

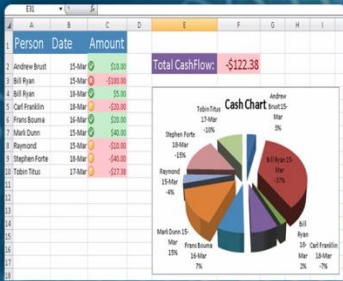


# Dr. MCR HRD Institute of Telangana

Spl. Foundation Course for AIS, CCS, IES & ISS Officers

## Information & Communication Technology

### Course Material



# Digital India



## Contents

MS Word 2010 .....	1
I. Enhancement of Document Layout using Object features.....	1
1. Inserting pictures .....	1
2. Enhancing pictures.....	1
3. Applying Picture Styles to your images.....	1
4. Adding a picture shape .....	2
5. Displaying a picture border.....	3
6. Adding a picture effect.....	4
7. Editing and adjusting images .....	4
8. Cropping pictures.....	5
9. Resizing pictures .....	6
10. Rotating pictures.....	7
11. Adding captions to pictures .....	8
II. Special Publication Features for Quality Work .....	9
1. Provide Text Alternatives for Images and Graphical Objects .....	9
2. Avoid “Floating” Elements .....	10
3. Captioning and numbering of tables and figures.....	10
4. Captioning tables .....	11
5. Automatically captioning tables .....	11
6. Captioning figures .....	11
7. Step-by-step captioning and numbering of tables and figures.....	12
8. Aligning the table and figure caption.....	14
9. Concatenating chapter number to figure or table number .....	15
10. Footnotes and endnotes.....	15
11. How to change the footnote separator .....	17
12. Endnotes with Square Brackets ([1],[2],...).....	17
13. Bookmarks .....	18
14. Cross references.....	19
15. Working with Columns.....	21
16. Adjust spacing .....	22
17. Display text boundaries .....	22
18. Quickly access options .....	23
19. Equalize the columns .....	23

20.	Add a column break .....	24
21.	Balance the columns .....	24
22.	Create a title that spans columns .....	25
23.	Add a picture.....	26
24.	Drop Cap .....	27
III.	Boiler Plate features in MS-Word .....	28
1.	Document templates .....	28
2.	Saving and Creating Templates.....	28
3.	AutoText.....	29
4.	Adding Your Own AutoText .....	29
5.	Viewing AutoText Entries.....	30
6.	F3 And AutoText.....	31
7.	AutoCorrect Options .....	31
8.	Difference between Building Blocks/AutoText and AutoCorrect. ....	33
9.	create a new Building Block? .....	33
10.	Building Blocks Organizer.....	34
IV.	Generating Table of Contents and Indexing in MS Word .....	35
1.	Identify the text that you want to appear in the Table of Contents.....	35
2.	Create the Table of Contents .....	36
3.	Using a table of contents content control in Word 2007 or Word 2010.....	36
4.	Customize the Table of Contents (if you need to) .....	38
5.	How to create a table of contents for several documents .....	38
6.	Other tips about Tables of Contents.....	39
7.	PDF for electronic submission.....	40
8.	Converting Word files to PDF.....	41
9.	Save a document to a shared folder on your server.....	41
V.	Document Sharing and Security Issues .....	42
1.	Share a Word doc in Windows Live SkyDrive.....	42
2.	Restrict Editing To Secure Word 2010 Document .....	42
3.	Set Document Password: .....	46
4.	Remove Document Password:.....	47
	MS PowerPoint 2010 .....	49
I.	Custom Animation using PowerPoint .....	49
1.	Overview of animating text and objects .....	49
2.	Add animation to an object .....	49
3.	Use ready-made animations .....	51

4.	Set triggers .....	52
5.	Use the Animation Painter.....	52
6.	Let the timeline help you out.....	52
7.	See it all in the Animation Pane .....	52
8.	Advanced Animation Time line .....	53
II.	Customizing of Presentation using PowerPoint.....	54
1.	Recording a Voice Narration in PowerPoint .....	54
2.	Embed or link the narration.....	54
3.	Accompany the narration with notes .....	54
III.	Rehearse Timings, Custom Slideshow, and Presentation looping.....	55
IV.	Visual Tools of Enhancement of presentation using PowerPoint.....	58
1.	Working with Movies in PPT .....	58
2.	Embed a video in your presentation.....	58
3.	Embed a video from a file .....	58
4.	Link to a video file from your presentation .....	58
5.	Link to a video file on a web site.....	59
6.	How to Upload PowerPoint to YouTube .....	60
7.	How to upload your video to YouTube .....	60
	MS Excel 2010 .....	62
I.	Introduction: .....	62
II.	Components of Excel .....	63
1.	The Ribbon .....	63
2.	Dialog Box Launcher.....	64
3.	Quick Access Toolbar .....	64
4.	Backstage View .....	65
5.	Quick access to Recent Workbooks and Recent Places:.....	65
6.	Contextual Tabs .....	66
7.	Spreadsheet and Workbooks.....	67
8.	Worksheets: .....	67
9.	Protected View.....	68
III.	Navigating in Excel .....	68
1.	Insert, Move, & Rename Worksheets.....	68
2.	Select & Move Worksheet Cells.....	69
3.	Range Selection Techniques .....	70
IV.	Modifying Cells.....	70
1.	Understanding Text, Values, & Formulas.....	70

2.	Editing Cells & Entering Expressions .....	71
3.	Inserting Worksheet Rows & Columns .....	71
4.	Delete Worksheet Rows & Columns .....	71
5.	Resizing Columns .....	72
6.	Resizing Rows.....	72
7.	Merge or Split cells .....	73
8.	Merge Adjacent Cells .....	73
9.	Combining & Splitting Contents.....	73
V.	Cell Reference .....	75
1.	Referencing Methods.....	75
A.	Relative Cell References.....	75
B.	Absolute Cell References .....	75
C.	Mixed Cell References.....	75
2.	Working with Names and Ranges .....	76
A.	What Are Range Names? .....	76
B.	Defining and Using Range Names .....	76
VI.	Using Logical Functions .....	77
1.	Using the Function Library .....	77
2.	The IF function .....	78
3.	The AND Function .....	78
4.	The OR Function.....	79
5.	Nested IF functions .....	80
6.	Applying Logical Functions.....	80
VII.	Lookup functions.....	80
1.	Using VLOOKUP to Find Data .....	81
2.	VLOOKUP.....	81
3.	Hlookup.....	82
VIII.	Pivot Table.....	82
1.	What is a PivotTable?.....	82
2.	Preparing Data to Create a PivotTable.....	82
3.	Creating a PivotTable .....	83
4.	Formatting a PivotTable.....	85
5.	Using Slicers to Manipulate PivotTables.....	86
6.	Creating a PivotChart .....	87
IX.	Data Analysis.....	88
1.	Sorting Data in Ms-Excel: .....	88

2. Filter:	91
A. What are filters?	91
B. Filtering with AutoFilter	91
C. Filtering Text	91
D. Filtering numbers: searching for the 'Top 10'	92
E. Filtering dates	93
F. Removing a filter	93
3. Creating advanced filters	93
4. Conditional Formatting:	94
5. Charts	95
A. How To Draw Charts In Excel 2010	95
B. Chart and Graphs Types In Excel 2010	95
C. Column Chart	96
D. Line Graphs	96
E. Pie Chart	96
6. Tables:	97
A. Creating Tables In Excel 2010	97
B. Properties Of Excel Tables	98
C. Deleting an Excel Table	99

# MS Word 2010

## I. Enhancement of Document Layout using Object features

### 1. Inserting pictures

You've probably heard that pictures liven up your documents. That's true. You may also have heard that images help reinforce your message and give peoples' eyes a welcome rest. That's also true. But the real reason you'll want to enhance your Microsoft Office Word 2010 document by adding pictures, clip art, drawings, and more is that it's great fun and it adds life to your pages. This article provides a brief introduction to working with images in your Word 2010 documents.

Perhaps the easiest way to add images to your document is to click the **Picture** tool in the **Illustrations** group of the **Insert** tab. The **Insert Picture** dialog box appears, enabling you to navigate to the folder storing the image you want to add. Select the picture and then click **Insert** to add it to your document.

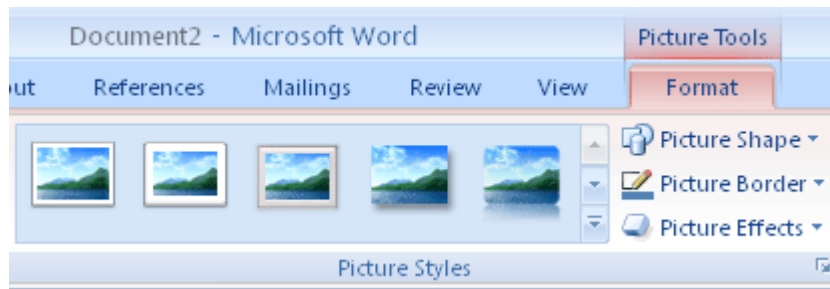


### 2. Enhancing pictures

After you add your images, you may want to use the editing and enhancement tools in Word to put a professional polish on them. Whether you want to do simple tasks like correct lighting problems or crop out unnecessary elements—or stylize the images by adding shadows, frames, and more—this is where the fun of working with images in Word really begins. We'll start with the Picture Styles because they give you the most dramatic enhancements for the smallest amount of effort.

### 3. Applying Picture Styles to your images

Picture Styles work similarly to the other quick styles you'll find in strategic places throughout Word. When you select a picture in your document, the contextual Picture Tools become available on the Ribbon. The Picture Styles have their own group in the middle of the **Format** tab.



The Picture Style gallery shows the various styles you can apply to the selected image. You can display the entire selection of styles by clicking the **More** button in the lower right corner of the gallery (see Figure 1). Preview the various styles by positioning the mouse pointer over an item in the gallery; when you find one you want to use, click the mouse to select the picture style.



Figure 1 The Picture Styles gallery provides you with many different ways to display an image.

#### 4. Adding a picture shape

If you want to create a unique effect, you can apply a shape to the picture so that the image appears within the body of the shape. You might do this, for example, when you want a picture to pop off the page and catch the reader's attention (see Figure 2). To add the shape to the selected image, click **Picture Shape** and choose the shape you want to apply from the palette that appears.



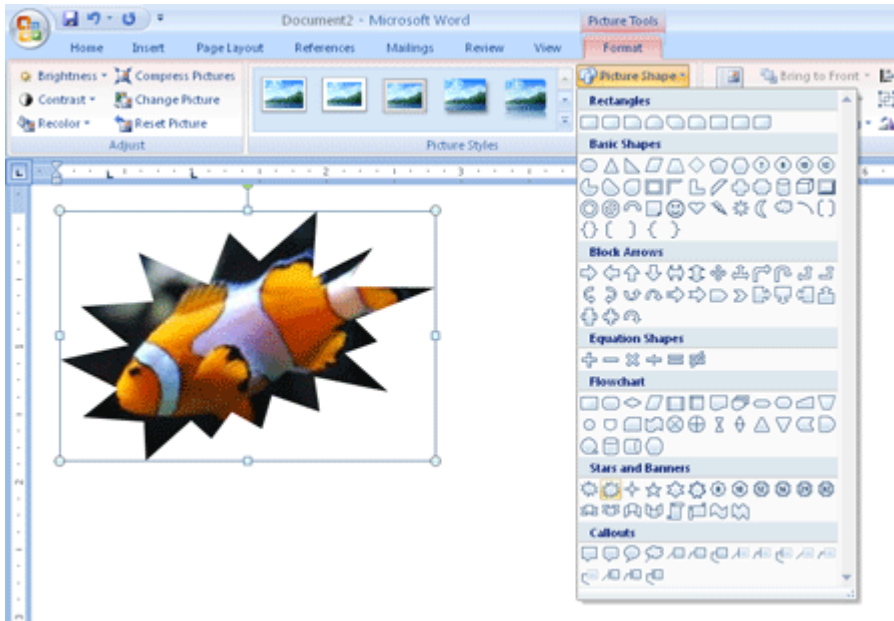


Figure 2 You can apply a shape to a picture to create a cut-out effect for the image.

## 5. Displaying a picture border

When you click **Picture Border** in the **Picture Styles** group, a color palette appears, enabling you to choose the color of the border you want to apply, as well as the weight and style of the line used to create the border. The top portion of the palette lists the colors that match the Theme that is currently applied to your document; the **Standard Colors** area of the palette provides primary colors. If you want to choose a color that does not appear in the palette, click **More Outline Colors** and then select the color from either the **Standard** or **Custom** tab. To apply it to the selected picture, click **OK** after you choose the color.



## 6. Adding a picture effect

Picture effects give you a huge range of special formats you can apply to the selected picture. You can choose from among a variety of shadow styles, apply a glow to the outer edges, display a reflection of the image, soften the edges, create a beveled effect, and apply 3-D effects and rotation.

To apply a picture effect, select the picture and then click **Picture Effects** in the **Picture Styles** group. A palette of choices appears. Point to the effects category you want to apply (Preset, Shadow, Reflection, Glow, Soft Edges, Bevel, and 3-D Rotation). A palette of effects opens to display your choice. Use Live Preview to see how the different effects will appear in your document (see Figure 3).



Figure 3 Use Picture Effects to enhance your pictures by adding shadows, bevel effects, 3-D effects, and more.

## 7. Editing and adjusting images

Word includes a number of image adjustment tools you can use to bring out the best in your images. You'll find the whole set located in the **Adjustment** group of the contextual Picture Tools. To display the tools, click on the picture you want to change. The Picture Tools appear on the Ribbon. The **Format** tab is automatically selected.

The **Adjustment** group is located on the far left. Depending on the type of change you want to make to your picture, click one of the following tools:

- **Brightness** Changes the amount of light included in an image. When you click Brightness, a palette of brightness options appears, with values ranging from +40% to -40%. You can use the Live Preview feature to point to a setting and see how it will affect the selected image. When you find a brightness level you like, click it to apply it to the image.
- **Contrast** Controls the way in which items in your picture are defined. When you click **Contrast**, a palette of contrast options appears. Experiment with the different settings until you find the one that looks right in your picture.
- **Recolor** Enables you to apply a color wash to your picture that may give it an old-fashioned feel (like a sepia-toned image) or enable it to blend naturally with the color scheme in the Theme applied to your

document. When you click **Recolor**, a palette appears offering you a number of different color possibilities (see Figure 4). Again, point to the ones you're considering, and Live Preview will show you the results. Click the one you decide on, and it is applied to the image in the document.

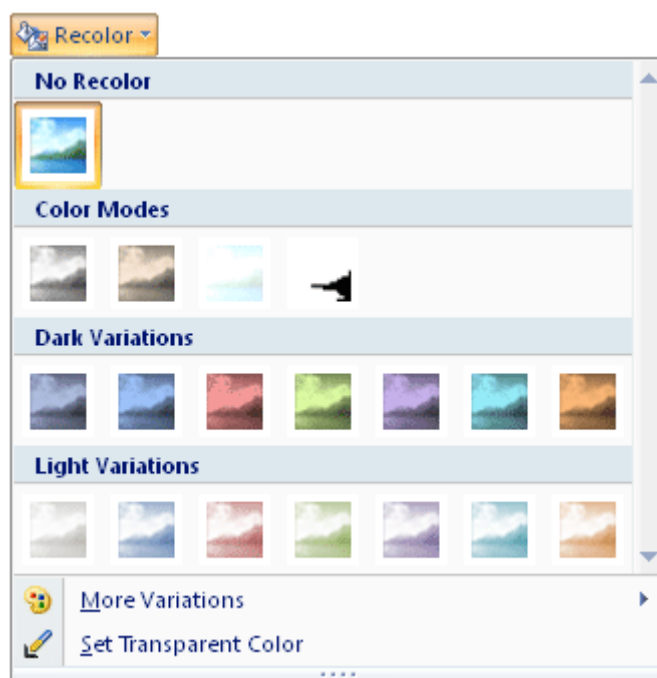


Figure 4 Use Recolor Picture in the Adjust group to add a color wash to the image in your document.

- **Compress Pictures** Reduces the file size of the image (not the actual size of the image in the document) so that when you save the file, it will be as compact as possible. When Word displays the **Compress Pictures** dialog box, click **OK** to compress all images in the document. If you want to compress only the selected images, click the **Apply To Selected Pictures Only** check box before you click **OK**.

**TIP** Click **Options** in the **Compress Pictures** dialog box to display additional choices for compression. In the **Compression Settings** dialog box, you can choose to compress images on save, delete image areas that have been cropped, or specify the type of compression you want depending on the desired output for your document (screen, print, or e-mail).

- **Change Picture** Displays the **Insert Picture** dialog box so that you can replace the selected photo with a new one.
- **Reset Picture** Reverses any modifications you've made to the original photo and returns it to its original size, shape, and coloring.

## 8. Cropping pictures

Cropping images is a simple process, but it can dramatically improve the look of your photo by enabling you to remove unnecessary elements from the image. For example, suppose that a diver's swim fin appears in the corner of an underwater photo you want to use for the Coral Reef Divers annual report. You can easily crop the photo to remove the unwanted fin and help your readers focus on the important part of the photo.

To crop your photo, follow these steps:

1. Insert the photo in your document and make sure it is selected. The Picture Tools appears.
2. Click **Crop** in the **Size** group. The pointer changes to a cropping tool.
3. Position the tool on the edge or corner of the image where you want to begin cropping. Drag the side or corner of the image inward until the portion of the picture you want to remove has been cropped out (see Figure 5).

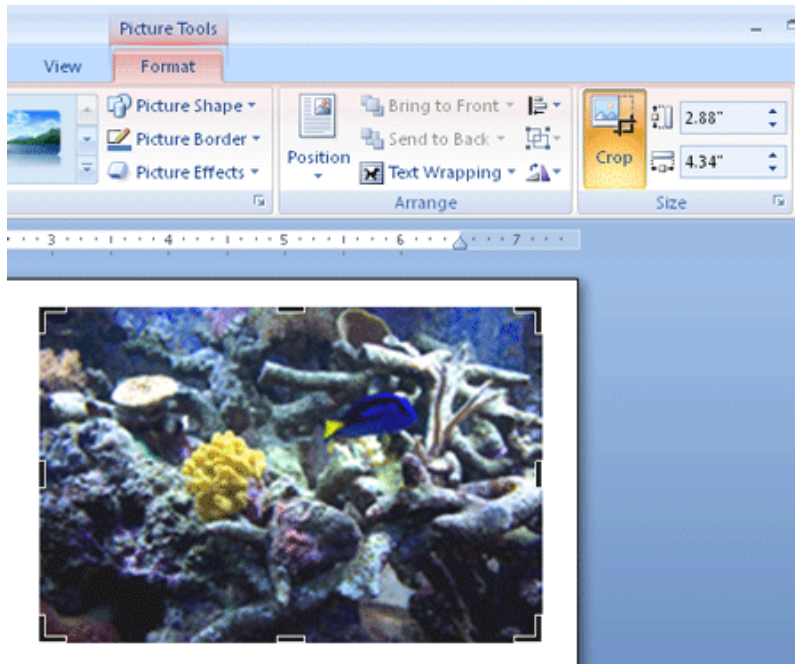


Figure 5 Crop a photo to make sure only the best part of the image is displayed.

**TIP** When you crop a photo, the rest of the image isn't gone; its display is merely suppressed. This means that if you decide to move the photo to another part of the document and redisplay the hidden part of the image, you can do that. Just select the Crop tool again and this time drag the corner or side outward to reveal the rest of the hidden image. Note, however, that if you have selected the **Delete Cropped Areas Of Pictures** check box in the **Compression Settings** dialog box, the cropped portions of the image will be deleted when you save the document.

## 9. Resizing pictures

An operation that goes hand-in-hand with cropping is resizing the images you import. This is one technique you'll use all the time—pictures rarely come into your documents at just the right size.

Resizing a picture in Word is similar to resizing any object. To begin, click the image. Handles appear around the edges of the object. If you want to enlarge the image, click in one corner of the picture and drag the handle outward. When the image is the size you want, release the mouse button.

If resizing your picture to a precise measurement is important, use the **Size** command available in the picture's options. Here's how:

1. Right-click the image in your document.
2. Choose **Size** from the options that appear.
3. In the **Size** dialog box, enter the **Height** and **Width** settings (see Figure 6). Additionally, you can enter other positioning values, such as **Rotation** and **Cropping**.

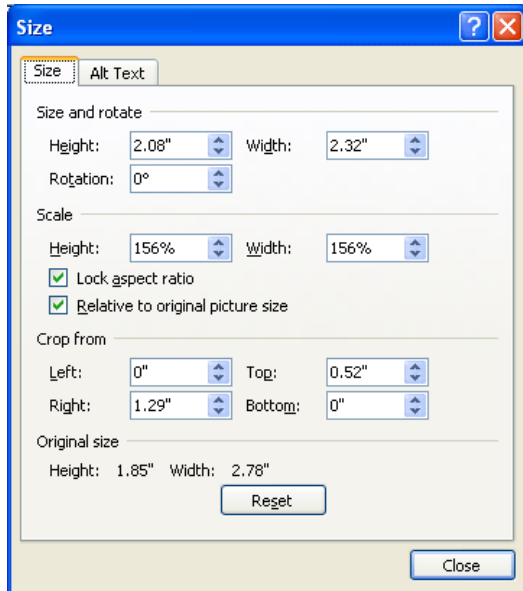


Figure 6 Use the **Size** dialog box when entering a specific size for an image is important.

4. Click **OK** to save your settings, and Word resizes the image according to your specifications.

## 10. Rotating pictures

Some of your documents are likely to be fairly straightforward and won't require a lot of special picture techniques. But once in a while you will have a reason to do something fun like rotating pictures. The rotating control in Word enables you to simply drag a picture in the direction you want to rotate it—very simple and easy to use. Instead of moving the image in predesigned increments, the Rotate tool lets you be in control of how far you want the picture to rotate.

Start by clicking the picture in your document. You'll notice that a round green handle appears in the top center of your image. This is the rotate handle. Position the mouse on that handle. The pointer changes to a curved arrow, indicating that you can drag the handle in the direction you want to rotate the image.



**TIP** When you apply shadows or frames or other special picture effects to the image, Word automatically takes the angle into account, with no calculating required. Nice.

## 11. Adding captions to pictures

Readers like to know what your images contain, so unless you're certain that readers will understand what your images are showing, you may want to consider adding figure captions. The process is simple, and you can control the look and placement of the text by following these steps:

1. Right-click the picture you want to add the caption to.
2. Click **Insert Caption**. The **Caption** dialog box appears, as Figure 7 shows.

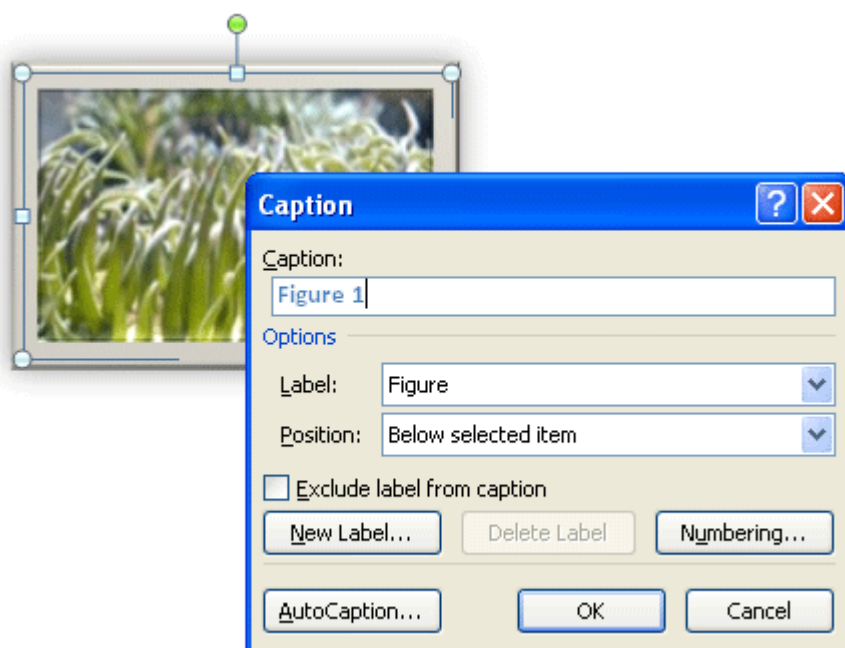


Figure 7 You can easily add captions to the images in your document by right-clicking a picture and choosing **Insert Caption**.

3. In the top text box, type the caption you want to appear with the figure. You may want to customize the look of the caption by changing one of the following items:
  - If you want to hide the label (for example, Figure), click the **Exclude Label From Caption** check box.
  - If you want to change the way in which the captions are numbered, click the **Numbering** button and select your choice.
4. Click **OK** to save the caption settings and return to the document.

The caption is displayed in a color, font, size, and style that is controlled by the Theme selected for your document. If you change the Theme later (by clicking the **Page Layout** tab, selecting **Themes**, and choosing a new Theme from the gallery), the captions will be reformatted automatically.

## II. Special Publication Features for Quality Work

### 1. Provide Text Alternatives for Images and Graphical Objects

When using images or other graphical objects, such as charts and graphs, it is important to ensure that the information you intend to convey by the image is also conveyed to people who cannot see the image. This can be accomplished by adding concise alternative text to of each image. If an image is too complicated to concisely describe in the alternative text alone (artwork, flowcharts, etc.), provide a short text alternative and a longer description as well.

#### Tips for writing alternative text (“Title” in Word 2010)

- Try to answer the question "what information is the image conveying?"
- If the image does not convey any useful information, leave the alternative text blank
- If the image contains meaningful text, ensure all of the text is replicated
- Alternative text should be fairly short, usually a sentence or less and rarely more than two sentences
- If more description is required (e.g., for a chart or graph), provide a short description in the alternative text (e.g., a summary of the trend) and more detail in the long description, see below
- Test by having others review the document with the images replaced by the alternative text

#### Tips for writing longer descriptions (“Description” in Word 2010)

- Long descriptions should be used when text alternatives (see above) are insufficient to answer the question "what information is the image conveying?"
- In some situations, the information being conveyed will be how an image looks (e.g., an artwork, architectural detail, etc.). In these cases, try to describe the image without making too many of your own assumptions.
- One approach is to imagine you are describing the image to a person over the phone
- Ensure that you still provide concise alternative text to help readers decide if they are interested in the longer description

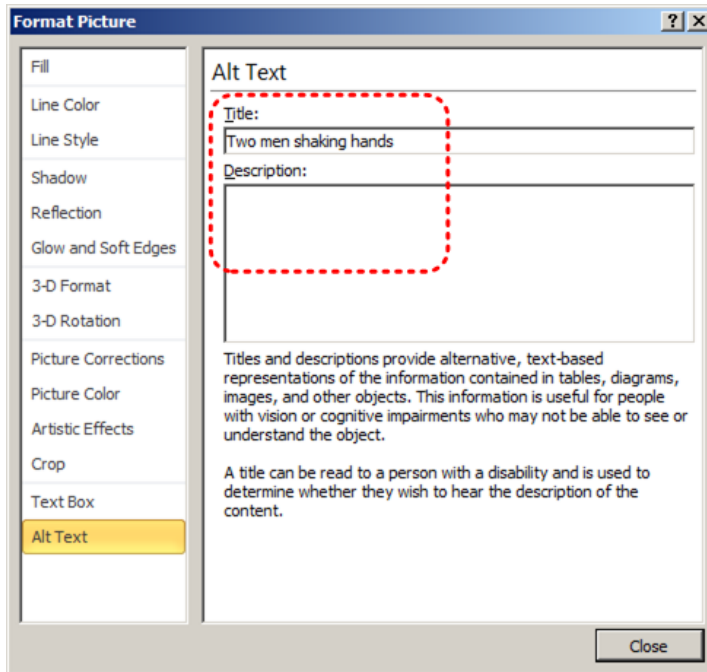
Alternatively, you can include the same information conveyed by the image within the body of the document, providing the images as an alternate to the text. In that case, you do not have to provide alternate text within the image.

#### To add alternative text to images and graphical objects

1. Right-click\* the object
2. Select **Format Picture...**
3. Select the **Alt Text** option from the list
4. Fill in the **Title**. If more description is required (e.g., for a chart or graph), provide a short description in the **Title** (e.g., a summary of the trend) and more detail in the **Description**.

❗ At this time, if a Word 2010 document is ever saved to HTML, the **Title** and **Description** fields are combined into a single entry within the HTML <alt> tag. **[Tested: September 30th, 2010]**





❗ When inserting a very small image, or resizing a larger image to be much smaller, Word 2007 assumes that the image is intended to be a bullet-point for a bulleted list. Once Word 2007 defines the image as a bullet, the option to add alternative text disappears. Select **Undo**, to redefine the bullet as an image. When you right-click\* the image, select **Format Picture...** and select the **Alt Text** tab in the **Format Picture** dialog. Alternative text can be found, or can be entered, into the **Alternative text** box.

## 2. Avoid “Floating” Elements

When images and objects are inserted into Word 2010 documents they default to being an “inline object”. Inline objects keep their position on the page relative to a portion of the text.

A “floating” object keeps its position relative to the page, while text flows around it. As content moves up or down on the page, the object stays where it was placed. To ensure that images and objects remain with the text that references it, always position it as an inline object.

Similarly, avoid placing drawing objects directly into the document (e.g., as borders, to create a diagram). Instead, create borders with page layout tools and insert complete graphical objects.

### To prevent an image or object from “floating”

1. Select the object
2. Go to menu item: **Page Layout**
3. Select **Position** from the **Arrange** section

## 3. Captioning and numbering of tables and figures

In a longer more structured document, you will frequently want to number and add captions to your tables and figures. You could do this manually, but a better idea is to let Word add these captions and automatically assign the numbers. You need this automated approach for a number of reasons.

- If you want to easily make a cross-reference to the table or figure, Word must maintain the caption.



- If you want to automatically create a List of Tables or List of Figures for your Table of Contents, Word must maintain the captions.
- If you insert or delete tables or figures, Word will automatically renumber if it maintains the captions. A caption consists of the word Table or Figure, whichever is appropriate, followed by a number. You may then choose to add punctuation, such as a period or a colon, and then the text you wish to have for the caption.

## 4. Captioning tables

You may want to add captions to tables already entered into your document or, alternatively, you may want to have captions automatically added to any new tables you create.

Adding captions to existing tables

If you have tables without captions in your document and wish to add captions, you can do so quite easily. For each table:

- Click somewhere in the table
- Click on the **References** tab
- Click the **Insert Caption** button
- In the Caption box, it will read Table 1 (if it reads Figure 1, choose **Table** from the **Label:** drop down list) and allow you to add further information. If you wish to have punctuation appear after the number, type it, and then type the text of the caption. Notice that the Position box lets you select Above or Below for the caption, but table captions are generally positioned above the table. Repeat the above procedure for every table in your document. Word will automatically provide the correct table number.

## 5. Automatically captioning tables

Word can automatically add the caption to a table when the table is created. To do this:

- Click on the **References** tab
- Click the **Insert Caption** button
- Click on the **AutoCaption** button. You will be presented with a list of objects that can be captioned automatically. One of those is **Microsoft Word Table**. Click the checkbox beside this item. Confirm the Options below are what you want and click **OK**. Now every time you create a table, the caption Table followed by the appropriate number will be added automatically. You can simply click in the caption line, type any punctuation you wish, and then type the caption text.

### **Combining manual and automatic captioning**

You can manually caption any existing tables, and then ask Word to automatically caption any additional tables you add. Word will handle the numbering properly.

## 6. Captioning figures

To caption an existing figure, select the figure and:

- Click on the **References** tab
- Click the **Insert Caption** button
- Make sure that **Figure** is selected in the Label box. The Caption box will read Figure 1 and permit you to type additional information. Type any punctuation that you wish to have after the number, and then type the text

of the caption. Repeat this process with each figure in your document. Note that the caption appears by default at the bottom of the figure.

Automatic captioning is probably not a viable option for figures. Automatic captioning only works with figures inserted via an application that supports Object Linking and Embedding (OLE), that is, objects that can be inserted into a document via the Insert>Object command. Generally, most people insert figures from a variety of sources, so manually captioning is often necessary.

## 7. Step-by-step captioning and numbering of tables and figures

**Exercise:** Now we will ask Word to automatically add captions to any additional tables that we create:

1. Our document already contains 1 table, and we will be adding more. We would like to add a caption to the existing table, and automatically add captions to any additional tables we create.
2. First, **click anywhere inside the existing table.**
3. Click on the **References** tab
4. Click the **Insert Caption** button
5. In the resulting dialog box, make sure that **Table** is selected in the Label: box, and **Above Selected Item** in the Position box.
6. Click in the **Caption** box, and **type a punctuation mark if you wish, perhaps a colon, then type the text of the caption “Wool Distribution”**. Click **OK**. Note that the caption now appears above your table.



Now we will ask Word to automatically add captions to any additional tables that we create:

7. Click on the **References** tab.
8. Click the **Insert Caption** button.
9. Click on the **AutoCaption** button.
10. You will be presented with a list of objects that can be captioned automatically. One of those is **Microsoft Word Table**. Click the checkbox beside this item. Confirm the Options below are what you want and click **OK**.



11. Now go to the **Jack and Jill** rhyme, and **click at the end of the text of the Jack and Jill rhyme**, and **press Enter** to move to a new line.
12. Click on the **Insert** tab and click on the **Table** button, then **drag to create a 2x3 table**:



Enter the following information into the table.

<i>Table 2: Result of climbing hill</i>	
<b>Child</b>	<b>Result</b>
Jack	Fell down
Jill	Broke crown

**Note:** The caption "Table 2" is created automatically, and you can click after the 2 and type a colon, and then type the caption "Result of Climbing Hill".

Now we will add a caption to the Lamb figure that appears in "Mary had a Little Lamb":

13. **Click on the image of the lamb** to select it, click on the **References** tab, and click the **Insert Caption** button.

14. In the label box, select **Figure**. Note that that causes the **Position** to be set to **Below selected item**.
15. After Figure 1, **type desired punctuation**, and then the caption, **“Mary’s Lamb”**. Click **OK**, and see the caption added to the document.



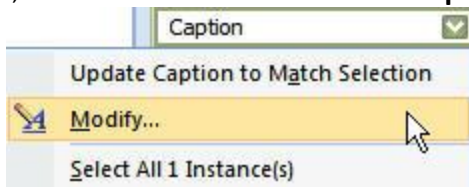
Now we will add an additional figure near the top of the document. On your **N:** drive is an image file called **fiddle.bmp**.

16. Set the mouse pointer **after the title of “Hey Diddle Diddle”**, press **<enter>**. Go to the **Insert** tab and click on the **Picture** (Word 2010) or **Pictures** (Word 2013) button. Select **fiddle.bmp** from the **N** drive.
17. Now **click on the fiddle image to select it**. Click on the **References** tab and then the **Insert Caption** button. Make sure that **Figure** is selected from the drop down list beside **Label:**. To the caption field add a **colon**, followed by **“Cat’s Fiddle”** and click **OK**. Note that the picture is captioned as Figure 1 because it appears first in the document, and the picture of the Lamb, which was Figure 1 has been renumbered to Figure 2.

## 8. Aligning the table and figure caption

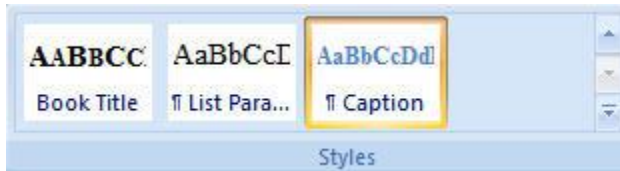
The caption for both figures and tables defaults to left alignment. You may wish to have your captions centered, particularly if your tables and figures are centered on the page. Captions are inserted with the **Caption** style attached. To change the alignment:


- Click on the button in the bottom right of the **Styles** section in the **Home** tab. In the **Styles** window that appears, click on the down arrow beside the **Caption** style and choose **Modify**



OR

- Scroll to find the **Caption** style in the style gallery and right click on it and choose **Modify**.

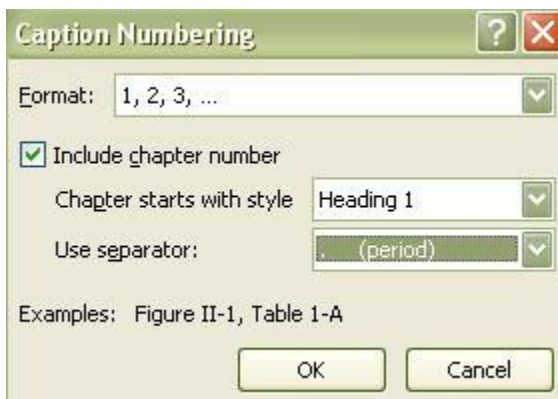


- Click on the **centre** alignment icon (  ) in paragraph group of Home tab and click **OK**  
 Since the same style is applied to Figure and Table captions, you cannot have different alignments for these two types of captions, unless you create a new style for one of the captions. This will work, but you must remember to apply that style manually to the captions, and if you are creating a List of Tables or List of Figures, you must remember to tell Word to use items of that style to build the list.

## 9. Concatenating chapter number to figure or table number

You may wish to have the chapter number appended to the table or figure number in the caption, such as Table 1.3, or Figure 3.8:

- Click on the **References** tab
- Click the **Insert Caption** button
- Choose **Table** in the Label box
- Choose the **Numbering** button and click the **Include Chapter Number** box



- Choose **Heading 1** beside **Chapter starts with style** and **. (period)** beside **Use separator:**
- Click **OK** (note that the type of numbering you choose for your Heading 1s will be used)
- Repeat the above, but choose **Figure** in the Label box

## 10. Footnotes and endnotes

Footnotes and endnotes are handled in a similar fashion, except that footnotes appear at the bottom of the current page, and endnotes appear at the end of the document.

### Exercise:

- We will continue to use the **Nursery Rhymes** file. We wish to insert a footnote after the word fiddle in the rhyme **Hey Diddle Diddle**. **Click your mouse immediately after the word fiddle** and click on the **References** tab and then the **Insert Footnote** button. If you are in **Print Layout** view, you will be

shifted to the bottom of the page and be able to enter your footnote text right away. If you are in **Draft**view, a new pane will appear at the bottom to allow you to type your footnote. In either case, to return to the same spot in your document, simply double click on the footnote number. (In Draft view you could also click on the close button on the right side.

## 2. Type the footnote text:

The instrument in question was really a violin. The rumour that it was a very expensive Stradivarius was simply that, mere rumour.

3. To make changes to the settings, if necessary, click on the **References** tab, click on the corner button in the **Footnotes** group to view the following dialogue box:



Here you could make changes to the number format, restart the numbering, convert footnotes to endnotes, etc. We won't make any changes now so just click the **Cancel** button.

4. Now, you can return to the place in the document where you were working by:

- **Double clicking on the footnote number**

5. Now, **switch views**. If you were in Draft switch to Print Layout, and vice versa. Do this by selecting the appropriate Document View from the **View** tab.

6. We want to put another footnote, in **Jack and Jill**, after the word crown. **Click after the word crown**, and click on the **References** tab and then the **Insert Footnote** button. The footnote number will be presented, and you can type your footnote. **Type this footnote:**

A crown is another name for the head. They could have said that Jack broke his head, but that would not rhyme, so they used the word crown instead.

7. Now return to the main document by **double clicking the footnote number**.

8. Move the **mouse over one of the footnote indicators in the document** (don't click) and see the note that appears showing the text of the footnote.

9. If you would like to have an 'insert footnote' button your quick access toolbar at the top:

- In the **References** tab, right click on the **Insert Footnote** button and then choose **Add to Quick Access Toolbar**.
- Now create a footnote by clicking on the button on the Quick Access Toolbar.  
**Note:** If your Word file was imported from a previous version of word and you have issues with footnotes appearing on the wrong page, you can try the following:
  1. Open the file.
  2. From the **File** tab, choose **Options**.
  3. Click **Advanced** on the left and scroll down to the bottom section, **Compatibility options for**
  4. From the drop down list beside **Lay out this document as if created in:** choose **Microsoft Word 2010** or **Microsoft Word 2013**, depending on the version you're using.
  5. Click **OK**.

## 11.How to change the footnote separator

The footnote separator is the thin line that appears between the bottom of your page and any footnote text that may be on that page.

1. In the **View** tab, click **Draft** to switch to Draft view.
2. In the **References** tab, click **Show Notes** (in the Footnotes section of the tab).
3. Directly above the pane that appears at the bottom is a drop down menu. From this drop down menu, you can choose **Footnote Separator**.
4. You can then change the footnote separator in the pane and click on the **X** in the top right of the pane to close the pane.

## 12.Endnotes with Square Brackets ([1],[2],...)

1. For all your endnote references, do the following:
  - In the **References** tab, click **Insert Endnote**
2. Next, we will change the **Endnote Reference** style from superscript to no superscript:
  - Click on the button at the bottom right of the **Styles** section of the **Home** tab to open the floating Styles window. Click on the **Options** link. Under **Select styles to show** choose **All styles** and click **OK**. Find the **Endnote Reference** style in the list and click the drop down arrow beside it and choose **Modify**.  
OR
  - Select an endnote reference number from the endnotes section at the end of your document, right click and choose **Style. Endnote Reference** will be selected. Click the **Modify** button.
  - In the **Modify Style** window that opens, click on the **Format** button (bottom left) and choose **Font**; uncheck superscript and then click **OK** and **OK** again. (Click **Close** if necessary.) All of your Endnote Reference numbers should now NOT be superscript.
  - If your Endnote Reference number is using the wrong type of number (e.g. "i" instead of "1"), you may change it by:
    - In the **References** tab, clicking on the button at the bottom right of the **Footnotes** section

- Beside **Number format**, choosing the style you like
- Clicking on the **Apply** button
- 3. Now, our challenge is to get square brackets around the reference numbers. Save your document before doing this. We will do this using Word's **Replace** feature:
  - Click at the top of your document (or press **Ctrl-Home** on your keyboard to quickly go to the top of your document).
  - In the **Home** tab, click **Replace** on the far right (in the **Editing** section).
  - Click on the **More** button. (If you don't see a **More** button but do see a **Less** button, then you can leave things as they are.)
  - With your insertion point in the text box beside **Find What:**, choose the **Format** button and choose **Style** then choose **Endnote Reference** from the list and click **OK**.
  - Click in the text box beside **Replace With:** and type **[^&]**. Now click on the **Replace All** button. A message will pop up to tell you how many replacements were made. Click **OK**. All of your Endnote Reference numbers should now have square brackets around them.
  - Click the **Close** button to close the Find and Replace window.

### 13. Bookmarks

A Bookmark marks a place in a document that you may wish to jump to, refer to, etc. We will insert a bookmark at the location of the song "Inky Dinky Spider".

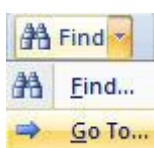
#### Exercise:

1. **Select the title "Inky Dinky Spider"**. From the **Insert** tab, click on **Bookmark**. In the resulting dialog box, assign the bookmark a name of **"spider"** and click **Add**. Initially, you will not see any indication that a bookmark exists, but the next step will describe how you can view a bookmark 'codes' so you will know where your bookmarks are.
2. Click on the **File** tab in the top left and choose **Options**. Click **Advanced** from the list on the left, then scroll down to the section, **Show document content**. Click on the checkbox to put a checkmark beside **Show bookmarks**  **Show bookmarks** and click **OK**.
3. Now you will see the bookmarked text in your document enclosed in square brackets.

[The Inky Dinky Spide]

The square brackets simply indicate that a bookmark is present. They do not print. Note that you could have created a bookmark by simply clicking the mouse and not selecting any text. This would be indicated by the square brackets displaying one on top of the other ( **I** ).

4. **Click the mouse near the top of the document**, click on the **Home** tab and from the **Find** submenu, choose **Go To...**





- From the list on the left under **Go to what:** choose **Bookmark**. If you had multiple bookmarks, you could then choose the one you wanted to go to from the drop down list near the top right under **Enter bookmark name:**. Choose **spider** from this list (in this example, we only have one bookmark) and click on the **Go To** button. We immediately jump to the bookmarked text.



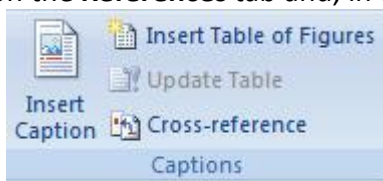
## 14. Cross references

A cross-reference is a referral from one location in a document to a component elsewhere in the document. For example, “see Table 2: Snowfall in 2003”. Cross references can be made to tables, figures, footnotes, headings, page numbers, bookmarks, etc.

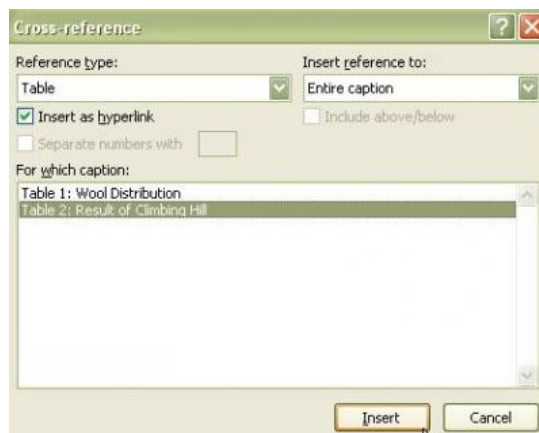
We will create a cross-reference to the “Jack and Jill” table.

### Exercise:

- Go to the end of “Inky Dinky Spider” and after the word “again” type “As we saw in”.** Now click on the **References** tab and, in the Captions section click on **Cross-reference:**



- In the **Reference type:** drop down list, select **Table**. Note that a list of all tables appears.
- Choose **Table 2: Result of Climbing Hill**. In the **Insert reference to:** drop down list, select **Entire caption** (rather than only the table number, or only the text of the caption), and click **Insert**. Then click **Close**.

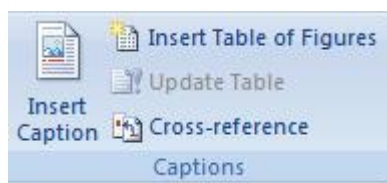


- Note that the text now reads:

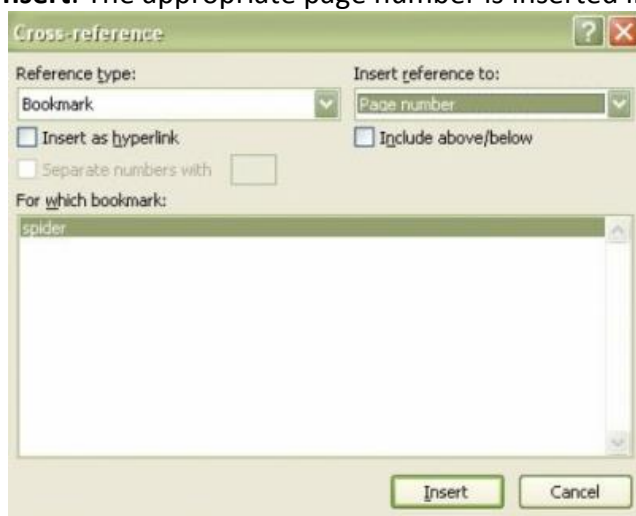
As we saw in **Table 2: Result of Climbing Hill**

and we can add the text “climbing things can prove dangerous”. Note that the grey area that you see when you click on the inserted cross-reference text is there to indicate that this is a cross-reference. It will not print.

5. Now we will delete the first table in our document, and we will see what happens to our reference. **Drag through to select the caption and the complete Table 1**, and press the **delete** key.
6. Now look at your document and you will see that Table 2 has not been renumbered to Table 1 and the cross reference is still to Table 2. There are two ways we could fix this:
  - If we print it or do a print preview, the references will be updated before printing occurs.
  - We can **select the entire document**, and force updating by pressing the **F9** key. Do this now:
    - **Home** tab: **Select/Select All** (in the Editing section) or press **Ctrl-A** on your keyboard
    - Press **F9**. Note that the table numbering and cross-references are updated.
7. Now we will make a cross-reference to our bookmark. **Go to the end of the “Hey Diddle” rhyme, and type “No spiders were present as they are on Page”**. Now click on the **References** tab and, in the Captions section click on **Cross-reference:**



8. In the Reference type: drop down list, choose **Bookmark**.
9. From the list of bookmarks presented, select **spider** (in this case this is the only item in the list).
10. From the Insert reference to: drop down list, choose **Page number** (as opposed to the actual text that was bookmarked).
11. Click **Insert**. The appropriate page number is inserted into the document.



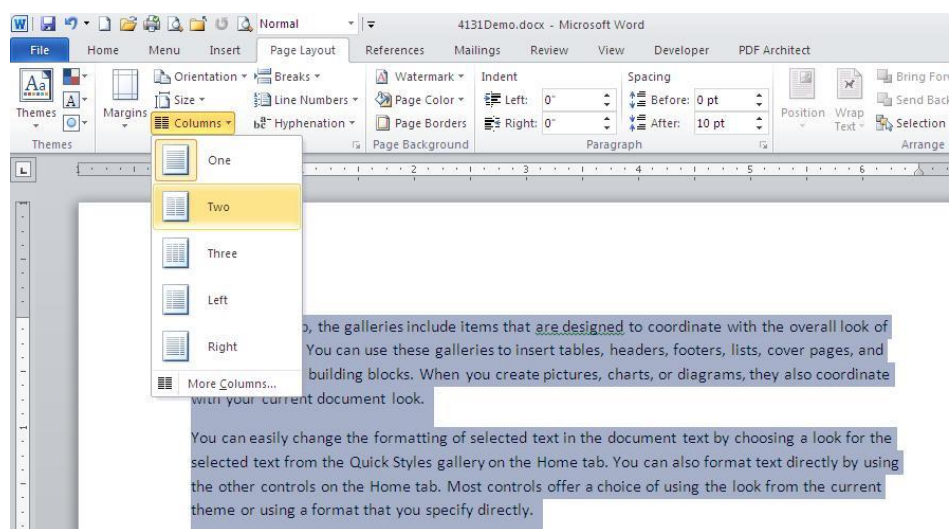
12. Click on the **Close** button to close the cross-reference window.

## 15. Working with Columns.

Arranging text and graphics into columns is an effective way to make your document more readable and to fit more content on a single page. These 10 tips will help you generate columns quickly and easily and maintain them with little to no effort.

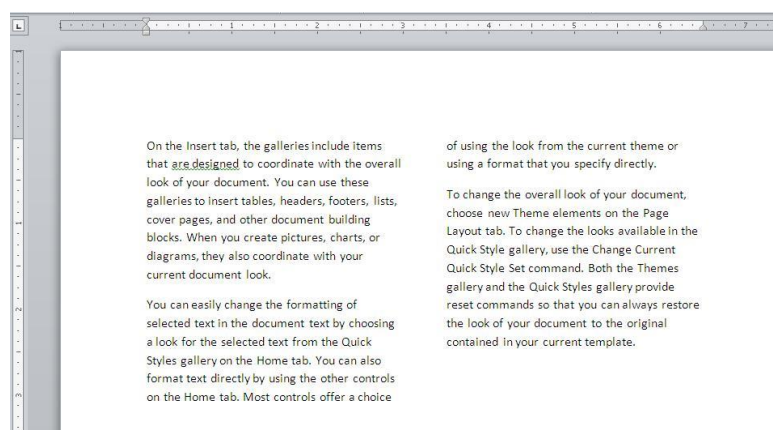
**Add columns to existing text:** When you enable columns, Word will automatically guide your text into columnar format. If the text already exists, the technique is the same. However, you must select the text first as shown in **Figure A**. Then, using the instructions given in the introduction, select the number of columns you want. **Figure B** shows the results of dividing the existing single column of text into two columns.

Figure A



*Select existing text to change the column property for only that text.*

Figure B



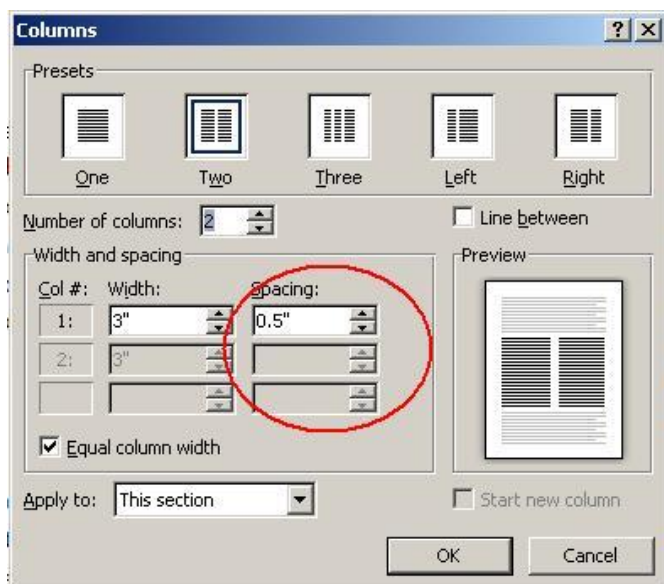
These two columns began as one column.

## 16.Adjust spacing

Columns usually make content more readable because of the shorter lines. You can also use a smaller font than you might ordinarily use. That means you can fit more content on a page using columns. The type of document will determine the number of columns and whether columns are equal in width. However, the general run allows between 40 to 60 characters per line. Any more or less makes the document less readable.

The spacing between columns is the *gutter*. If it's too narrow, readers will wander across the gutter to the next column instead of wrapping around to the next line in the column. To adjust the gutter, choose More Columns from the Columns drop-down (on the Page Layout tab), as shown in **Figure C**. In Word 2003, choose Columns from the Format menu.

Figure C



*Adjust the spacing between the columns.*

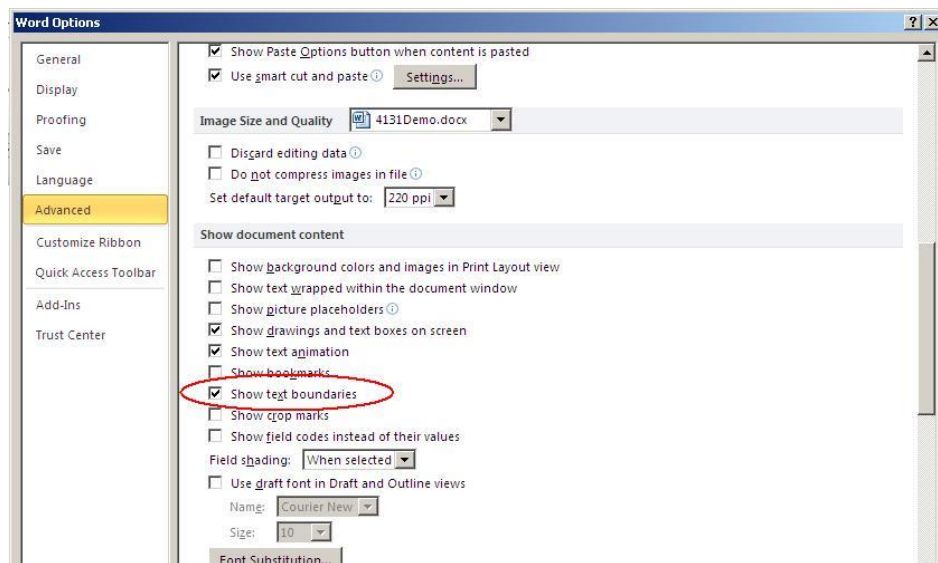
Because you're working with short lines, you'll need to rethink paragraph indents. I recommend that you use small indents or don't indent paragraphs at all.

## 17.Display text boundaries

The document shown in **Figure D** is displaying text boundaries. Enabling this feature will help you visualize your document's limitations as you work. Enabling text boundaries is simple:

1. Click the File menu and choose Options (under Help). In Office 2007, click the Office button and then click Word Options. In Word 2003, choose Options from the Tools menu, and skip to step 3.
2. Select Advanced in the left pane.
3. In the Show Document Content section, check the Show Text Boundaries option.
4. Click OK.

Figure D

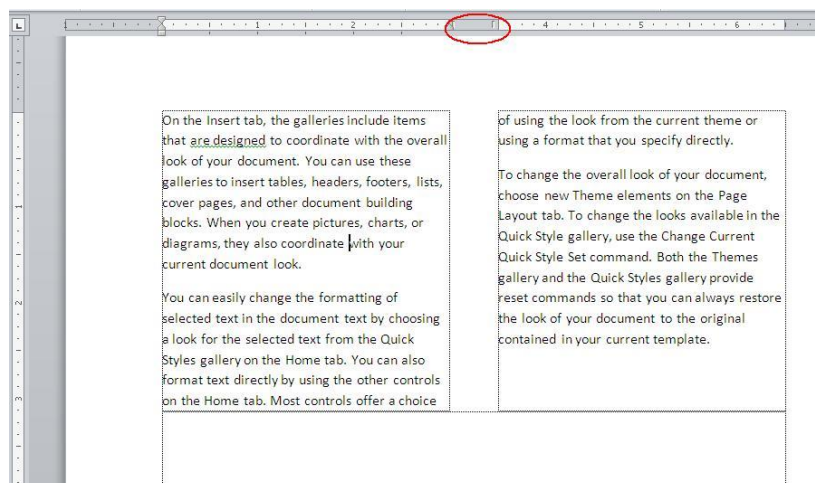


*Displaying text boundaries can facilitate column maintenance.*

## 18. Quickly access options

Many options are available via the Columns dialog (shown in Figure C). To access it, click inside a multi-column section and double-click the gutter space in the horizontal ruler (displayed at the top of the page) shown in **Figure E**.

Figure E



Quickly access column properties by double-clicking the horizontal ruler.

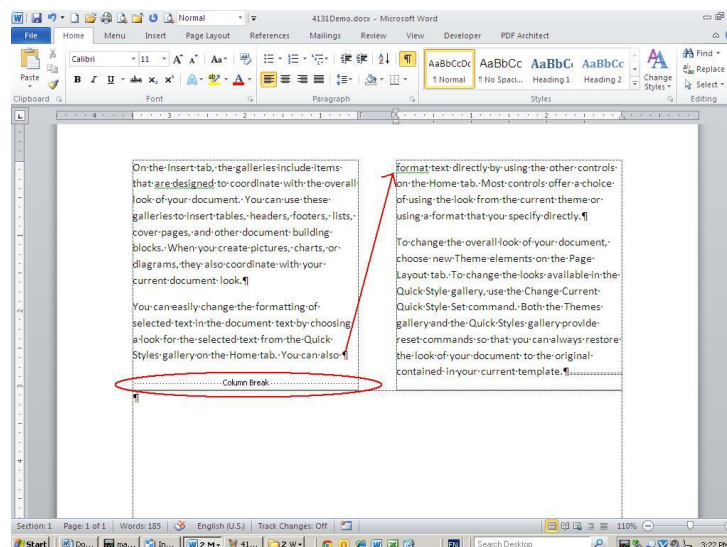
## 19. Equalize the columns

To create columns of equal width and gutter space check the Equal Column Width option in the Columns dialog (at the bottom of the Width And Spacing section). Doing so will dim all but the first column's measurements. Use the first column's settings to adjust all of the columns. Word will adjust the other settings accordingly. Remember, you can use [Ctrl]+Z to undo changes.

## 20. Add a column break

When needed, you can force a column break by pressing [Ctrl]+[Shift]+[Enter]. Doing so will position the cursor at the top of the next column, leaving the remainder of the current column blank, as shown in **Figure F**. A *column break* positions a hard break at the inserted location and pushes remaining text to the top of the next column. If you insert a column break in the last column on a page, the break also acts as a page break. If you don't want a page break there, you'll have to delete the column break.

**Figure F**



Insert a column break to force text to the top of the next column.

To insert a column break, click the Page Layout tab and choose the Column Break from the Breaks drop-down in the Page Setup section. In Word 2003, choose Break from the Insert menu. Column breaks are similar to page breaks in that they inherit formatting from the *following* paragraph, which can be confusing. There's nothing special you have to do — knowledge is the simple remedy.

## 21. Balance the columns

Depending on the amount of text you enter and the length of the columns, you might end up with a long and a short column. You can often insert a column break and balance the text yourself. However, the break remains if you return to a single column. When a forced break isn't the right choice, insert a continuous section break. Doing so creates a new section and Word distributes the text across the columns. To add a continuous section break, do the following:

1. Position the cursor at the end of the last column.
2. On the Page Layout tab, click Breaks on the Page Layout tab. In Word 2003, choose Break from the Insert menu.
3. Select Continuous in the Section Breaks section.



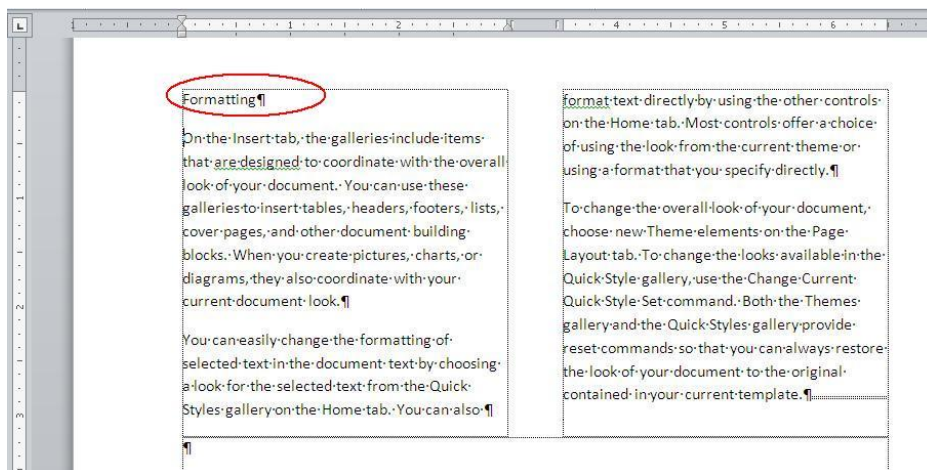
As before, you can adjust the balance between the two columns if you like by pushing text into the next column or pulling text back into the previous column. Unlike the column break method, there's no column break to leave behind if you return to a single column format. However, the section break remains and you'll probably want to remove it. To do so, click Show/Hide on the Standard toolbar to display formatting marks then just delete the section break marker.

## 22. Create a title that spans columns

Entering a title before you generate the columns is simple. You just enter the title and format it as you normally would. Then, set your column properties and start typing your columnar text. If, on the other hand, you enter the title *after* generating the columns, you might find yourself scratching your head. The good news is, it's just as easy to add the title after you generate the columns as before:

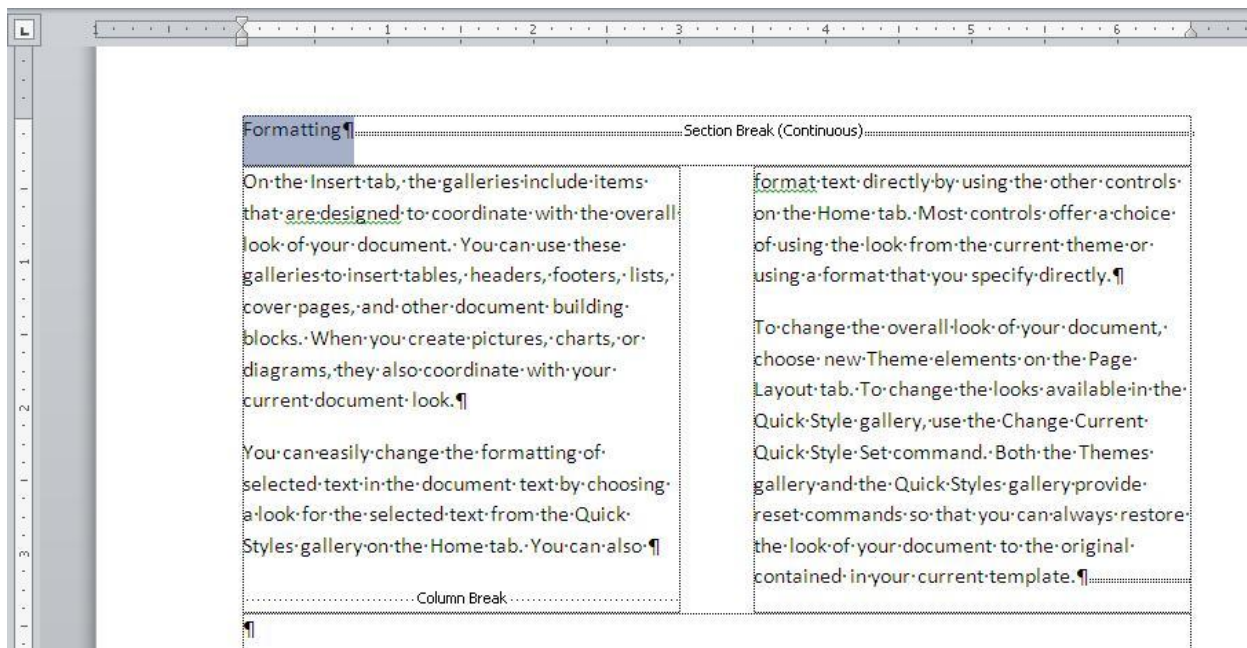
1. Position the cursor at the beginning of the first column, right where you want the title to appear.
2. Enter the title text.
3. Press [Enter] to push the column text to the next line, leaving the title text in a line of its own, as shown in **Figure G**.
4. Select the title text.
5. Click the Page Layout tab and click the Columns drop-down in the Page Setup group, then choose One, as shown in **Figure H**. In Word 2003, click the Columns tool on the Standard toolbar and choose one column.
6. With the title still selected, click the Center alignment tool in the Paragraph group (on the Home tab). **Figure I** shows the centered title in a single column that spans all the columns. In Word 2003, Center is on the Formatting toolbar.

Figure G



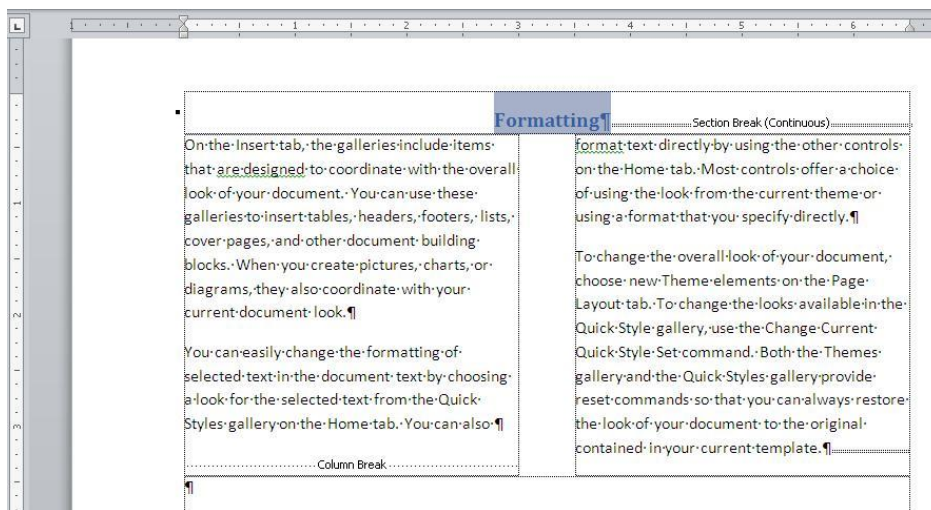
Get the title on a line of its own.

Figure H



Generate a single column for the title text.

Figure I



*This centered title spans the columns.*

You're not stuck with a one-column span. You can span the title across two, three, or as many columns as you like, regardless of the number of columns in the section. Just select the text and choose the appropriate number of columns.

In step 5, you might have noticed that Word inserted a continuous section break. That's how Word splits the document multi-column section from the title section.

## 23. Add a picture

You can insert a picture in a columnar section the same way you would in a normal document (one column). Click the Insert tab and click Picture or Clip Art in the Illustrations



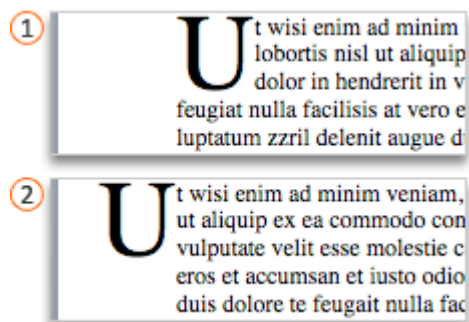
group, locate your picture, and continue. Then, right-click the newly inserted graphic and choose Square or Tight from the Wrap Text drop-down in the Arrange group on the contextual Format tab. In Word 2003, right-click the image, choose Format Picture, and click the Layout tab.

## 24. Drop Cap

Word 2010 offers three widely used formats in Drop Cap gallery, However, there is an option to customize the layout and size of drop cap according to your requirements.

For dropping first letter cap, select the first letter of paragraph and navigate to Insert tab, and from Text group, click Drop Cap drop-down button and select a desired drop cap position.

Drop cap is a large capital letter at the beginning of a text block that has the depth of two or more lines of regular text. The following illustration shows your options for positioning a drop cap.



① Dropped

② In margin

Do any of the following:



Drop Cap

### III. Boiler Plate features in MS-Word

#### 1. Document templates

Every document created in Word has a template associated with it. A template is a collection of formatting, styles, macros and possibly text. When you start Word 2010, it opens a blank document based on the “Normal” or “standard” template. When you go to create a new document by clicking the **File** tab and choosing **New**, or open Word 2013, Word displays a variety of available templates from which you can choose, including the standard **Blank document** template which uses the Normal template.

A template is simply a Word document, with a file extension of **.dotx** (regular template) or **.dotm** (a template that may contain macros) **instead of .docx**.

#### 2. Saving and Creating Templates

Templates you create should be stored in the trusted templates folder:

- Word 2013
  - **C:\Users\userid\Documents\Custom Office Templates (Windows 8)**
  - **C:\Users\userid\Documents\Custom Office Templates (Windows 7)**
- Word 2010
  - **C:\Users\userid\AppData\Roaming\Microsoft\Templates (Windows Vista/7/8)**
  - **C:\Documents and Settings\userid\Application Data\Microsoft\Templates (Windows XP)**

Where 'userid' is the name of the computer account you are logged into.

Saving here tells Word that it is safe to open even if the template should contain macros or other code. Because macros can contain malicious code, Word is on the lookout against opening documents with macros. If your computer security settings are at the recommended level, Word will open any template file, but it will disable any macros it contains. For templates that are in the **(Trusted) Templates** folder, however, Word doesn't disable the macros. It assumes the files are safe, so be sure the files you store there are from a trusted source.

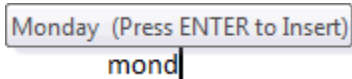
You may wish to create all the styles you think you will need, and set up some standard formatting, (margins, etc.) and save these settings as a template:

1. Choose **File/Save As**
2. For Word 2010, select **Microsoft>Templates** (or **Trusted Templates** if you are using Windows XP) on the left side of the **Save As** window. (In Word 2013 the save location is automatically changed to the templates folder when step 3 is completed)
3. Beside **Save as type:** select **Word Macro-Enabled Template** or **Word Template**. Choose **Word Macro-Enabled Template** if your template has macros, as the UWaterloo Thesis template does.
4. Enter the **File Name:**
5. Click **Save**.
6. To create a new document based on this template, select **File/New**
  - For Word 2010, click on **My Templates** and select your template. Click **OK**.

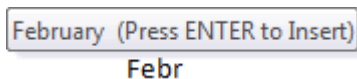
- For Word 2013, click on **PERSONAL** and select your template.

### 3. AutoText

AutoText in Word is the feature that displays helpful tooltips while you are typing text. If you press Enter when you see such a tooltip, Word will accept the suggested completion. For example, if you start typing the word “monday”, by the time you have typed “mond”, Word has a good idea what you are trying to type, and presents the following tooltip.



Pressing Enter at this point will insert the word “Monday”. The same thing happens when you type in the start of months too:



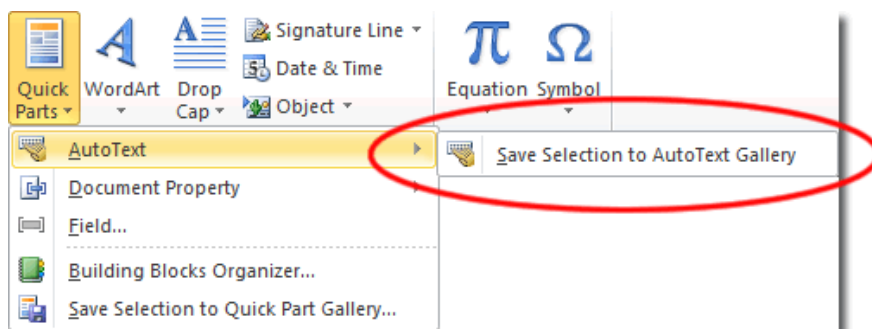
The built in AutoText that comes with Word 2010 only applies to dates such as days or months, which is a shame. However, you can add your own entries to the AutoText gallery.

### 4. Adding Your Own AutoText

Suppose you have a portion of text that you know you will have to type in numerous times in your document. It’s a long piece of text, so it would save time for you to be able to insert it automatically. This is just the kind of situation that homemade AutoText entries were made for.

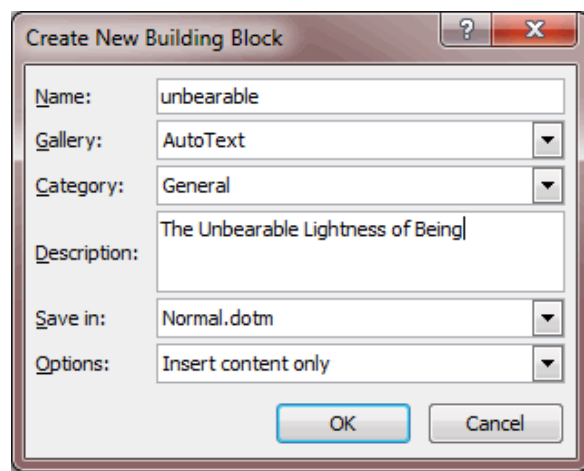
Let’s pretend you are doing a book review and you need to type in the phrase “The Unbearable Lightness of Being” many times. We’ll now set up an AutoText entry for it.

First of all type out the phrase, then select it and click to the Insert tab > Quick Parts (in the Text group) > AutoText > Save Selection to AutoText Gallery.



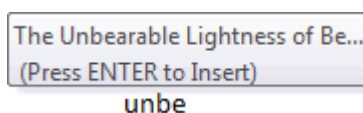
When the *Create New Building Block* window opens, we must type something into the Name box. The name is what Word will use to recognise what you are typing. We should also type in a description in the Description box, as this text will appear in the tooltip, once Word thinks you are typing the phrase.

The entries in the following image are perfect.



This AutoText entry instructs Word to display “The Unbearable Lightness of Being” in a tooltip whenever you start typing the word “unbearable”. Click OK to save the new AutoText entry. Now let’s test it out by typing out “unbearable”.

You should find that you don’t need to type out the whole word before the tooltip pops up.



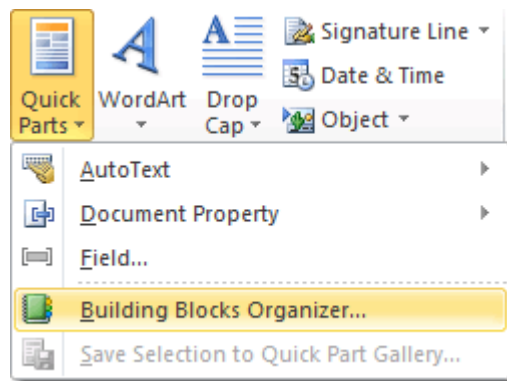
Pressing Enter at this point will insert the whole phrase.

If you complete typing the word “unbearable” without pressing Enter, the AutoText will be ignored and the single word “unbearable” will remain, so you do get a choice of whether or not to use the AutoText.

## 5. Viewing AutoText Entries

To view all the AutoText entries that have been added in the past, click the Quick Parts button (in the Text group on the Insert tab) and then hover over AutoText. You will see a gallery of AutoText. If you click on an entry, that will insert the AutoText into your document where the cursor is currently positioned.

To edit existing entries, click the *Building Blocks Organizer* option in the *Quick Parts* menu instead.



The window that then opens allows us to select an entry and amend it by clicking the *Edit Properties* button at the bottom. The entry will appear in the AutoText Gallery, and you can sequence the list by Gallery to help you find it.

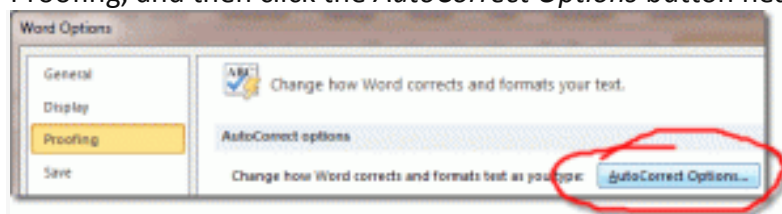
## 6. F3 And AutoText

If you really want to save time, you can type in an abbreviated word in the name box of the *Create New Building Block* window. In our example, we could use “un” to stand for the AutoText entry. The only problem is that there are many words that begin with “un”. How can Word know that when you type “un” you would like the AutoText tooltip to pop up? It can’t. And it would be pretty annoying for the tooltip to appear every time you typed “un”, as most times you wouldn’t need it.

This is where the F3 on your keyboard comes in. If you type in the name of your AutoText and then press F3, the full phrase will be inserted.

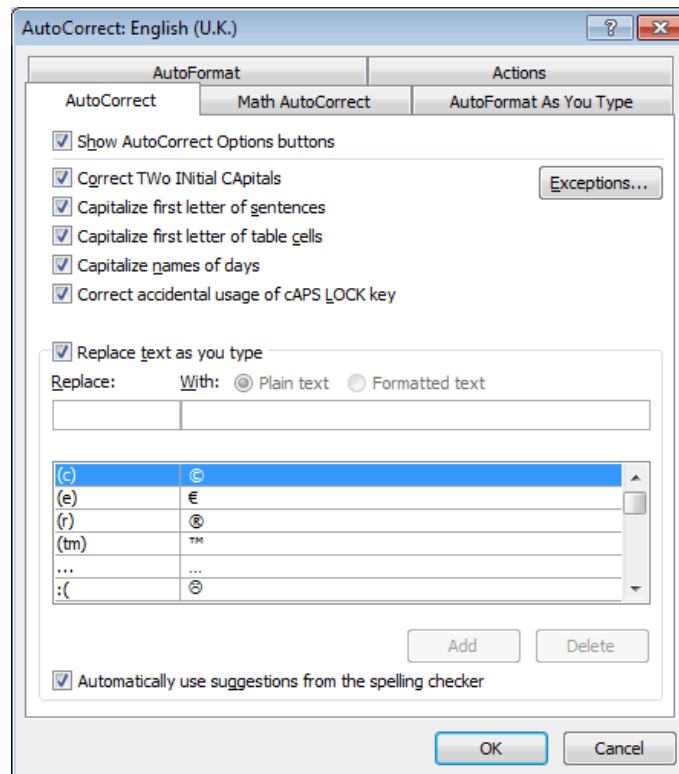
## 7. AutoCorrect Options

You can customize the way that Word AutoCorrect works: click the File tab > Options > Proofing, and then click the *AutoCorrect Options* button near the top of the window.



Click to enlarge

The AutoCorrect window has many tabs, but when it opens, it will display the AutoCorrect tab. The options at the top are basically a list of yes/no questions in the form of checkboxes, described as follows:



**Show AutoCorrect Options buttons** – after an autocorrection has been applied, if you hover over the corrected word you’ll see the AutoCorrect Options button appear (see below). This checkbox turns it off.

- **Correct TWO Initial Capitals** – with this option checked, this sentence would become “Two Initial Capitals”
- **Capitalize first letter of sentences** – fairly self explanatory.
- **Capitalize first letter of table cells** – similar to the above option, except that table cell contents are treated in isolation. When you tab to the next cell, or press the spacebar, for example, the capital letter is applied to the first letter of the first word in the cell.
- **Capitalize names of days** – Word recognises the names of the days (there are only seven, after all) and when this option is checked, day names with lowercase initial letters are corrected.
- **Correct accidental usage of cAPS LOCK key** – Word can detect when you’ve accidentally left the Caps Lock button on and corrects the text you type.
- **Replace text as you type** – this section is geared towards setting up “shortcuts” for long pieces of text that would be tedious to type in. To set up “cdc” to be converted to “Centers for Disease Control”, see the image below.

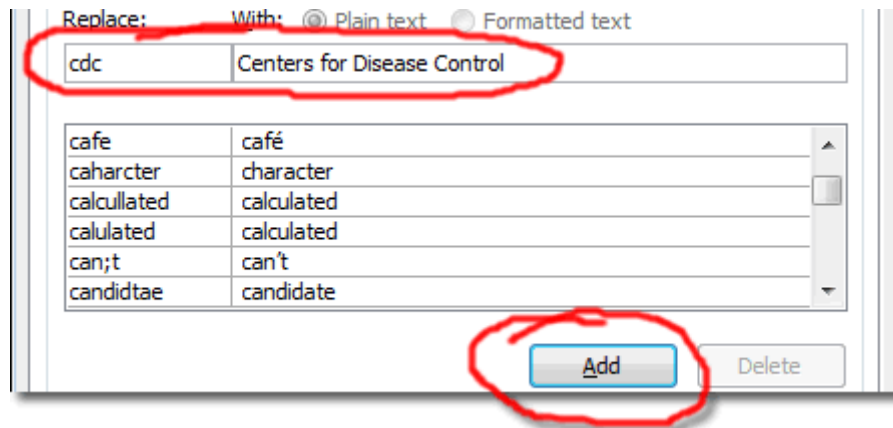
Once you’ve made changes on the AutoCorrect window, click OK to save them. The changes you make take immediate effect.

### AutoCorrect Options Buttons



AutoCorrect Options

### Replace text as you type



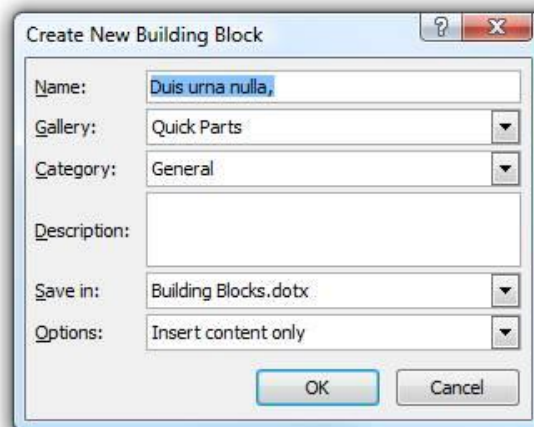
## 8. Difference between Building Blocks/AutoText and AutoCorrect.

- The obvious difference between Building Blocks/AutoText and AutoCorrect is how they are triggered.
- AutoCorrect takes effect as soon as you type text that Word recognizes, followed by a space or punctuation.
- Building Blocks/AutoText requires you to press F3 or accept the AutoComplete prompt if you don't specifically enable the replacement, nothing happens.
- If you want complete control and don't like things happening "automatically," you may prefer Building Blocks/AutoText.

## 9. create a new Building Block?

1. Type or insert the material you want to include in the new entry. It can be text—from as little as one character to many pages—or a table, a graphic, fields, text boxes, or any combination of these items.
2. Select all the text or other material to be included in the entry (pay special attention to the paragraph mark at the end of the selection—you may or may not want to include it).
3. Press **Alt+F3** to open the Create New Building Block dialog, shown below. Alternatively, you can click the **Save Selection to <name> Gallery** item at the bottom of almost any gallery.

rices posuere cubilia Curae; Quisque porta dapibus velit. Maecenas sit amet massa  
 ier. Duis urna nulla, egestas quis, varius vel, lacinia a, diam.



4. The dialog will suggest a name for your entry from the beginning of the selection but you can change the name. The name must be unique within the gallery you are using.
5. Change the Gallery drop down to the gallery of your choice. (If you select AutoText or a Custom gallery, see **Adding a Custom or AutoText gallery button to the Quick Access Toolbar** .)
6. Choose one of the existing categories, or click **Create New Category** and create a new one. (The entries in the galleries are sorted and grouped by category.)
7. (Optional) Add a Description. It will be shown in a ScreenTip when you hover your mouse over the thumbnail in the gallery.
8. You can leave the setting to save the entry in Building Blocks.dotx or change it to save in any open template. Building Blocks can only be saved in templates and cannot be saved in regular documents.
9. (Optional) The **Options** drop down enables you specify where the Building Block is to be inserted, such as in its own paragraph or in its own page.

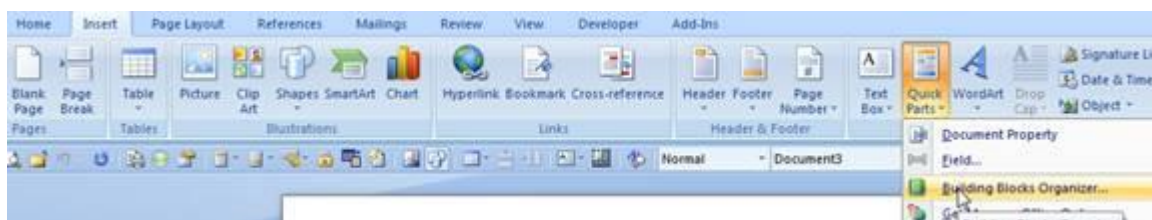
### Assign a Building Block to a keyboard shortcut

Another method for inserting Building Blocks is to create your own keyboard shortcut.

1. Click **Office Button>Word Options>Customize**, and next to "Keyboard Shortcuts" at the bottom left, click the **Customize** button.
2. Select **AutoText** in the list on the left. Building Blocks in all galleries will be displayed.
3. Select the name of the entry in the list on the right.
4. Click in the "**Press new shortcut key**" text box.
5. Press the key combination you want.
6. Click the **Assign** button.

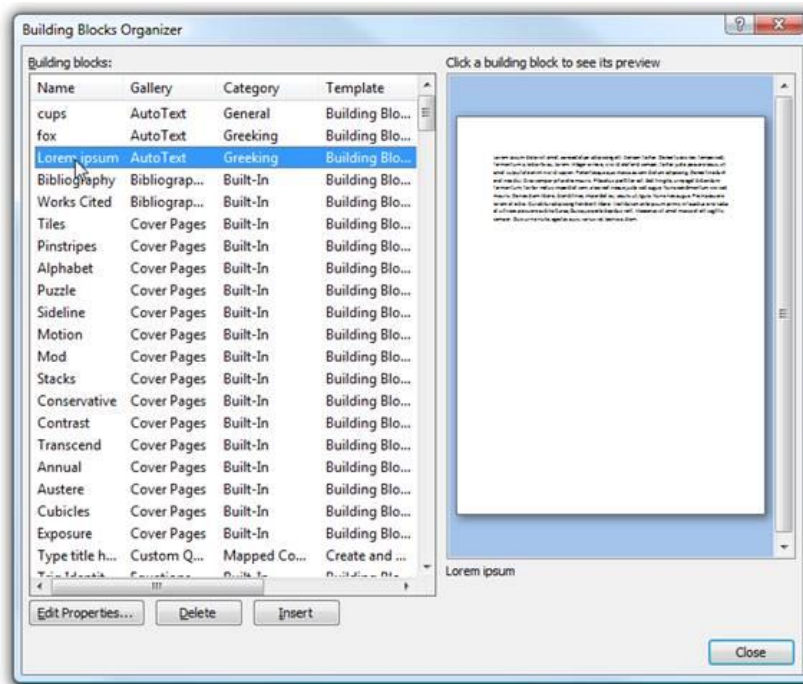
## 10. Building Blocks Organizer

To see all of the available Building Blocks, click **Insert>Quick Parts>Building Blocks Organizer**.



In the Building Blocks Organizer dialog, you can click the column headings to sort the entries. For example, if you click the Gallery column heading the Building Blocks will be grouped by gallery and sorted alphabetically within each group. Clicking an entry places a preview in the box to the right, although text will usually be too small to read.





If you created AutoText entries in a previous version of Word, you'll find them stored as Building Blocks in a gallery called AutoText. For more on using Building Blocks in the AutoText gallery see **Adding a Custom or AutoText gallery button to the Quick Access Toolbar** .

Clicking the Insert button inserts the text of the selected entry into the document at the cursor position.

To edit an entry, select it in the list and then click the **Edit Properties** button. The Modify Building Blocks dialog box is similar to the Create New Building Block dialog box, and you can change any of the previously assigned properties. This dialog box can also be used to move a Building Block from one to template to another by changing the “Save in” box. This will move the entry, not copy it.

#### IV. Generating Table of Contents and Indexing in MS Word

Creating a table of contents in a Microsoft Word document is a two-step process. First, identify the text that you want to appear in the Table of Contents. Second, tell Word to insert the Table of Contents. Having created your Table of Contents, you can then customize it in several ways, to suit your needs.

##### 1. Identify the text that you want to appear in the Table of Contents

In your document, click within the first major heading that you want to appear in the Table of Contents. Apply the Heading 1 style to that paragraph. The easiest way to apply the Heading 1 style is:

- in Word 2003 and earlier: click the **Style** box on the Formatting toolbar and choose Heading 1

- in Word 2007 and Word 2010: on the **Home** tab, in the **Styles** group, click the Heading 1 thumbnail.

In the same way, apply the Heading 1 style to other major headings in your document. Apply the Heading 2 style to sub-headings, Heading 3 style to sub-sub-headings etc.

If you don't like the way the heading styles look (eg, you want a different font or font size or colour), don't format the text directly.

## 2. Create the Table of Contents

### Word 2003 and earlier versions

1. Click where you want your Table of Contents to appear.
2. Display the Table of Contents dialog. To do that:
  1. In Word 2000, choose **Insert > Index and Tables**.
  2. In Microsoft Word 2002 and 2003, choose **Insert > Reference > Index and Tables**.
3. Click on the **Table of Contents** tab. Click **OK**.

### Word 2007 and Word 2010

1. Choose **References > Table of Contents**.
2. Choose one of the following items on the menu.
  - There may be **custom tables of contents** on your menu. If you click the thumbnail for a custom table of contents, your table of contents will be inserted into a content control. (There is further information about content controls below.)
  - There are two **built-in 'automatic' tables of contents**: Automatic Table 1 and Automatic Table 2. If you click the thumbnail for either of these, your table of contents will be inserted into a content control, and Word will add a heading. (There is further information about content controls below.) The only difference between the two is the text of the heading ("Contents" and "Table of contents").
  - There is a **built-in "Manual Table"**. This takes you back to the era of the electric typewriter. If you like typing things out for no good reason and your life expectancy is a lot longer than mine, this is for you.
  - At the bottom of the menu, you can choose **Insert table of contents**. This displays the Table of Contents dialog that was also in earlier versions of Word. If you want two or more tables of contents in one document, you must choose this option for the at least the second and subsequent tables of contents.
3. Using a table of contents content control in Word 2007 or Word 2010

You can use the content control to manage your table of contents (Figure 1).

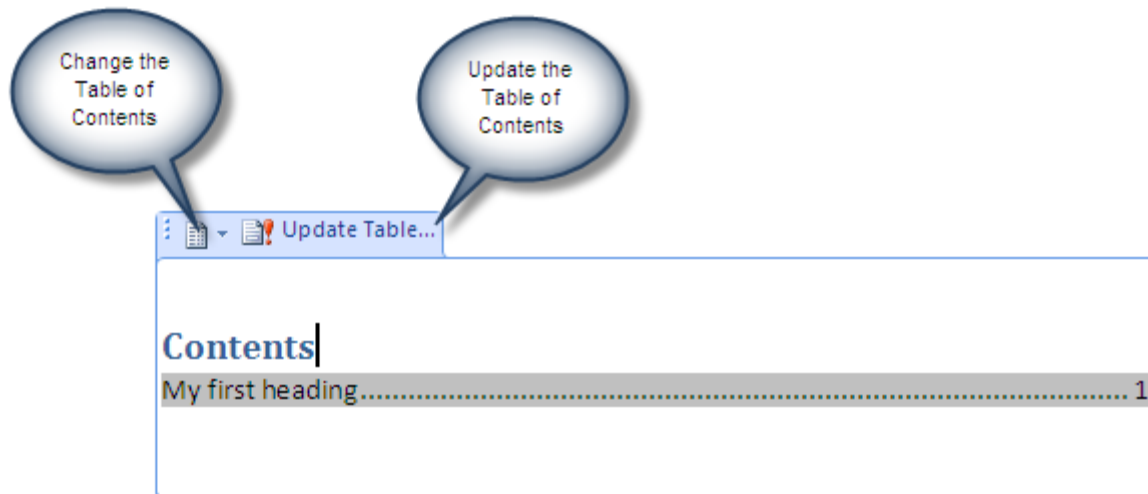


Figure 1: A table of contents in a content control

If you attempt to insert another custom or built-in table of contents that will be placed in a content control, then the new one will over-ride the existing one. If you want more than one table of contents in a document, use the "Insert table of contents" menu option for all, or at least the second and subsequent, tables of contents.

***How to create a custom table of contents and have it appear on the Table of Contents menu in Word 2007 or Word 2010***

You can save a custom table of contents and have it appear on the References > Table of Contents menu.

1. Insert your table of contents into any document, and adjust it to suit your needs.
2. Add text above and/or below the table of contents as required (for example, add a heading "Table of Contents", preferably formatted with the built-in TOC Heading style).
3. Select the text above, the table of contents, and the text below.
4. Insert > Quick Parts> Save Selection to Quick Part Gallery.
5. In the Create New Building Block dialog:
  - give your table of contents a name
  - in the Gallery list, choose Table of Contents
  - in the Category list, choose 'Create new category' and name your new category
  - click OK.

You can now insert your table of contents using References > Table of Contents. It will be inserted into a content control, like the built-in tables of contents.

Word displays entries in the menu in alphabetical order by category. Sadly, there are few letters in the alphabet before the "B" for "Built-In". If you want your custom tables of contents to appear before the Built-In category, but there is no name between "A" and "Built-In" that suits you, then put a space at the beginning of the category name. For example, name your category "Shauna". A space is alphabetized before a letter, so " Shauna" will be displayed before "Built-In".

#### 4. Customize the Table of Contents (if you need to)

### How to change the look of the headings in the document

If you don't like the way your headings look (eg you want a different font, font size, colour, more or less spacing before or after the heading), **don't** choose Format > Paragraph or Format > Font (in older versions of Word) or use the tools on the Home tab (in newer versions of Word). And don't use the font size or bold buttons on the toolbar or ribbon. Instead, modify the Heading style.

### How to change the look of the Table of Contents itself

To modify the Table of Contents itself, you need to display the Table of Contents dialog. To display the dialog for an existing table of contents:

- in Word 2000: click within the table of contents and choose **Insert > Table of Contents**
- in Word 2002 and Word 2003: click within the ToC and choose **Insert > References > Table of Contents**
- in Word 2007 and Word 2010: click within the ToC and then click **References > Table of Contents > Insert Table of Contents** (if the ToC is in a content control, be sure you've clicked the ToC itself, and not any "Contents" heading above the ToC)

From the Table of Contents dialog you can modify the Table of Contents in several ways.

- By default, Word shows three levels in your Table of Contents. That is, it puts the text from Heading 1, Heading 2 and Heading 3 in the Table of Contents. If you want to show more or fewer levels, in the Table of Contents dialog, change the number in the **Show levels** box.
- There are very good reasons for using the built-in Heading styles. But if you really need to use other styles (other built-in styles, or custom styles), you can put them in your Table of Contents. In the Table of Contents dialog, click **Options**, and allocate your style(s) to the appropriate level(s).
- To change the font, font size, colour etc used to create the Table of Contents itself, you need to do two things in the Table of Contents dialog. First, make sure that, in the **Formats** box, you have chosen "From Template". Second, click **Modify** and modify the relevant TOC style. Word uses style TOC 1 for the top level of contents, TOC 2 for the next level etc

For sophisticated customization, you can edit the switches in the TOC field.

#### 5. How to create a table of contents for several documents

To create one table of contents for several documents, you need to do the following.

1. Create a separate document to hold the table of contents (we'll call this "the ToC document").
2. For ease, put all the documents, and your ToC document, in the one folder.
3. In your ToC document, use an RD (Reference Document) field for each document that you want to include in your Table of Contents.
  - To insert an RD field, do ctrl-F9 and, within the brackets that Word gives you, type RD "*filename*". For example { RD "Chapter 1.docx" }. You can't type the curly brackets by hand. You must do ctrl-F9.
  - If you can't put all your files in one folder, you must use double backslashes and double quotes. For example, { RD "C:\\My folder\\Chapter 1.docx" }.
  - In theory, you can use relative path names. But it never seems to work properly<g>.
4. Add an RD field for each document that you want to reference, in order.
5. Create the Table of Contents in this ToC document in the usual way.
6. Remember the page number rule: "The Table of Contents will pick up whatever pagination appears in your document". It applies when using RD fields to create a ToC for many documents. You may have to set the starting page number manually in each document if you want pagination to run consecutively through your project.

#### 6. Other tips about Tables of Contents

- A Table of Contents is a field, not ordinary text. To see fields in your document, you can tell Word to display fields with grey shading. The grey doesn't print, but it reminds you that this is a field, not ordinary text. To display fields with grey shading:
  - in Word 2003 and earlier versions: **Tools > Options > View**; set the Field Shading box to Always.
  - in Word 2007: Click the round **Office (pizza) button**, click **Word Options**, then, in the menu at left, click **Advanced** and in the 'Show document content' section set Field Shading to "Always".
  - in Word 2010: Click **File**, then **Options**, then, in the menu at left, click **Advanced** and in the 'Show document content' section set Field Shading to "Always".
- Tables of Contents don't update automatically when you add a new heading to your document. This is because a ToC is a field. To update a Table of Contents, put your cursor in the Table of Contents and press **F9** to update it. Or **ctrl-a F9** to update all fields in the document. In Word 2007 and Word 2010, if your table of contents is in a content control, you can use the content control to update the ToC.
- When you update your Table of Contents, always choose to update the Entire Table (Figure 2).



Figure 2: Whenever you see this box, **always** choose the second option and update the entire table.

Note: It is also possible to create a Table of Contents by marking each individual paragraph that you want to appear in the ToC. Then, you tell Word to use your marked paragraphs to create the ToC. You do this using { TC } fields. It seems to me that the chance of human error in accidentally omitting to mark a heading is large. I wouldn't risk it. But if you're interested, look at Word's help under TC.

## 7. PDF for electronic submission

Theses are now submitted electronically in PDF format to the Graduate Office. They should be named, based on your name, **Lastname\_Firstname.pdf**. Word 2010 and Word 2013 have a built in PDF creator, and Word 2007 allows you to download a free PDF creator add-in that works very well with Word 2007 for creating PDF files.

For Word 2007, check to see if the PDF creator add-in is installed:

- Click on the **Office button** in the top left and choose **Save As**
- If, under **Save As**, you see **PDF or XPS**, then the add-in is installed and you can click on **PDF or XPS**, then browse to where you want your PDF file saved, type in the name you want it to be called, and click **Publish**.
- If, under **Save As**, you see **Find add-ins for other file formats**, then the add-in is not installed. See the next section for instructions on how to install it

**Word 2007: How to install the add-in if it is not installed:**

- Sign onto the PC with an administrative account.
- **Open Word** and click on the **Office button** at top left, then select **Save As/Find add-ins for other file formats**.
- A Word Help window will appear. Browse down and click on the hypertext for **Microsoft Save as PDF or XPS Add-in for 2007 Microsoft Office programs**.
- Internet Explorer (or your default web browser) should load a page.
- Click on the **Validation** button in the middle of the page to continue.
- A horizontal message bar will appear near the top of your window (below the Internet Explorer toolbar). Click where it says "**click here**" and select **Install Active X Control** from the menu.
- Click **Run** to any windows asking you to install Active X, and then the SavetoPDF... exe file.
- At the license page, click in the bottom left to "**accept**" then the **continue** button.
- A window should appear when the installation is complete.
- Click **OK**.
- **Close Word and re-open it.**

## 8. Converting Word files to PDF

### If you are using Word 2010/2013 built in PDF creator

- Click on the **File** tab and choose **Save As**
  - Browse to the location where you want it saved.
  - Choose **PDF (\*.pdf)** beside **Save as type**:
  - Click **Options**. Make sure that the **Document structure tags for accessibility** and **Document Properties** is checked and **Create bookmarks using Headings** is checked and click **OK**.
  - Type in the name you want it to be called (based on the **Lastname\_Firstname.pdf** format), and click **Save**.
  - NOTE: Avoid security settings as they may interfere with assistive software
- How to save a Word 2007 file as PDF using the add-in:**

- Click on the **Office button** and choose **Save As/PDF or XPS**.
- Browse to where you want it saved, type in the name you want it to be called (based on the **Lastname\_Firstname.pdf** format), and click **Publish**.

## 9. Save a document to a shared folder on your server

Once you tell your operating system where to find the shared folder, you can use the Save As command to save files directly to a folder others can access. In Windows 7, you can set up Windows Explorer to recognize the shared folder by mapping the drive. Open Windows Explorer, right-click Network, and choose Map Network Drive. Then, specify a drive letter, choose the folder you want to use, and click Finish. That should add your shared folder to your Network Connections so you can choose the folder to receive the files when you use the Save As dialog box.

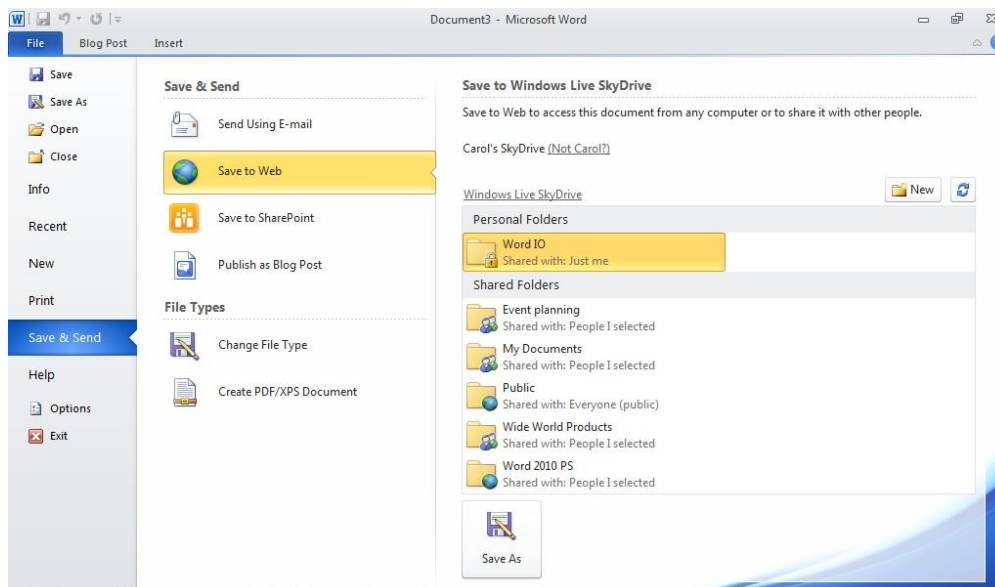


## V. Document Sharing and Security Issues

### 1. Share a Word doc in Windows Live SkyDrive

The integration of Word 2010 with Windows Live SkyDrive and the addition of the Word Web App is one of the big stories of the new release. Now you can easily post a Word document to Windows Live SkyDrive by using the Save To Web tool in the Save & Send tab and continue editing, formatting, or even sharing it with others, right from that online space (**Figure A**). The editing tools in the Word Web App enable you to do everything you might need to do online, including add new content, research your topic, and edit and format what's already there. You can give others access to the file stored in Windows Live SkyDrive so that you can all work together peaceably on the file in a space that's accessible to everyone.

**Figure A**



*The Word Web App and Word's integration with Windows Live SkyDrive make collaboration easy.*

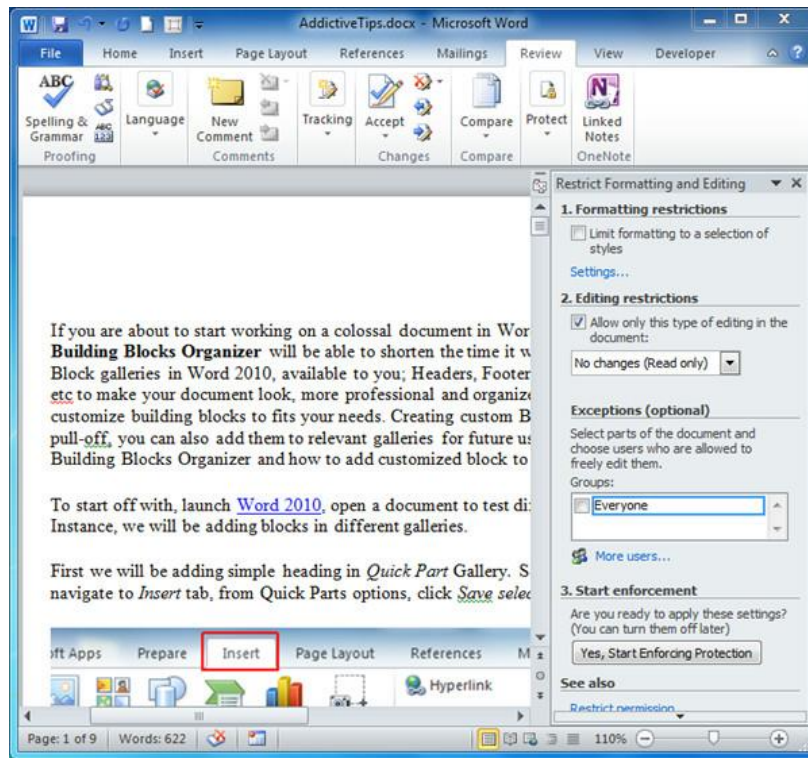
### 2. Restrict Editing To Secure Word 2010 Document

Keeping your important document protected from any external source would be extremely beneficial. Sometimes while writing document it become dire need to maintain confidentiality of document and preventing document from being edited from any unauthenticated source. Word 2010 provides an option to make your document protected from any unauthorized use, which eventually mitigates the probable of vulnerability. There are several ways to secure document content but in this post we will be focusing on how to enforce editing restrictions.

To start out with, launch Word 2010 document on which you want to restrict editing. Navigate to *Review* tab and click *Restrict Editing*.



You will see *Restricting Formatting and Editing* pane at the right sidebar providing numerous options to restrict editing.

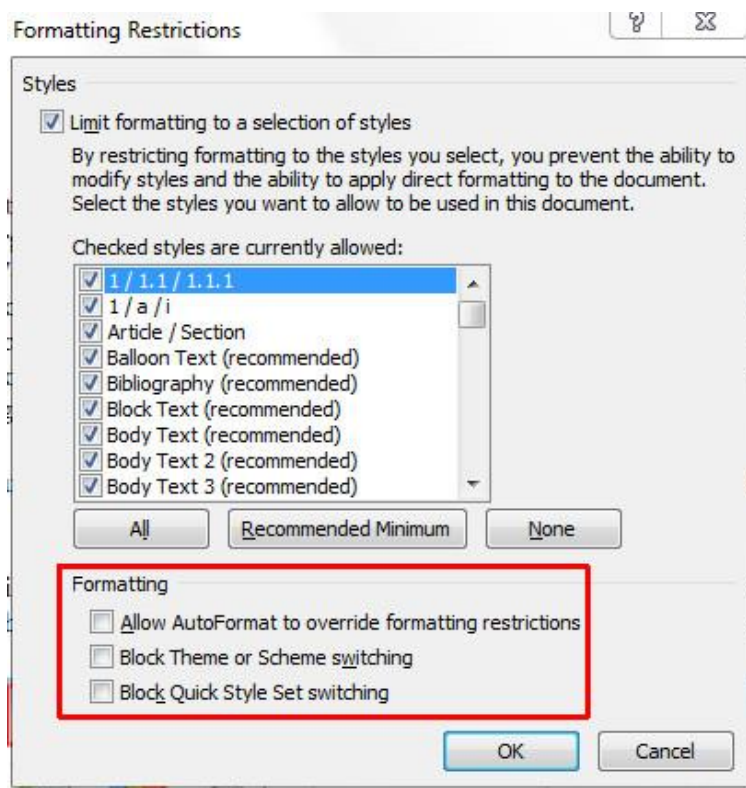


Under *Formatting restrictions* enable *Limit formatting to a selection of styles* option. For configuring advance options click *Settings*.

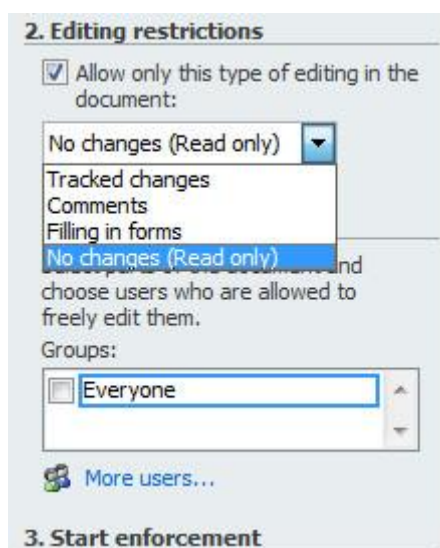


Upon click *Formatting Restrictions* dialog will appear, here you can restrict formatting to the desired styles and prevent others from modifying styles and change formatting of the document. Scroll through the list and disable the desired options. You can also use the recommended settings by clicking *Recommended Minimum*.

Under *Formatting* you can enable several options that lets you to Allow AutoFormat usage which overrides formatting restrictions, Block Theme or Scheme switching, and Block Quick Style Set Switching. Click *OK* to continue.

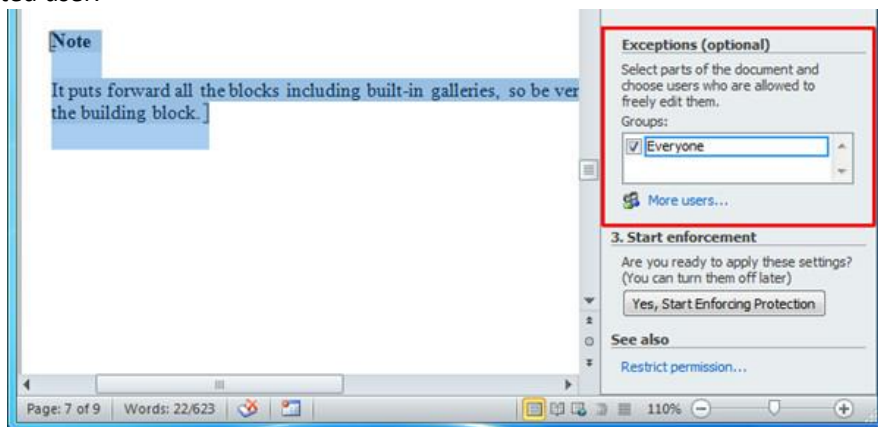


From *Editing restrictions* enable *Allow only this type of editing in the document* option and from it's list choose desired option.



If you want users to edit portion of the document content then select the content and under *Exceptions (options)*, select the users you want to give permission of editing. If you want to add users for this, click *More users*.

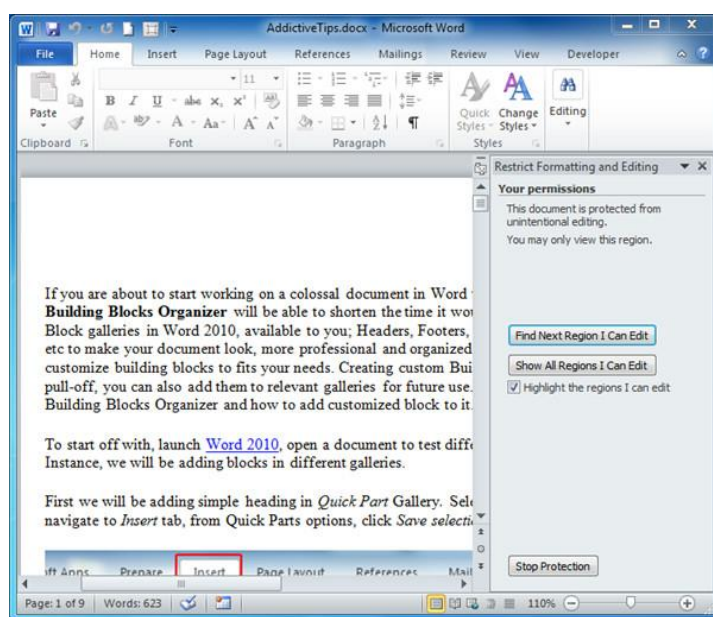
Now from *Start enforcement* click *Yes, Start Enforcing protection* to protect document from any unauthenticated user.



Now enter passphrase to make your document password protected. If you want to encrypt document and allow authorized users to remove protection when they want, then enable *User authentication*. Click *OK* and save the document.

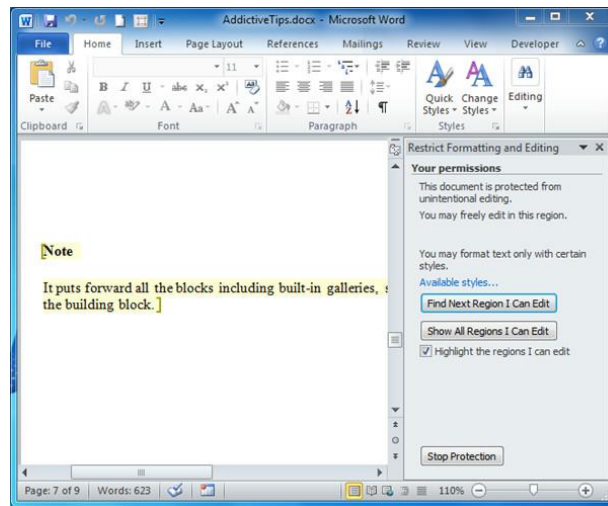


When someone will try to edit the document, *Restrict Formatting and Editing* bar will appear, but they can find the regions which they can edit.



Upon clicking *Find Next Region I can Edit*, it will take you to the content you can edit, as shown in the screenshot below.

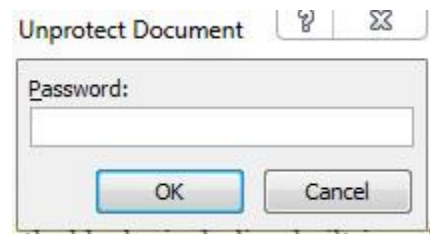




If you want to disable protection then click *Stop protection*. Enter password to let Word 2010 know that you are an authorized user.

### 3. Set Document Password:

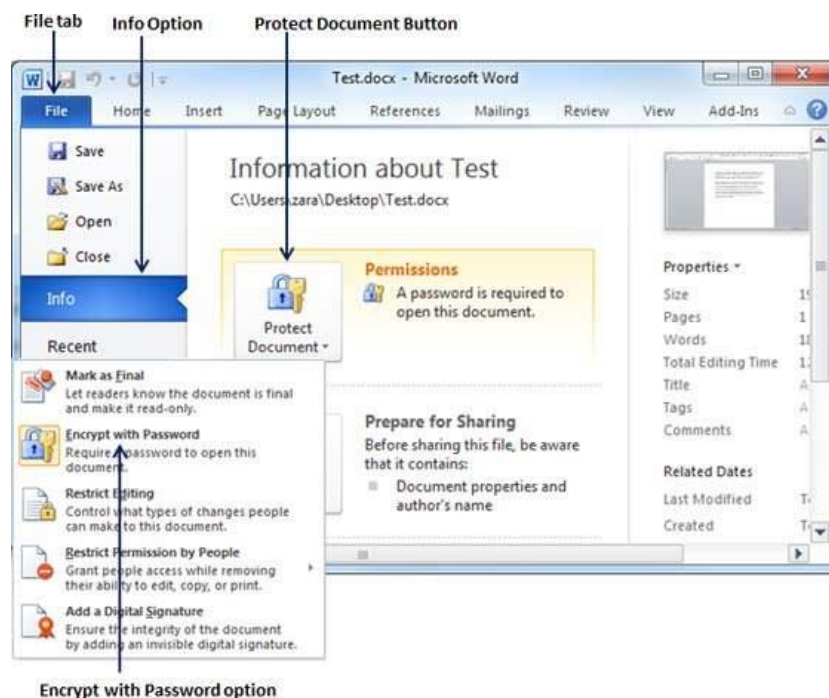
Once you set a password for a document then you will be able to open the document only if you know the password. If you lost your password then there is no way to recover it and to open the document. So you need to be careful while setting a password for your important document.



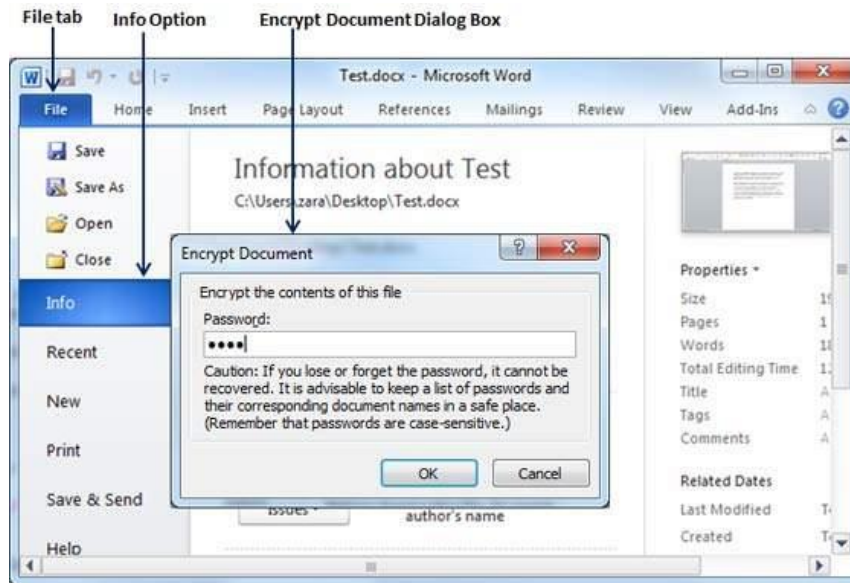
Following are the simple steps to set a password for a word document.

**Step (1):** Open a word document for which you want to set a password.

**Step (2):** Click the **File** tab and then click **Info** option and finally **Protect Document** button which will display a list of options to be selected.



**Step (3):** Select **Encrypt with Password** option simply by clicking over it. This will display an **Encrypt Document** dialog box asking for a password to encrypt the document. Same dialog box will appear twice to enter the same password. After entering password each time, click **OK** button.



**Step (4):** Save the changes, and finally you will have your document password protected. Next time when someone will try to open this document it will ask for the password before displaying document content, which confirms that now your document is password protected and you need password to open the document.

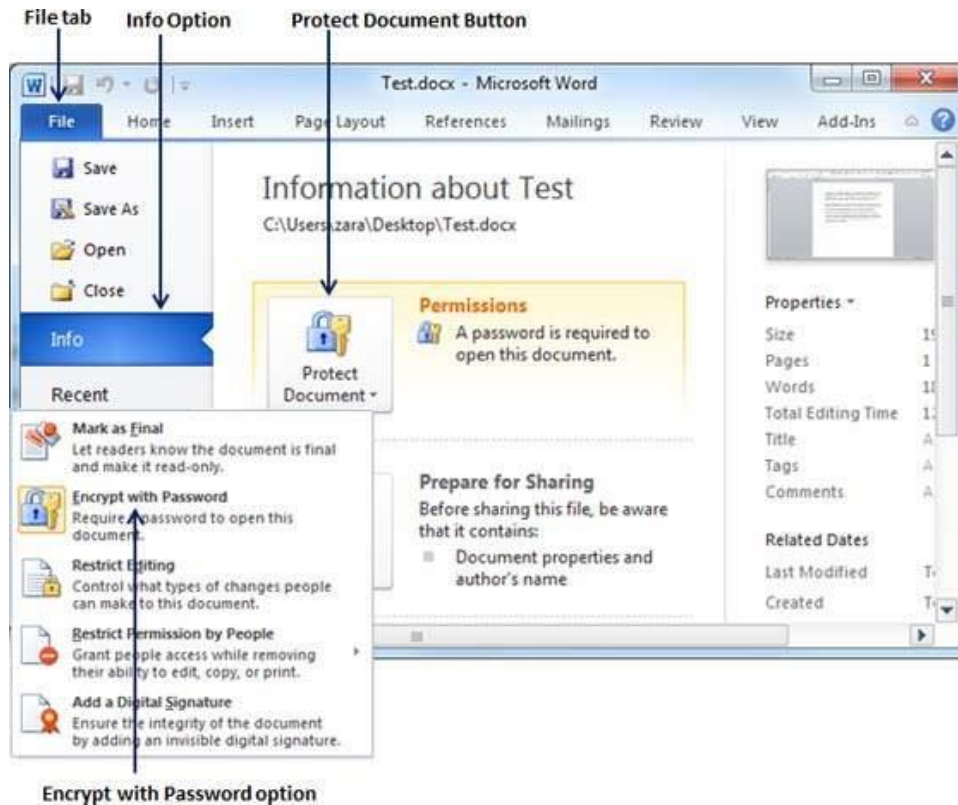


#### 4. Remove Document Password:

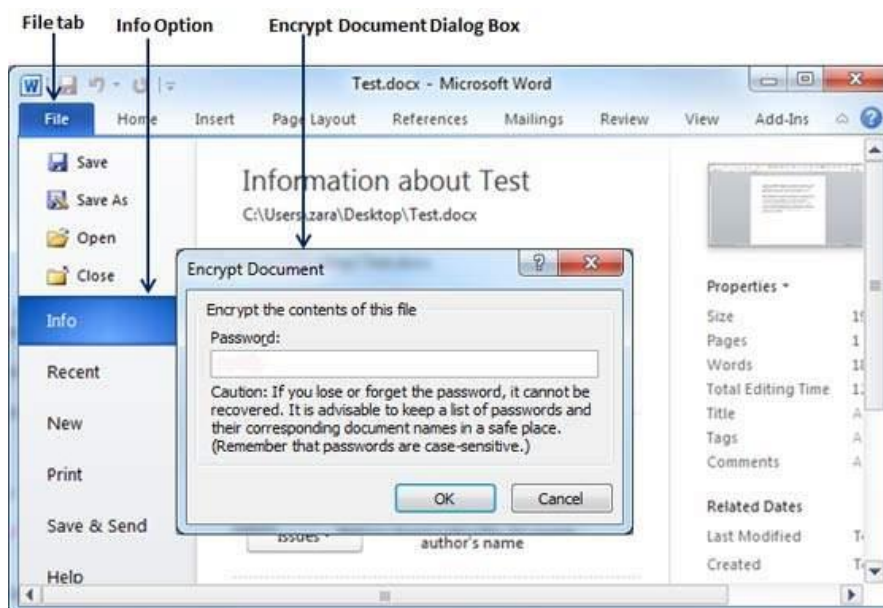
You can remove a document password only after opening it successfully. Here are the simple steps to remove a password protection from your word document.

**Step (1):** Open a word document for which you want to remove the password. You would need correct password to open the document.

**Step (2):** Click the **File** tab and then click **Info** option and finally **Protect Document** button which will display a list of options to be selected.



**Step (3):** Select **Encrypt with Password** option simply by clicking over it. This will display an **Encrypt Document** dialog box and password which will be in the form of dotted. You need to remove these dotted from the box and make it clear to remove the password from the document.



Now when you will open your document next time, word would not ask you for any password because you have removed the password protection from the document.



# MS PowerPoint 2010

## I. Custom Animation using PowerPoint

You can animate the text, pictures, shapes, tables, SmartArt graphics, and other objects in your Microsoft PowerPoint 2010 presentation to give them visual effects, including entrances, exits, changes in size or color, and even movement.

### 1. Overview of animating text and objects

Animation is a great way to focus on important points, to control the flow of information, and to increase viewer interest in your presentation. You can apply animation effects to text or objects on individual slides, to text and objects on the slide master (slide master: The main slide that stores information about the theme and layouts of a presentation, including the background, color, fonts, effects, placeholder sizes, and positions.), or to placeholders on custom slide layouts.

There are four different kinds of animation effects in PowerPoint 2010:

☐ Entrance effects. For example, you can make an object fade gradually into focus, fly onto the slide from an edge, or bounce into view.

☐ Exit effects. These effects include making an object fly off of the slide, disappear from view, or spiral off of the slide.

☐ Emphasis effects. Examples of these effects include making an object shrink or grow in size, change color, or spin on its center.

☐ Motion Paths (motion path: The path that a specified object or text will follow as part of an animation sequence for a slide.). You can use these effects to make an object move up or down, left or right, or in a star or circular pattern (among other effects).

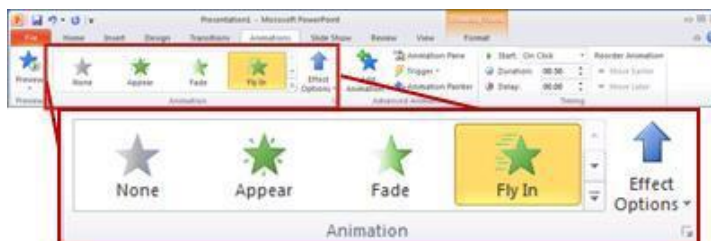
You can use any animation by itself or combine multiple effects together. For instance, you can make a line of text fly in from the left while it grows in size by applying a Fly In entrance effect and a Grow/Shrink emphasis effect to it.

### 2. Add animation to an object

1. To add an animation effect to an object, do the following:

2. Select the object that you want to animate.

3. On the Animations tab, in the Animation group, click the More button, and then select the animation effect that you want.



### NOTES

☐ If you do not see the entrance, exit, emphasis, or motion path animation effect that you want, click **More Entrance Effects**, **More Emphasis Effects**, **More Exit Effects**, or **More Motion Paths**.

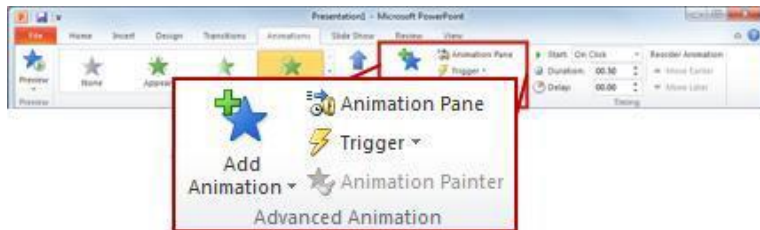
☐ After you have applied an animation to an object or text, the animated items are labeled on the slide with a non-printing numbered tag, displayed near the text or object. The tag

appears only in Normal view when the **Animations** tab is selected or the Animation task pane is visible

### Apply multiple animation effects to a single object

To apply multiple animations onto the same object, do the following:

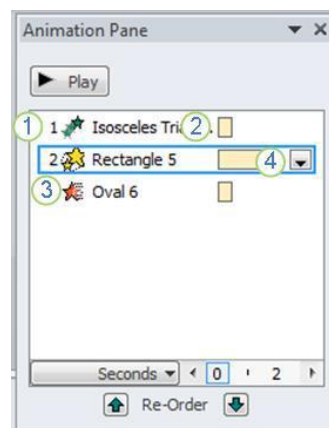
1. Select the text or object that you want to add multiple animations.
2. On the **Animations** tab, in the **Advanced Animation** group, click **Add Animation**.



### View a list of animations currently on the slide

You can view the list of all the animations on the slide in the Animation task pane. The Animation task pane shows important information about an animation effect, such as the type of effect, the order of multiple effects in relation to one another, the name of the object affected, and the duration of the effect.

To open the Animation task pane, on the Animations tab, in the Advanced Animation group, click Animation Pane.



4. In the task pane, numbers indicate the order in which the animation effects play. The numbers in the task pane correspond to the non-printing numbered tags that are displayed on the slide.

5. Timelines represent the duration of the effects.

6. Icons represent the type of animation effect. In this example, it is an Exit effect.

7. Select an item in the list to see the menu icon (down arrow), and then click the icon to reveal the menu.

### Set the effect options, timing, or order for an animation

To set the **effect options** for an animation, on the **Animations** tab, in the **Animation** group, click the arrow to the right of **Effect Options** and click the option that you want.

You can specify the start, duration, or delay timing for an animation on the **Animations** tab.

To set the **start timing** for an animation, in the **Timing** group, click the arrow to the right of the **Start** menu and select the timing that you want.

To set the **duration** of how long the animation will run, in the **Timing** group, enter the number of seconds that you want in the **Duration** box.

To set a **delay** before the animation begins, in the **Timing** group, enter the number of seconds that you want in the **Delay** box.

☑ To **reorder** an animation in the list, in the **Animation** task pane, select the animation that you want to reorder, and on the **Animations** tab, in the **Timing** group, under **Reorder Animation**, either select **Move**

Earlier to make the animation occur before another animation in the list or select **Move Later** to make the animation occur after another animation in the list.

### Test your animation effect

After you add one or more animation effects, to validate that they work, do the following:

☑ On the **Animations** tab, in the **Preview** group, click **Preview**.



### Five tips for creating animations in PowerPoint 2010

Takeaway: If you've struggled in the past with PowerPoint's animation tools, you may find the situation has improved with the latest version. Here are a few easy ways to create animation effects with PowerPoint 2010.

In previous versions of PowerPoint, animating elements on the screen was in equal parts (to me, at least) amusing and annoying. I loved it when the items did their little swirls or faded into view at just the right time. But I fussed and fumed over that one word bubble that would never arrive on cue. Now in PowerPoint 2010, the animation feature is easier — and goes farther — with just a few clicks of the mouse. Here's a small taste of these improvements.

### 3. Use ready-made animations

The Add Animation gallery presents simple animations you can easily apply to items on your slide. Simply click the element you want to animate, click the Animation tab, and click Add Animation. The gallery (**Figure A**) shows a number of simple animations that control the way objects enter, exit, appear, and disappear on your slides.



The Add Animation gallery offers assorted ready-made animations you can apply to elements on your slide.

#### 4. Set triggers

A trigger enables you to tie your animation to another action on the slide. You can create bookmarks in your presentation that trigger an animation to begin, or you can set the animation to start when you click the mouse. You can further control the trigger by indicating which action you will take to trigger the animation. Set a trigger for an animation by clicking the animated item and then clicking Trigger in the Advanced Animation group of the Animations tab.

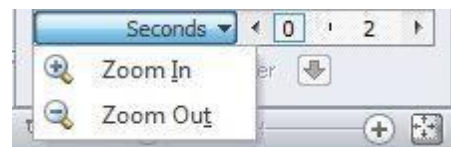
#### 5. Use the Animation Painter

It's not unheard of to spend hours trying to get everything in your presentation animated perfectly. Getting things to move at the right speed, in the right order, and ending in the right sequence used to be a pretty tricky business. Now you can automate the animation sequences you like by using the Animation Painter. Available in the Advanced Animation group, the Animation Painter works like the Format Painter tool. You click the element with the animation you want to copy, click Animation Painter, and then drag the pointer over the item you want to receive the animation settings. PowerPoint does the rest.

#### 6. Let the timeline help you out

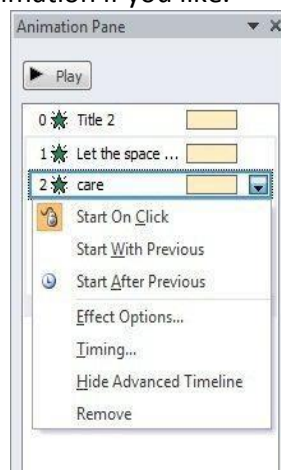
The timeline appears at the bottom of the Animation Pane to help you see how the animations are unfolding on your slide. You can use the timeline to gauge the entry and exit of various items and to determine whether you want to change the time or sequence of events. Each individual animation also shows the length of time it requires by displaying a small time segment to the right of each animation entry. You can scroll along the timeline by clicking the arrows at either end or click the Seconds control to Zoom In or Zoom Out and change the increments of time

**You can change the increments on the timeline to fine-tune the animation of elements on your slide.**



#### 7. See it all in the Animation Pane

The Animation Pane (**Figure C**) brings together all kinds of information and tools for you to use as you organize, order, and time the animation features you add to elements on your slides. Display the Animation Pane by clicking the Animation tab and choosing Animation Pane in the Advanced Animation group. The task pane lets you preview the animation (click Play), reorder animations, and see where they fall on the timeline. You can also access options related to each animation by clicking its arrow and choosing the tool you want to use. You can set options, control time, or even remove the animation if you like.



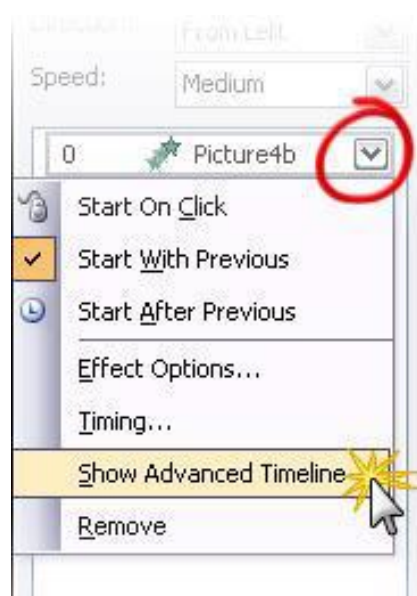
The Animation Pane brings together all the settings you may want to change for individual animations.

### 8. Advanced Animation Time line

When you need to fine tune the animation timings, you need to display the very powerful Advanced Timeline. When you open the animation pane, which do you see:



With the advanced Timeline you can see the duration, start and end for each animation in relation to the other animations. For advanced animation needs the WITH PREVIOUS setting is utilized more and the animation start position and duration are adjusted with the Advanced Timeline (as example when a subtle overlapping animation is needed).



To see the Advanced Timeline, click any animation and choose SHOW ADVANCED TIMELINE.

## II. Customizing of Presentation using PowerPoint

### 1. Recording a Voice Narration in PowerPoint

You might want to add narration to a presentation in the following cases:

- For a Web-based presentation
- For archiving a meeting so that presenters can review it later and hear comments made during the presentation
- For self-running slide show presentations

Your computer must be equipped with a sound card, microphone, and speakers for you to record and hear a narration. You can record the narration before you run a presentation, or record it during the presentation and include audience comments in the recording.

If you don't want narration throughout the presentation, you can record comments on selected slides. When you're finished recording a narration, a sound icon appears on each slide where you've recorded. You can either click the icon to play the sound, or set up the sound to play automatically.

Because voice narration takes precedence over other sounds, if you've inserted another sound to play automatically in the presentation, it gets overridden by the narration.

Automatic slide timings

As you record, Microsoft PowerPoint records the amount of time you take on each slide. You can choose to save these slide timings with the narration, or you can set slide timings separately. Slide timings are especially useful if you want the presentation to run through automatically. You can turn them off when you don't want the presentation to use them.

### 2. Embed or link the narration

You have a choice to either link or embed the narration.

☐ If you embed the narration, the narration sound file becomes part of the presentation and it travels with the presentation. However, embedding the narration results in a large file size.

☐ If you want the file size to be smaller, you can link the narration. The file is then stored where you specify on your hard drive and plays with the presentation. If you present the show on a different computer, you must carry the linked sound file with you and install it on that computer. A linked file will also play faster.

### 3. Accompany the narration with notes

Because audience needs and computer equipment varies, consider accompanying your narration with notes. This benefits anyone who is deaf or hard of hearing or whose computer lacks a sound card. If you save the presentation as a Web page (.htm file), the notes will appear beneath each slide as it displays. If you save it as a presentation (.ppt) file, you can print out the notes and make them available to your audience.

## Instructions

1. Prepare the PPTX slides with all the animation effects that you want to include;
2. Prepare notes for each slide with your narration;
3. Take a printout of your notes and mark the places in the text where you want to click for the animation effects to start during the slide show presentation;

4. Make mp3 files with your narration for each slide using the notes.
5. From the "Insert" panel, insert audio files in the slides
6. Open the "Animation Pane" in the "Animations" panel a. Move the audio file to the top of the list of effects. Make sure that the animation effect for the audio file is set to "Play." b. From the top-down menu for the audio file in the Animation Pane, click "Start With Previous." The audio file order number should show "0." c. Select from the top-down menu "Effect Options" and change "Stop playing" to "After current slide."
7. Click "Record Slide Show" in the "Slide Show" panel. Use the marks in the printed notes to click and start the animation effects and advance to the next slide while listening to the narration.

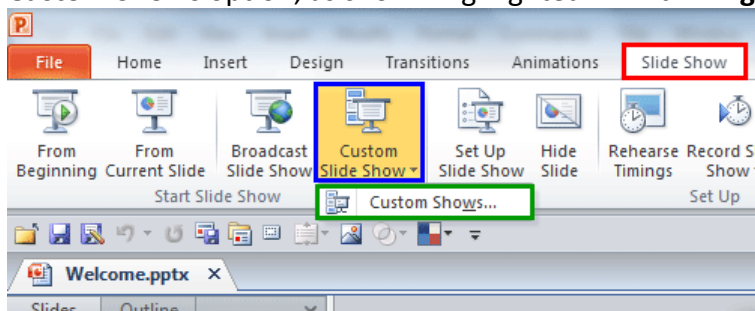
In PowerPoint 2010 you have an option to save the slide show with the animations and narrations as a high-quality Windows media Video (.wmv) file, played back on computers even if PowerPoint is not installed. To do that, click "Share" and then under 'File Types' select "Create a Video."

### III. Rehearse Timings, Custom Slideshow, and Presentation looping.

The purpose of creating a Custom Slide Show is to display only selected slides from your presentation, without deleting the slides you do not want to show. To understand a Custom Slide Show, think of your individual slides as songs -- then a Custom Slide Show is a playlist of those songs! Even better, since this is like a playlist, you do not have to delete the slides that are not used. And there's more -- you can create any number of Custom Slide Shows from a single presentation!

Follow these steps to learn how to create Custom Slide Show in **PowerPoint 2010**:

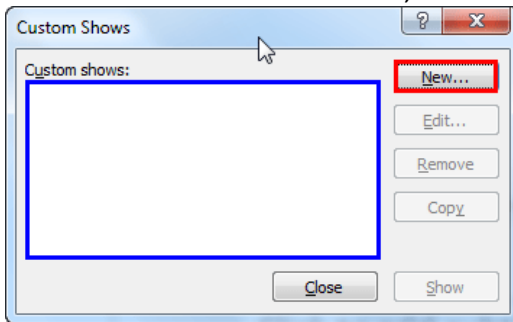
1. Open the presentation in which you wish to create a Custom Slide Show.
2. Access the **Slide Show** tab (shown highlighted in within **Figure 1**) of the **Ribbon**, and click the **Custom Slide Show** button. Within the drop-down menu that appears, click the **Custom Shows** option, as shown highlighted in within **Figure 1**.



**Figure 1:** Custom Shows option

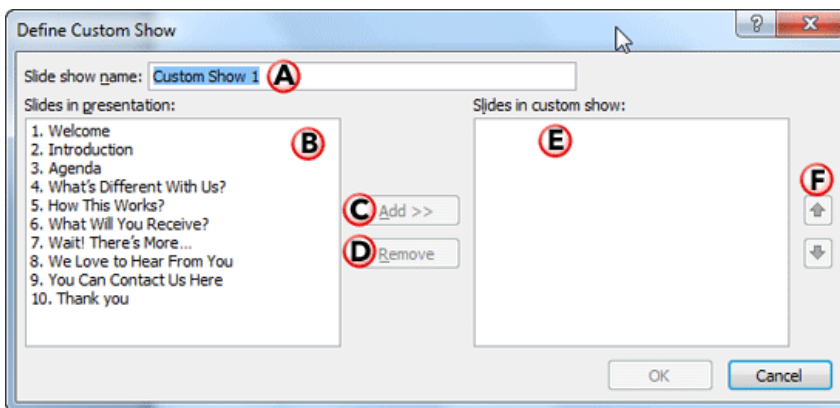


- This brings up the **Custom Shows** dialog box, as shown in **Figure 2**. Note that the area on the left, that's because this particular presentation contains no Custom Slide Show yet. To create a Custom Slide Show, click the **New** button,



**Figure 2:** Custom Shows dialog box

- This will open the **Define Custom Show** dialog box, as shown in

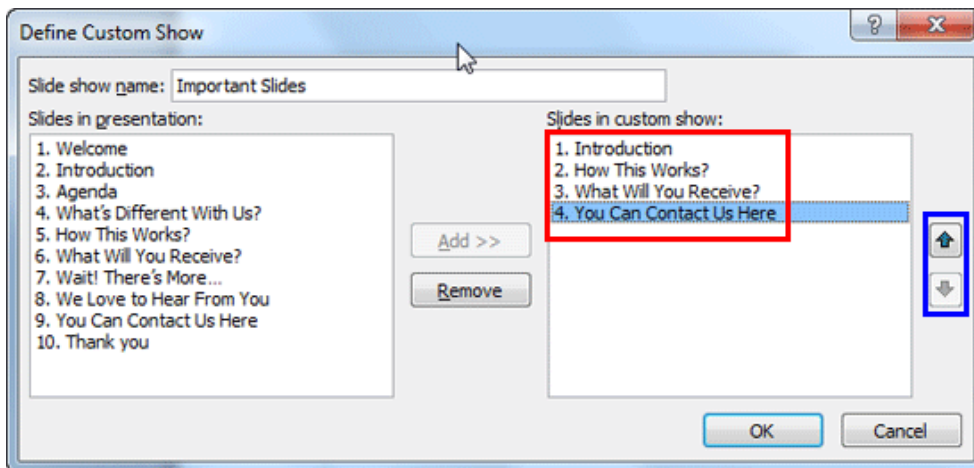


**Figure**

- 3:** Define Custom Show dialog box  
All the options within the **Define Custom Show** dialog box are explained below, as marked in **Figure 3**, above:
  - Slide show name:** Here you can provide name for your Custom Slide Show. By default PowerPoint may just call this **Custom Show 1**, but you can type in a new, more descriptive name.
  - Slides in presentation:** Shows a list of slides within the current presentation. To select slide(s), click the slide name(s).
  - Add:** This button adds the selected slides from the **Slides in presentation** area to the **Slides in custom show** area. Note that unless you select some slides within the **Slides in presentation** area, the **Add** button stays greyed out. Do note that you can also add the same slide more than once.
  - Remove:** This button removes selected slides from the **Slides in custom show** area. Note that unless you select a slide within the **Slides in custom show** area, the **Remove** button stays greyed out.



- E. **Slides in custom show:** Once you add the slides, this area shows the list of slides within the current Custom Show. **Figure 4**, below shows three slides added within **Slides in custom show** list -- you can also see that we have changed the Custom Show name to 'Important Slides'.

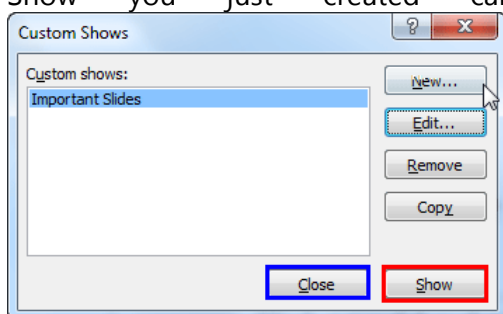


**Figure 4:** Slides added within Slides in custom show list

- F. **Re-order:** The **Up** and **Down** buttons within **Figure 4**, above) are active only when there are slides added within **Slides in custom show** list. Use the **Up** and **Down** buttons to re-order the sequence of the selected slide(s).

Click the **OK** button to create the Custom Show.

6. This brings you back to the **Custom Shows** dialog box, as shown in **Figure 5**. The Custom Show you just created can be seen within this dialog box.



**Figure 5:** Custom Shows dialog box with the Custom Show listed

To preview the Custom Show, select it from the list and click the **Show** button, as shown within **Figure 5** above.

7. Within the **Custom Shows** dialog box, you will find other buttons such as:
- **New**, to create more Custom Shows
  - **Edit**, to edit a selected Custom Show

- **Remove**, to delete an existing, selected Custom Show, and
  - **Copy**, to create a duplicated copy of the selected Custom Show. This option is very useful if you want to create similar Custom Shows where only a few slides differ.
8. Once you are happy with your Custom Show, click the **Close** button, within **Figure 5**.

#### IV. Visual Tools of Enhancement of presentation using PowerPoint

##### 1. Working with Movies in PPT

You can embed a video or link to a video from your PowerPoint presentation. When you embed your video, you don't have to worry about lost files when you deliver your presentation because all the files are there. If you want to limit the size of your presentation, you can link to a video file on your local drive or to a video file that you uploaded to a web site, such as YouTube.

##### 2. Embed a video in your presentation

With Microsoft PowerPoint 2010, you can now embed a video from a file directly into your presentation. And, as you have with earlier versions of PowerPoint, you can also embed an animated .gif file from the Clip Art library.

Notes

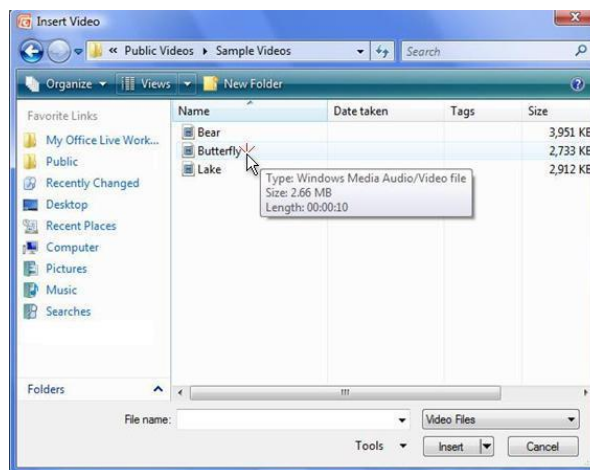
PowerPoint will support QuickTime (.mov, .mp4) and Adobe Flash (.swf) files when you have installed the QuickTime and Adobe Flash players.

There are some limitations when using Flash in PowerPoint 2010, including the inability to use special effects (such as shadows, reflections, glow effects, soft edges, bevels, and 3-D rotation), the fade and trim capabilities, and the ability to compress these files for easier sharing and distribution.

PowerPoint 2010 does not support 64-bit versions of QuickTime or Flash.

##### 3. Embed a video from a file

1. In **Normal** view, click the slide in which you want to embed a video.
2. On the **Insert** tab, in the **Media** group, click the arrow under **Video**, and then click **Video from file**.
3. In the **Insert Video** dialog box, locate and click the video that you want to embed, and then click **Insert**.



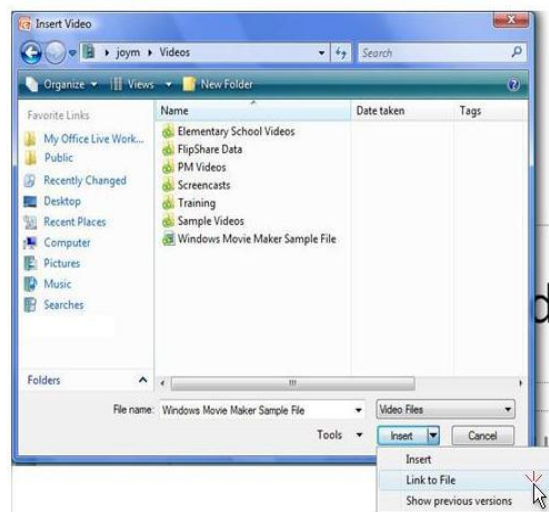
##### 4. Link to a video file from your presentation

You can link to an external video or movie file from your Microsoft PowerPoint 2010 presentation. By linking your video, you can reduce the file size of your presentation.

To add a link to a video from your PowerPoint presentation, do the following:

1. On the **Slides** tab in **Normal** view, click the slide to which you want to add a video or animated GIF file.
2. On the **Insert** tab, in the **Media** group, click the arrow under **Video**.
3. Click **Video from File**, locate and click the file that you want to link to.
4. On the **Insert** button, click the down arrow, and then click **Link to file**.

**IMPORTANT** To prevent possible problems with broken links, it is a good idea to copy the videos into the same folder as your presentation, and link to them there

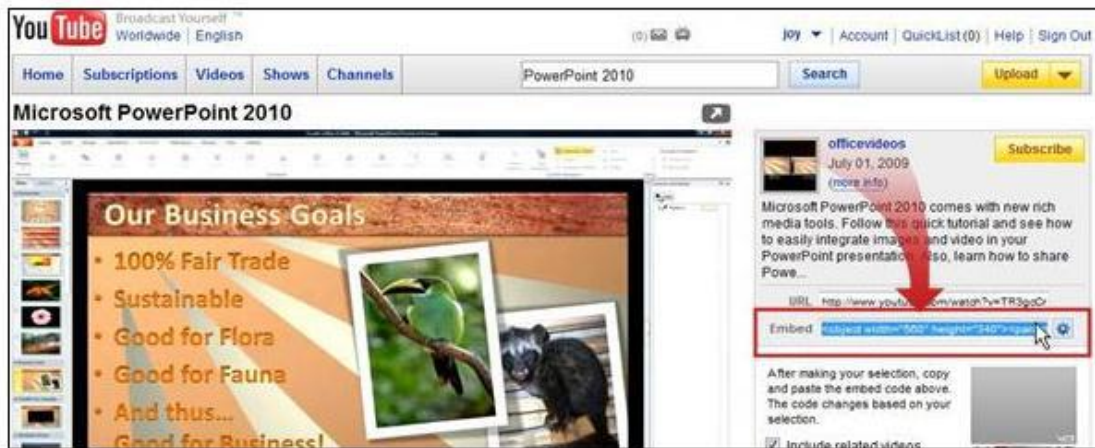


## 5. Link to a video file on a web site

You can link to a video file on your local drive or to a video file that you uploaded to a web site, such as YouTube or hulu.

**IMPORTANT** Please make sure that you obtain the owner's approval before you distribute content (that you did not create) that is copyrighted.

1. On the **Slides** tab in **Normal** view, click the slide to which you want to add a video.
2. In your browser, go to the web site that contains the video that you want to link to, such as YouTube or hulu.
3. On the web site, locate the video, and then locate and copy the **Embed** code.
4. Note Most web sites that contain videos include an embed code, yet the locations of embed codes will differ depending on each web site. And, some videos do not have an embed code, and therefore you cannot link to those. And, to be clear, even though they are called 'embed codes', you are actually linking to the video and not embedding it in your presentation.



1. In YouTube, the **Embed** code is located to the right of the video.
2. Back in PowerPoint, on the **Insert** tab, in the **Media** group, click the arrow under **Video**.
3. Click **Video From Web Site**.
4. In the **Video From Web Site** dialog box, paste the embed code, and then click **Insert**.

## 6. How to Upload PowerPoint to YouTube

Microsoft PowerPoint is the de facto standard for slide show and presentation creation software. With Microsoft PowerPoint you can create slide shows that react as you click, that are optimized for projection or large room display. PowerPoint slide shows also represent an easy way of distributing information in a simple slide format. If you have created a PowerPoint presentation and want to distribute it to someone, without giving them access to edit it, you can use an online site like YouTube to host it. Using YouTube to distribute your PowerPoint presentations requires you to first export it as a video. Microsoft PowerPoint can easily export to video and so no additional software is required.

### Instructions

1. Open the Microsoft PowerPoint presentation file that you want to upload to YouTube. Make sure that it is completely finished and free of errors.
2. Click "File," then click "Save & Send" to load up the alternative export options.
3. Click "Create a Video" under the "File Types" list, then click "Computer & HD Displays." Select the "Web" option from the list, then click "Create Video."
4. Specify a location for your exported video to be saved, then click "Save."
5. Go to the YouTube Video File Upload page (see the "Resources" section of this article) and click "Upload video." Locate your exported video from PowerPoint, select it and click "Upload" to upload your PowerPoint presentation to YouTube.

## 7. How to upload your video to YouTube

Once you have created your video, make sure it's **smaller than 2GB in size**, in an **acceptable file format**, and **less than 15 minutes** unless you have permission to upload videos of unlimited duration.

If all of these things are in order, you are now ready to upload!

### To upload your video:

1. Click the **Upload** link at the top of any YouTube page.

2. Click the **Upload video** button to browse for the video file you'd like to upload to our site. Select the file you want to upload and click **Open**.
3. As the video file is uploading, enter as much information about your video as possible in the relevant fields (including Title, Description, Tags, and Category). You're not required to provide specific information, but the more information you include, the easier it is for users to find your video!
4. Click the **Save changes** button to save the updates you've made to the video file.

#### **Have more than one video file to upload?**

Not a problem! You can upload up to 10 video files in a single uploading session

#### **Here's a list of some well-known formats that YouTube supports:**

- ✓ **WebM files** - Vp8 video codec and Vorbis Audio codecs
- ✓ **.MPEG4, 3GPP and MOV files** - Typically supporting h264, mpeg4 video codecs, and AAC audio codec
- ✓ **.AVI** - Many cameras output this format - typically the video codec is MJPEG and audio is PCM
- ✓ **.MPEGPS** - Typically supporting MPEG2 video codec and MP2 audio
- ✓ **.WMV** - Windows Movie Maker, PowerPoint video
- ✓ **.FLV** - Adobe-FLV1 video codec, MP3 audio

# MS Excel 2010

## I. Introduction:

If you have been using Office 2007, then you are already aware that the Ribbon interface replaced the familiar menus and toolbars with Tabs, Groups, and Commands. Although Excel 2010 retains the same interface it offers:

- (1) A new backstage view to manage your documents
- (2) The ability to customize the Ribbon with custom Tabs and Groups
- (3) An Info tab that displays different commands, properties, and metadata depending on the status and location of the document, and
- (4) Quick access to Recent Workbooks and Recent Places.

Today's Excel spread sheet isn't just for financial professionals. Microsoft Excel offers intuitive tools that make it easy to access, connect, and analyse critical data—regardless of your profession. The first step in learning to use your new software is to start (or in computer parlance: launch) the Excel Program.

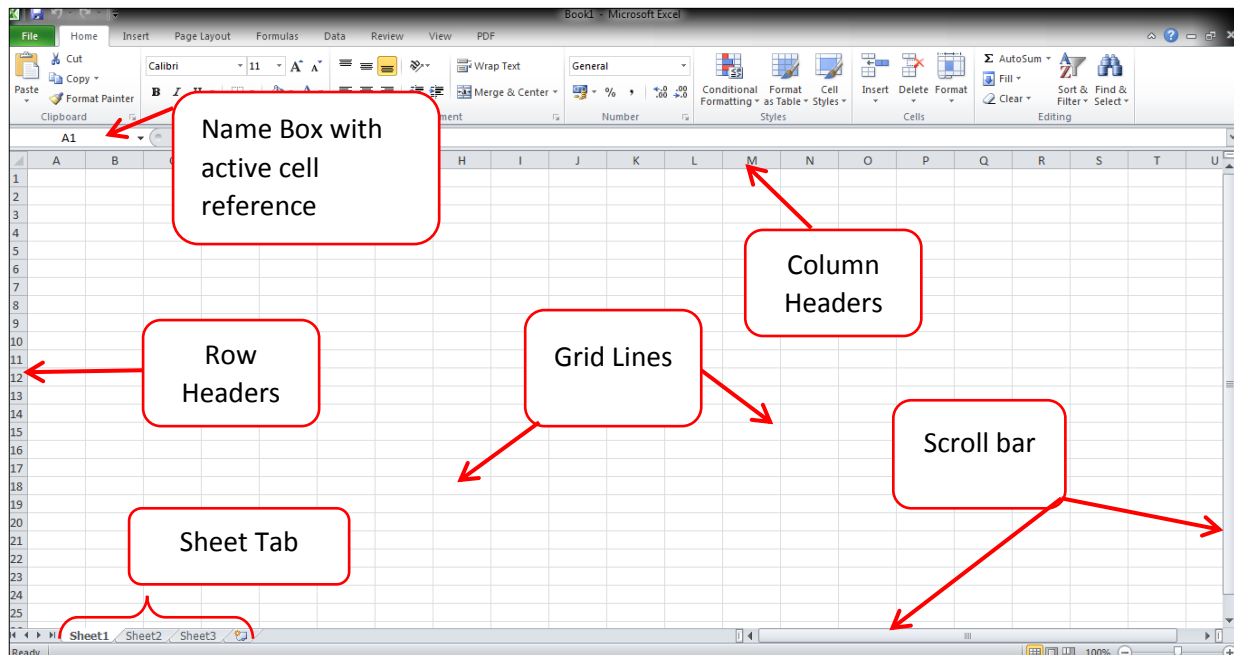
### **Launch Excel:**

1. *SELECT (Click) the Windows Start button; this will bring up a set of choices in a menu.*
2. *Select Programs. Another menu will appear to the right.*
3. *Locate and Select Microsoft Office and another menu will appear on the right.*
4. *Locate and Select Microsoft Office Excel 2010. You have now launched Excel.*

When Excel starts, it creates a new blank workbook, called **Book 1**. The **Workbook** is similar to a notebook. Inside you have sheets, each of which is called a **worksheet**. Each worksheet has a name that appears on a **sheet tab** at the bottom of the workbook.

## II. Components of Excel

When you first open Microsoft Excel, you'll see the basic components.



### 1. The Ribbon

When you try the new design, you'll discover that the commands you already know how to use are grouped together in ways that make sense to you.

There are three basic components to the Ribbon:

- 1) **Tabs:** There are seven of them across the top. Each represents core tasks you do in Excel.
- 2) **Groups:** Each tab has groups that show related items together.
- 3) **Commands:** A command is a button, a box to enter information, or a menu.

The principal commands in Excel are gathered on the first tab, the **Home** tab. The commands on this tab are those that Microsoft has identified as the most commonly used when people do basic tasks with worksheets.

For example, the **Paste**, **Cut**, and **Copy** commands are arranged first on the **Home** tab, in the **Clipboard** group. Font formatting commands are next, in the **Font** group. Commands to centre text or align text to the left or right are in the **Alignment** group, and commands to insert and delete cells, rows, columns, and worksheets are in the **Cells** group.

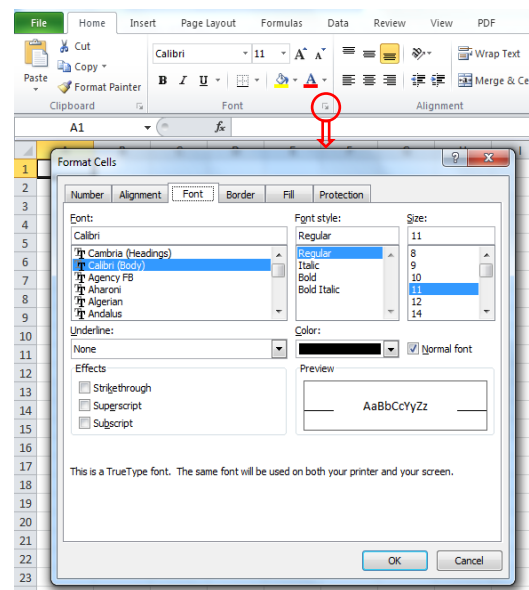
Groups pull together all the commands you're likely to need for a particular type of task, and throughout the task they remain on display and readily available, instead of being hidden in menus. These vital commands are visible above your work space.

Here's an example of the convenience: If you want text displayed on multiple lines in a cell, you don't have to click a command on a menu, click a tab in a dialog box, and then click an option in the dialog box. You just click the **Wrap Text** button in the **Alignment** group, on the **Home** tab.



## 2. Dialog Box Launcher

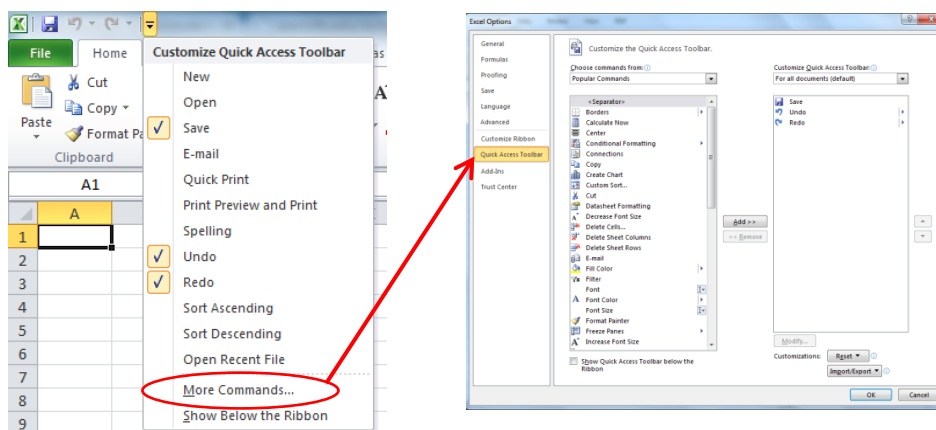
When you see the arrow (called the Dialog Box Launcher) in the lower-right corner of a group, there are more options available for the group. Click the arrow, and you'll see a dialog box or a task pane.



For example, on the Home tab, in the Font group, you have all the commands that are used the most to make font changes: commands to change the font, to change the size, and to make the font bold, italic, or underlined.

## 3. Quick Access Toolbar

If you often use commands that are not as quickly available as you would like, you can easily add them to the Quick Access Toolbar, which is above the Ribbon when you first start Excel 2010. On that toolbar, commands are always visible and near at hand.





For example, if you use AutoFilter every day, and you don't want to have to click the Data tab to access the Filter command each time, you can add Filter to the Quick Access Toolbar.

To do that, click on the Dropdown icon on the quick access toolbar and then click **More Commands** and select icons to **Add** to Quick Access.

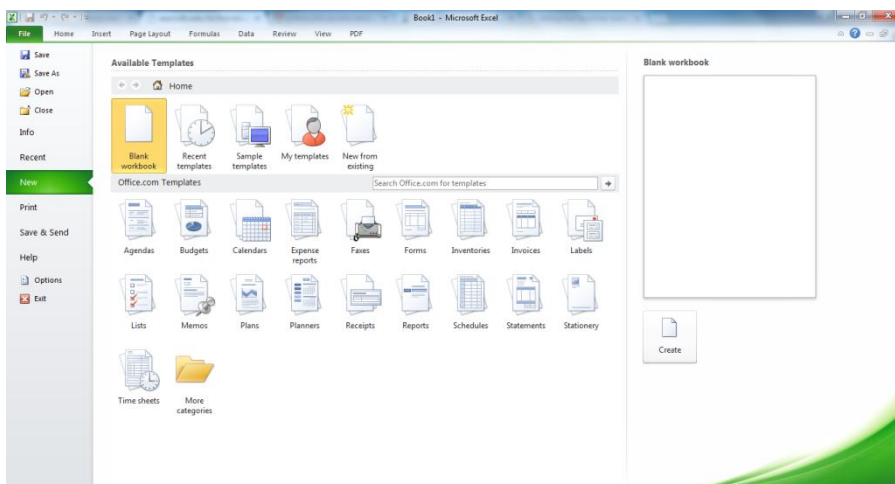
Or

You can directly right click on the icon and select the option Add to quick access toolbar.

To remove a button from that toolbar, right-click the button on the toolbar, and then click Remove from Quick Access Toolbar.

#### 4. Backstage View

The Backstage view is the place where you manage your Excel workbooks and the related data about them. Click on the File tab to create, save, and send workbooks; inspect workbooks for hidden metadata or personal information. From this view you can access the most recent documents and folders that were opened, set print options, and preview a spreadsheet before printing.



#### 5. Quick access to Recent Workbooks and Recent Places:

Prior versions of Microsoft Office displayed a set number of the most recent documents accessed as so does Office 2010. The newest version also includes “Recent Places,” shortcuts to folders that you may have accessed within Royal Drive, My Documents, etc.

These new and revised navigation shortcuts provide faster retrieval to any file or folder used continually by allowing the user to pin shortcuts to the Recent Screen.

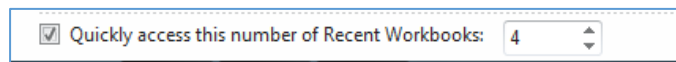
**How to:**

1. Click on the tab File and then Recent.

2. Click on the push pin next to any Recent Documents or Recent Places to pin the desired documents or places to the window. Click the push pin again to remove them from the window.



To change the default number of documents that are accessible click on the box “Quickly access this number of Recent Documents,” located under the Recent Documents pane.

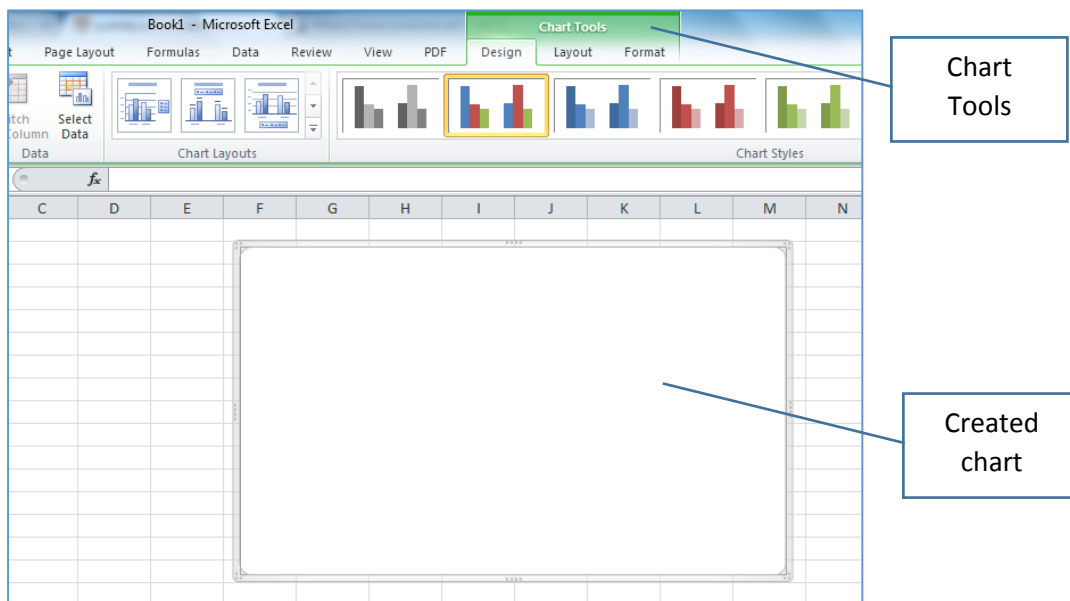


**6. Contextual Tabs**

The commands on the Ribbon are the ones you use the most. This means some less used tabs will only appear if you need them (these are called “Contextual Tabs”).

For example, if you don't have a chart in your worksheet, the commands to work with charts aren't necessary.

But after you create a chart, the **Chart Tools** appear, with three tabs: **Design**, **Layout**, and **Format**. On these tabs, you'll find the commands you need to work with the chart. The Ribbon responds to your action.



Use the **Design** tab to change the chart type or to move the chart location; the **Layout** tab to change chart titles or other chart elements; and the **Format** tab to add fill colours or to change line styles. When you complete the chart, click outside the chart area. The **Chart Tools** go away. To get them back, click inside the chart. Then the tabs reappear.

So don't worry if you don't see all the commands you need at all times. Take the first steps. Then the commands you need will be at hand.

**Excel Terminology:**

*To understand Excel better, you should familiarize yourself with the following terminology: Spreadsheet, Workbook, Worksheet and cell*


7. Spreadsheet and Workbooks

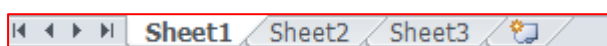
A **spreadsheet** is a grid of data divided into numbered rows and lettered columns. Each block in this grid is called a **cell**, and it can hold an individual piece of text or data. A cell has a lettered column and numbered row. In Excel, a file/document is considered a spreadsheet, although it is commonly referred to as a **workbook**.

	A	B	C
1	<b>Code</b>	<b>Department</b>	<b>Cost</b>
2	11164539	Dept 2	55.30
3	11164540	Dept 5	69.58
4	11164541	Dept 4	47.87

8. Worksheets:

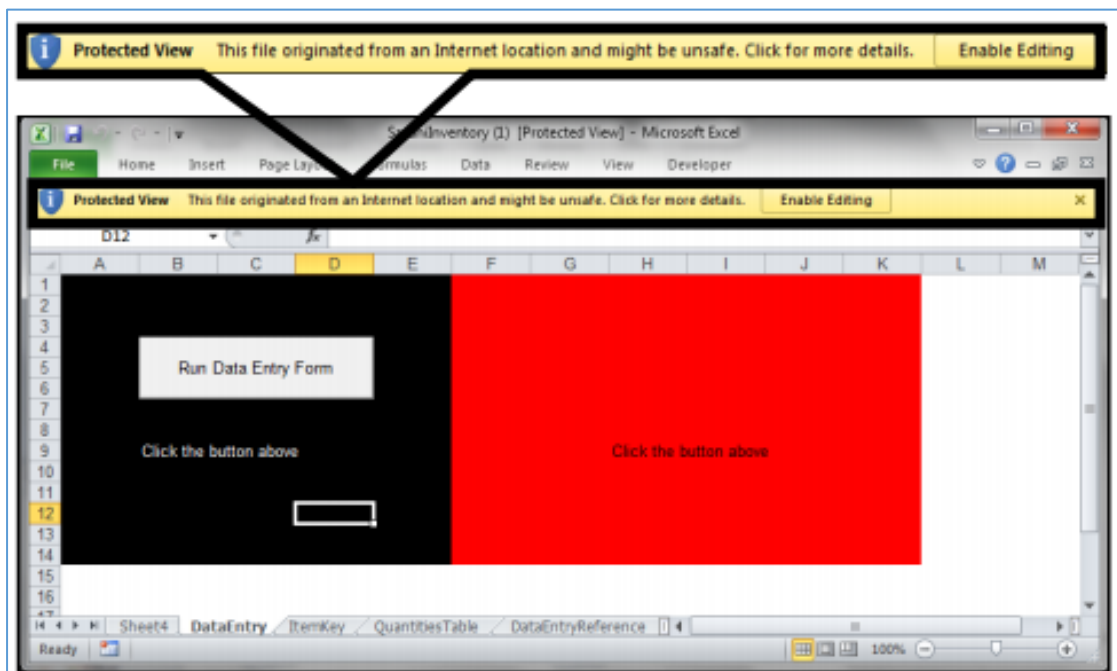
The worksheet is a page of data in your spreadsheet (or workbook) that is organized by the labelled tab displayed at the bottom of the excel window. Each worksheet has **16,384 columns** and **1,048,576 rows**, so Excel can easily accommodate large datasets.

- Your spreadsheet can contain as many as you want. By default, however, all newly opened Excel spreadsheet have three worksheets.
- To view the contents of a worksheet, click on its tab at the bottom- left corner of the Excel window.
- To create a new worksheet, click the small button( ) to  the right of all the worksheets or shortcut to insert a new sheet: **Shift + F11**



## 9. Protected View

In an effort to increase Office 2010's security, Microsoft has instituted this feature across all its products. Documents that are opened from an "untrusted" source (i.e., a spreadsheet downloaded from Gmail or opened from Outlook) will appear in so-called Protected Mode. In Protected Mode, you cannot, edit, print, or save files to your computer.



## III. Navigating in Excel

### Navigate between Worksheets

To move to other Worksheets, you can click their tab with the mouse at the bottom of the screen (Sheet1, Sheet 2, or Sheet 3) or use the Ctrl key with the Page Up and Page Down keys to move sequentially up or down through the worksheets.

#### 1. Insert, Move, & Rename Worksheets

Worksheets are much like pages within a book; you peruse through them like you flip the pages of a book. There are several ways to move and copy worksheets. Right click on the sheet tab and choose Move or Copy. Select a new position in the workbook for the worksheet or click the Create a copy checkbox and Excel will paste a copy of that worksheet in the workbook. The same shortcut menu for the sheet tab also gives you the option to insert, delete, or rename a worksheet.

## Navigation Keystrokes

<b>Keystroke</b>	<b>Action</b>
↑, ↓, ←, →	Moves the active cell up, down, right, or left one cell
Enter	Moves the active cell down one cell
Tab	Move the active cell to the right one cell
Page Up	Moves the active cell up one full screen
Page Down	Moves the active cell down one full screen
Home	Moves the current cell to column A of the active row
Ctrl + Home	Moves the current cell A1
F5( Function Key)	Opens the “Go To” dialog box in which you can enter the cell address of the cell you wish to make active

### 2. Select & Move Worksheet Cells

To select a large area of cells, select the first cell in the range, press and hold the Shift key, and then click the last cell in the range. Once you have selected a range of cells, you may move the cells within the worksheet by clicking and dragging the selection from its current location to its new one.

To do this, bring your cursor to the side of the selection. When your cursor turns into 4 arrows pointing into opposite directions click and hold on to the mouse and drag where ever you want to locate it and let go of the mouse.

By pressing and holding the Ctrl key as you drag, Excel will leave the original selection in its place and paste a copy of the selection in the new location. To move between workbooks, use the Alt key while dragging the selection.

### 3. Range Selection Techniques

To Select	Do This
A single cell	Click the cell, or press the arrow keys to move to the cell.
A range of cells	Click the first cell in the range, and then drag to the last cell, or hold down SHIFT while you press the arrow keys to extend the selection.
A large range of cells	Click the first cell in the range, and then hold down SHIFT while you click the last cell in the range. You can scroll to make the last cell visible.
All cells on a worksheet	Click the Select All button. To select the entire worksheet, you can also press CTRL+A.
Nonadjacent Cells	Select the first cell or range of cells, and then hold down CTRL while you select the other cells or ranges. Note: You cannot cancel the selection of a cell or range of cells in a nonadjacent selection without canceling the entire selection.
Cells to the last used cell on the worksheet (lower-right corner)	Select the first cell, and then press CTRL+SHIFT+END to extend the selection of cells to the last used cell on the worksheet (lower-right corner).
Cells to the beginning of the worksheet	Select the first cell, and then press CTRL+SHIFT+HOME to extend the selection of cells to the beginning of the worksheet.
An entire row or column	Click the row or column heading. Note: If the row or column contains data, CTRL+SHIFT+ARROW KEY selects the row or column to the last used cell. Pressing CTRL+SHIFT+ARROW KEY a second time selects the entire row or column
Cancel a selection	Click any cell on the worksheet.

## IV. Modifying Cells

### 1. Understanding Text, Values, & Formulas

Information entered into cells is categorized as text, values, or formulas. Values must be numbers, though they can be formatted to appear on the screen as currency or as a percentage.

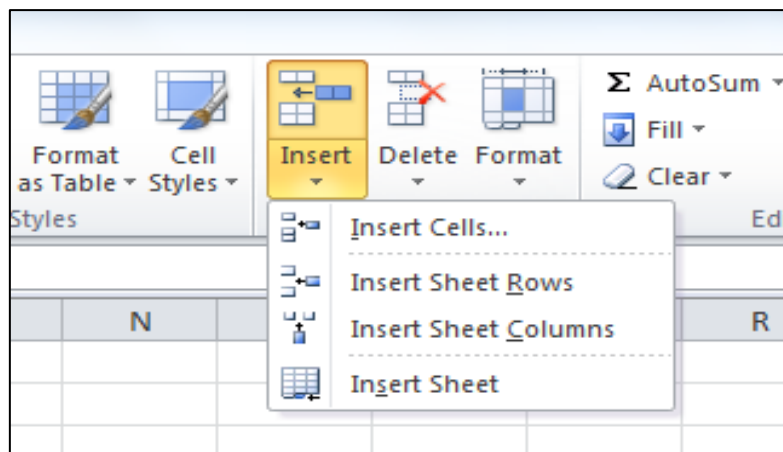
## 2. Editing Cells & Entering Expressions

You can edit a cell by selecting the cell and then clicking in the formula bar or by double-clicking the cell; double-clicking the cell will place your cursor inside that cell, allowing you to edit directly inside the cell. Telephone numbers or social security numbers that contain other characters (like a dash or parentheses) are treated as text and cannot be used in calculations. Arithmetic operators (such as +, -, /, and \*) are used in formulas.

## 3. Inserting Worksheet Rows & Columns

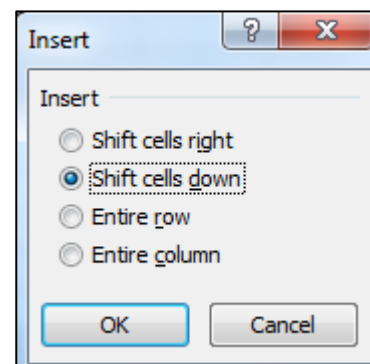
Adding rows and columns is very simple. On the **Home** tab in the **Cells** group, click the down arrow under the **Insert** command.

From here you can insert cells, rows, and columns simply by clicking on the appropriate command. You can also use the Insert dialog box. This figure depicts the **Insert dialog box**, which appears when you select a range of cells,



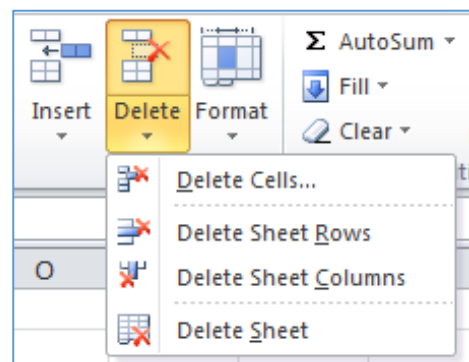
right click on the selection, and then choose **Insert** from the shortcut menu.

Selecting one of these options controls what happens to existing cells when the new row or column is inserted. You can tell Excel whether to adjust your formulas accordingly with the change (this is called cell referencing, which we will go over in a later section).



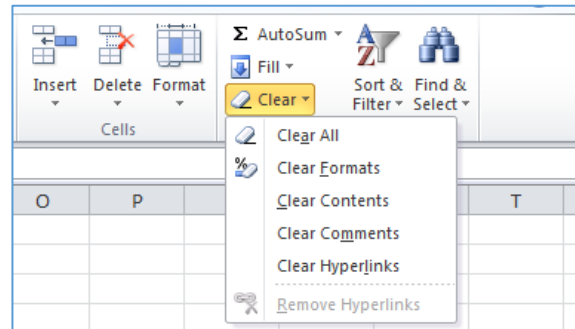
## 4. Delete Worksheet Rows & Columns

To delete cells, rows, or columns, select the **Home** tab, then from the **Cells** group select **Insert** or **Delete**. You can also or right click on a heading or a



selection of cells and choose **Delete** from the shortcut menu.

Clearing, as opposed to deleting, does not alter the structure of the worksheet or shift un-cleared data cells. When you want to clear a cell or range of cells, choose **clear** from the **Editing** group in the **Home** tab.

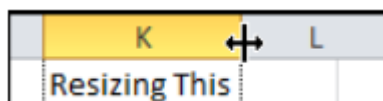


What can be confusing about this process is that you can use the **Delete** key to clear cells, but it does not remove them from the worksheet as you might expect.

## 5. Resizing Columns

In many situations, a cell will be too wide or too narrow to properly display the data it contains. To resize a column to a new width:

- Place your cursor on the gridline between the column to be resized and the column to the right of it.

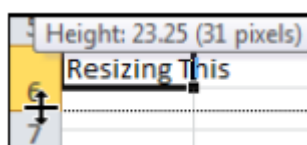


- Drag the column gridline left or right to resize the column and release the mouse when column is at the desired width.

## 6. Resizing Rows

To resize a row to a new height:

- Place your cursor on the gridline between the row to be resized and the one directly below it.



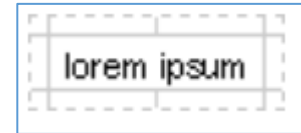
- Drag the gridline up or down to resize the row and release the mouse when then row is at the desire height.



*Tip: Double-click on a gridline (whether that of a column or a row) will resize that column or row precisely to the width or height of the text.*

## 7. Merge or Split cells

Merging two or more adjacent horizontal or vertical cells makes the cells become one large cell displayed across multiple columns or rows. The contents of one of the cells appear in the center of the merged cell.

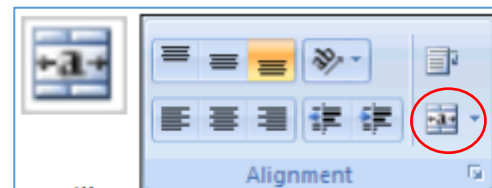


You can split a merged cell into separate cells again but you cannot split a single cell that has not been merged.

## 8. Merge Adjacent Cells

Select two or more adjacent cells that you want to merge.


**Note** Make sure that the data that you want to display in the merged cell is in the upper-left cell of the selected range. Only the data in the upper-left cell will remain in the merged cell. Data in all of the other cells of the selected range will be deleted.



On the Home tab, in the **Alignment** group, click **Merge and Center**. The cells will be merged in a row or column, and the cell contents will be centered in the merged cell. To merge cells without centering, click the arrow next to Merge and Center, and then click Merge Across or Merge Cells. If the Merge and Center button is unavailable, the selected cells may be in editing mode. To cancel editing mode, press ENTER.

### Split a Merged Cell

Select the merged cell. When you select a merged cell, the Merge and Center button also appears selected in the Alignment group on the Home tab.

To split the merged cell, click Merge and Center . The contents of the merged cell will appear in the upper-left cell of the range of split cells.

## 9. Combining & Splitting Contents

### Combine the Contents of Multiple Cells

You can use a formula with the ampersand (&) operator to combine text from multiple cells into one cell.

1. Select the cell in which you want to combine the contents of other cells.
2. To start the formula, type =( Excel 1: The Basics 16 Last updated: 2/09/2011
3. Select the first cell that contains the text that you want to combine, type "&" "&" (with a space between the quotation marks), and then select the next cell that contains the text that you want to combine.  
To combine the contents of more than two cells, continue selecting cells, making sure to type "&" "&" between selections. If you don't want to add a space between combined text, type "&" instead of "&" "&". To insert a comma, type "&"," "&" (with a comma followed by a space between the quotation marks).
4. To finalize the formula, type)
5. To see the results of the formula, press ENTER.

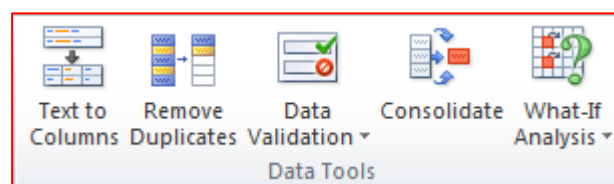
**Note:** The formula inserts a space between the first and last cells by using a space enclosed within quotation marks. Use quotation marks to include any literal text — text that does not change — in the result.

#### Split the Contents of a Cell across Multiple Cells

1. Select the cell, or entire column, that contains the text values that you want to distribute across other cells.

**Note:** A range can be any number of rows tall, but no more than one column wide. Maintain enough blank columns to the right of the selected column to prevent existing data from being overwritten by the data that will be distributed.

2. On the Data tab, in the Data Tools group, click Text to Columns.
3. Follow the instructions in the Convert Text to Columns Wizard to specify how you want to divide the text into columns.



For help with completing all the steps of the wizard, click Help in the Convert to Text Columns

# V. Cell Reference

A cell reference refers to a cell or a range of cells on a worksheet and can be used in a formula so that Microsoft Office Excel can find the values or data that you want that formula to calculate.

In one or several formulas, you can use a cell reference to refer to:

- Data from one cell on the worksheet.
- Data that is contained in different areas of a worksheet.
- Data in cells on other worksheets in the same workbook.

## 1. Referencing Methods

- 1) Relative,
- 2) Absolute
- 3) Mixed references

### A. Relative Cell References

When you copy and paste or move a formula that uses relative references, the references in the formula change to reflect cells that are in the same relative position to the formula. The formula is the same, but it uses the new cells in its calculation. Relative addressing eliminates the tedium of creating new formulas for each row or column in a worksheet filled with repetitive information.

### B. Absolute Cell References

If you don't want a cell reference to change when you copy a formula, make it an absolute reference by typing a dollar sign (\$) before each part of the reference that you don't want to change. For example, \$A\$1 always refers to cell A1. If you copy or fill the formula down columns or across rows, the absolute reference doesn't change. You can add a \$ before the column letter and the row number. To ensure accuracy and simplify updates, enter constant values (such as tax rates, hourly rates, and so on) in a cell, and then use absolute references to them in formulas.

### C. Mixed Cell References

A mixed reference is either an absolute row and relative column or absolute column and relative row. You add the \$ before the column letter to create an absolute column or before the row number to create an absolute row. For example, \$A1 is absolute for column A and

relative for row 1, and A\$1 is absolute for row 1 and relative for column A. If you copy or fill the formula across rows or down columns, the relative references adjust, and the absolute ones don't adjust.

## 2. Working with Names and Ranges

Working with numbers isn't always easy. A complex formula involving several cell ranges can be difficult to understand. Individual cells that contain important data can be hard to find on a large worksheet. Cell references like D5:D22 or A33:C33 are somewhat abstract, and don't really communicate anything about the data they contain.

In Excel, you can create meaningful names for cells or ranges that can be used to overcome these difficulties.

### A. What Are Range Names?

Range names are meaningful character strings that you can assign to individual cells or cell ranges. You can use a range name practically anywhere you can use a cell or range reference. The advantage of using names comes from the fact that a name, like Employees, is more meaningful and less abstract than a reference like C2:C55. Also, named ranges are by default absolute, so if you copy or AutoFill a formula using named ranges, it will maintain its original cell references.

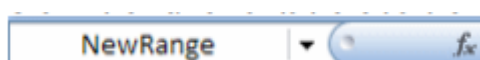
### B. Defining and Using Range Names

To define a range name:

- Select either a cell or cell range.
- On the Formulas Ribbon, choose the Define Name button from the Defined Names group.
- To name your range, type a name in the top text field and click OK. The Scope refers to the parts of the workbook where your named range will be valid.

**Another way to name a cell or range is to:**

- Select the cell or range of cells.
- Click in the Name Box to the left of the formula bar and Type the name



- Press Enter.

**Note:** Excel will not accept spaces between words in the names you choose. For example, “newrange” or “newRange” or “new\_Range” would be acceptable, but “New Range” would not.

Once you have defined your named ranges, you can use them in formulas and functions just as you would a regular cell or range reference.

## VI. Using Logical Functions

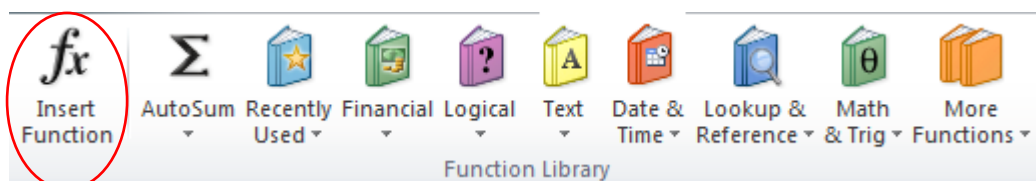
Excel 2010’s logical functions are:

- AND
- OR
- IF
- NO
- FALSE
- TRUE
- IFERROR

These logical functions are important when doing advanced work in Excel because they can help you control the behaviour of your worksheets based on specific logical conditions.

### 1. Using the Function Library

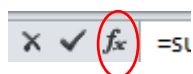
Excel 2010 contains an extensive library of functions that you can call upon to help you solve problems. These tools are available in the Function Library button group, on the Formulas ribbon.



The first

and largest button is Insert Function. This button will open a dialog allowing you to search for and insert hundreds of functions.

You can also click the small fx button next to the formula bar to display the Insert Function box.

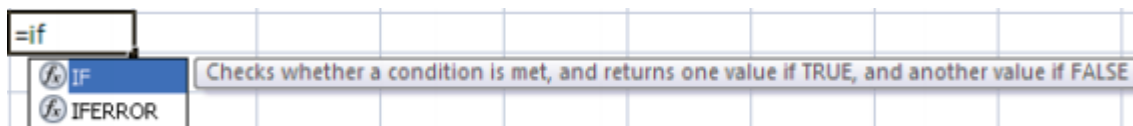


## Manually entering a function

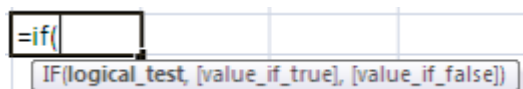
If you know which function you wish to use, you can enter a function into a worksheet by inputting it manually (i.e. by typing the function directly into a cell).

When you do this in Excel 2010, a screen tip will appear with the possible functions that correspond with the letters of the function name you have entered.

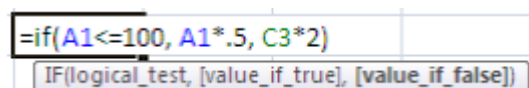
For example, if you type =IF into a cell the following appears.



Once you have selected the function you wish to use, continue by typing in a left bracket, which will cause the function syntax to display in another screen tip.



Continue to enter all the arguments required for the function to give you a result, ensuring you type a comma between each argument.



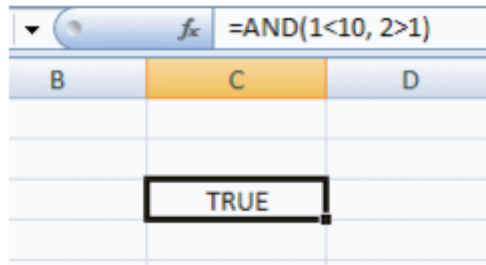
Press Enter to display the result.

## 2. The IF function

Excel's IF function can often prove to be very useful. You can use this function to branch to different values or actions depending on a specified condition. The structure of an If function is as follows: IF(logical test, value if true, value if false)

## 3. The AND Function

The AND function will return TRUE if all of its arguments are true. If one argument is false, the AND function will return FALSE. For example, the logical statement 11 is also true. As a result, the compound statement 11 is TRUE, because both of the statements that are being joined by AND are true. The following image demonstrates this in Excel.

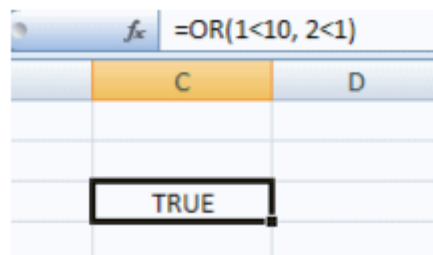


You can have as many as 255 logical arguments to an Excel AND function. The following table (often referred to as a truth table) may help you understand the AND function. In the last column of the truth table, you will see the value returned by the function, according to the corresponding values of the function arguments.

A	B	AND(a, b)
True	False	False
False	True	False
True	True	True
False	False	False

#### 4. The OR Function

The logical OR function will return TRUE if **one or more** of the arguments to the function are true. For instance, the logical statement  $1 < 10$  OR  $2 < 1$  is true, since 1 is less than 10. It does not matter that the statement  $2 < 1$  is false, because you have a choice of either  $1 < 1$  OR  $2 < 1$  to make the compound statement true. If one or both of the arguments is true, the overall OR statement will also be true.



You can have as many as 255 logical arguments to an Excel OR function.

Here is a truth table for the OR function.

A	B	OR(A,B)
True	False	True
False	True	True
True	True	True
False	False	False



### 5. Nested IF functions

The IF function is ideal for making choices based on logical tests. Furthermore, you can nest IF functions one inside another.

=IF(A1=10,100,IF(A1=5,200,0))

The diagram shows the formula =IF(A1=10,100,IF(A1=5,200,0)) with three callout boxes. Two boxes labeled 'Value if TRUE' point to the first '100' and the '200' respectively. One box labeled 'Value if FALSE' points to the final '0'.

In the case of this IF function, if the value in cell A1 is 10 the function will return 100. If the value in A1 is not 10, the function will test if the value in A1 is 5. If the value in A1 is 5, the function will return 200. If it is not 5 (and also not 10) the function will return 0.

The screenshot shows an Excel spreadsheet with the following data:

	A	B	C	D	E
1	5				
2					
3			200		
4					

The formula bar for cell C3 shows: =IF(A1=10,100,IF(A1=5,200,0))

When you nest logical functions, you must make sure that the number of closing parenthesis matches the number of opening parenthesis used in the function. If you count the parenthesis in the function from the image above, you will see two opening, and two closing parenthesis.

### 6. Applying Logical Functions

Nested functions can also be created using the IF and OR functions together; or the IF and AND functions together.

For example:

Function combination	Why is this useful?
IF function + AND function	Value is returned if BOTH conditions are TRUE
IF function + OR function	Value is returned if ONE of the conditions is TRUE

## VII. Lookup functions

Excel 2010 provides two lookup functions that you can use to quickly retrieve information from data in a table. The functions are called HLOOKUP (horizontal lookup) and VLOOKUP (vertical lookup).

The VLOOKUP function will look in the leftmost column of a table for a value you specify. When it finds the value you specified, it will return a value that is located in the same row, a specified number of columns into the table. It is called VLOOKUP because it looks vertically down a column for a match, and then retrieves data from across the row.

HLOOKUP is similar, but it will look horizontally across the upper row of your table, and then retrieve data from a column further down.

### 1. Using VLOOKUP to Find Data

The best way to learn how lookup functions work is to look at an example. Here we have a table of ticket prices for flights to different countries. To simplify matters, the data range for the table has been given a defined name (Price) that can be used in functions and formulas.

If we activate cell F1 and enter =VLOOKUP ("England", Price, 2) into the formula bar, cell F1 will show the value 550.

Price	
Country	Ticket Price
Brazil	400
China	850
Denmark	600
England	550
France	565
Germany	575
Hungary	625
Italy	690
Japan	925
Portugal	700

The lookup function looked vertically down the leftmost column of the lookup table (Price) until it found a match for the text string “England.” The function then returned the value that is in the second (2) column of the table, from the row where the match was found. You should notice that England, Price, and 2 are the exact arguments used in the function.

The arguments for the lookup function are:

### 2. VLOOKUP

- Value to match, from the left most column of the lookup table
- Lookup table name or range
- Number of the column in the table containing the relevant data
- TRUE or FALSE

For the example shown above, the true or false argument was left out. The relevance of the true or false argument in the VLOOKUP function will be discussed shortly.

### 3. Hlookup

HLOOKUP is the same as VLOOKUP, except that it looks across rows for a match rather than down columns. To use HLOOKUP, the lookup table would be arranged in this way.

<b>Brasil</b>	<b>China</b>	<b>Denmark</b>	<b>England</b>	<b>France</b>	<b>Germany</b>	<b>Hungary</b>	<b>Italy</b>	<b>Japan</b>	
400	850	600	550	565	575	625	690	925	

Since Excel is designed with more cells in the vertical direction than in the horizontal direction, and because a vertical table design is more intuitive for most people, VLOOKUP is generally used more often than HLOOKUP.

## VIII. Pivot Table

### 1. What is a PivotTable?

A PivotTable is a powerful tool for exploring and analysing information. A PivotTable helps you organise and manipulate the raw data in your spreadsheet, giving your insight into patterns or relationships that might not be obvious at first glance.

You can base a PivotTable on data in your current workbook or even external data from another source if you wish. With a PivotTable, you can conveniently drag and drop columns of your data to different areas of the table to examine relationships or trends that may not be obvious in a traditional Excel table or database.

### 2. Preparing Data to Create a PivotTable

Ideally, source data for a PivotTable should be structured like a traditional Excel table or database. The source data should have a row of unique column headings distinguishing the data and there should be no empty columns interspersed within the data. Also, blank rows in a source list or database can limit the usefulness of your PivotTable.

The following image shows a block of contiguous data that is well suited for a PivotTable.

EmpCode	EmpName	Gender	Designation	DOJ	District	Salary
E001	Yogesh Karwa	Male	Manager	30-Jul-00	Hyderabad	23200
E002	Gaurav Keshari	Male	Manager	17-Dec-00	Kurnool	13724
E003	M.V.Krishna Murthy	Male	Asst Manager	21-Jan-01	Chennai	30245
E004	Vivek D Dand	Male	Asst Manager	25-Feb-01	Kurnool	15724
E005	M Khaja Moinuddin	Male	Jr.Associate	1-Apr-01	Kurnool	34751
E006	Naveen Chadra Madap	Male	Jr.Associate	6-May-01	Hyderabad	38751
E007	S Kanaka Durga	Female	Sr.Associate	10-Jun-01	Kurnool	30147
E008	BalaSubrahmanyam Nanduri	Male	Sr.Associate	15-Jul-01	Chennai	29870
E009	V Srikantha Reddy	Male	Manager	3-Sep-00	Kurnool	56532
E010	N.G Naresh	Male	Asst Manager	8-Oct-00	Chennai	12124
E011	Susma Kranthi Patale	Female	Asst Manager	12-Nov-00	Hyderabad	27654
E012	M Lakshmi Priya	Female	Manager	19-Aug-01	Kurnool	28348
E013	K Amarnath	Male	Jr.Associate	23-Sep-01	Chennai	24724
E014	Inayath Ulla Khan	Male	Sr.Associate	28-Oct-01	Hyderabad	29687
E015	AnbuKumar B	Male	Sr.Associate	2-Dec-01	Hyderabad	26724
E016	Swetha Mandal	Female	Jr.Associate	6-Jan-02	Kurnool	27724
E017	Vijay Kumar D Hegde	Male	Jr.Associate	10-Feb-02	Chennai	28724
E018	Girish Shiralkar	Male	Sr.Associate	17-Mar-02	Hyderabad	29724
E019	Dasari Ratna Kishore	Male	Asst Manager	21-Apr-02	Hyderabad	30724
E020	Radhika	Female	Sr.Associate	26-May-02	Chennai	31724

Notice that there are no empty rows or columns and that every column of data has a unique label.

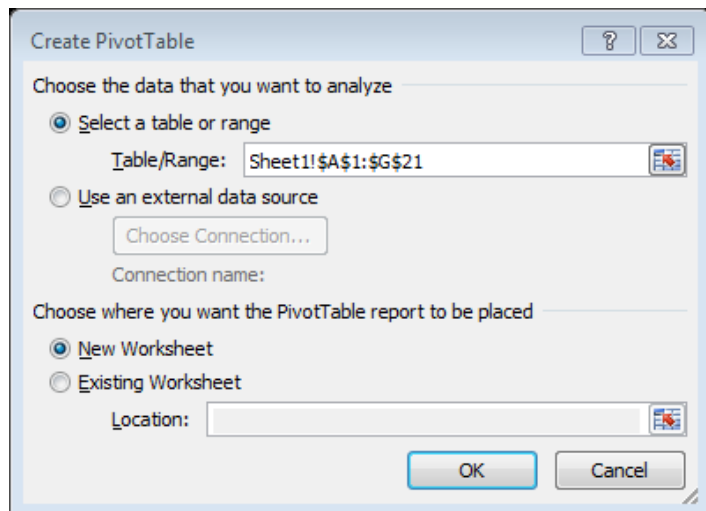
### 3. Creating a PivotTable

#### To create an Excel 2010 PivotTable:

- Select the range of data that you want to base the table on

- On the Insert Ribbon, Tables group, click the PivotTable button

- When the Create PivotTable dialogue box appears, choose the table or range option, so the PivotTable will be based on the Excel table or range you selected.



- Once you select your data source, you can then choose to locate your PivotTable in an Existing Worksheet or a New Worksheet.
- Click OK to create your PivotTable.

## Adding Fields to the PivotTable

Once your PivotTable appears, you can add information to it by placing checks in the boxes next to the headings in the PivotTable field list or by dragging the fields to the designated areas.

	A	B	C	D	E	F	G	H	I
1									
2									
3									
4	<b>Designation</b>	<b>District</b>	<b>Female</b>	<b>Male</b>	<b>Grand Total</b>				
5	Asst Manager								
6		Chennai		42369	42369				
7		Hyderabad	27654	30724	58378				
8		Kurnool		15724	15724				
9	<b>Asst Manager Total</b>		<b>27654</b>	<b>88817</b>	<b>116471</b>				
10	Jr.Associate								
11		Chennai		53448	53448				
12		Hyderabad		38751	38751				
13		Kurnool	27724	34751	62475				
14	<b>Jr.Associate Total</b>		<b>27724</b>	<b>126950</b>	<b>154674</b>				
15	Manager								
16		Hyderabad		23200	23200				
17		Kurnool	28348	70256	98604				
18	<b>Manager Total</b>		<b>28348</b>	<b>93456</b>	<b>121804</b>				
19	Sr.Associate								
20		Chennai	31724	29870	61594				
21		Hyderabad		86135	86135				
22		Kurnool	30147		30147				
23	<b>Sr.Associate Total</b>		<b>61871</b>	<b>116005</b>	<b>177876</b>				
24	<b>Grand Total</b>		<b>145597</b>	<b>425228</b>	<b>570825</b>				
25									

PivotTable Field List

Choose fields to add to report:

- EmpCode
- EmpName
- Gender
- Designation
- DOJ
- District
- Salary

Drag fields between areas below:

Report Filter:

Column Labels: Gender

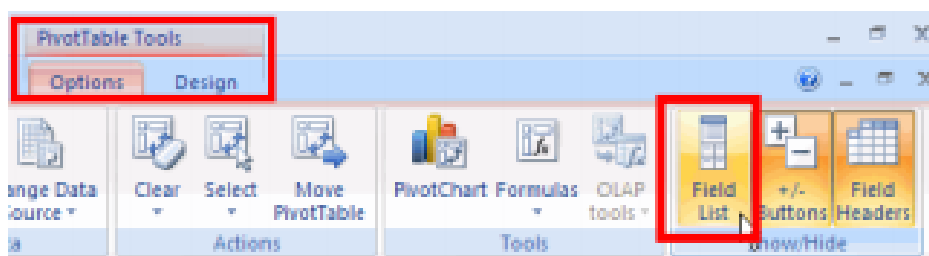
Row Labels: Designation, District

Values:

Defer Layout Update

## The PivotTable Tools Ribbon

If you close the PivotTable Field List, you can always get it back by clicking the Field List button on the Options Ribbon.



The Options Ribbon and the Design Ribbon will become available whenever you click inside the borders of your PivotTable.

## Modifying Calculations and Data Area Display

The default setting for PivotTable calculations is SUM. This means that the totals shown in the Grand Total areas of the PivotTable will be derived from summing the values in the rows and columns.

### To modify the way these totals are calculated:

- Right click on the Sum of 'X' field in the upper left corner of the PivotTable.
- Select Value Field Settings from the shortcut menu, then Summarize value field by tab.
- Switch the type of calculation to Count, Average, Max or Min, Product, Standard deviation, or Variance.
- Click OK.

Please note: The previous discussion has dealt primarily with PivotTable frames, also known as classic PivotTable layouts. For information on how to arrange data in the default Excel 2010 PivotTable layout, please see the downloadable reference material.

## 4. Formatting a PivotTable

To format a PivotTable:

- Click on a cell in the PivotTable, and from the PivotTable Tools tab
- Select the **Design** Ribbon.
- On the Design Ribbon, click on one of the preset styles in the **PivotTable Styles** group to quickly apply preset formatting to the table

## Refreshing a PivotTable

The data in a PivotTable is not linked directly to the source table or range. Instead, the PivotTable is based on a hidden copy of the source data that is kept in memory by Excel. This means that changes to the original source list or database will not be automatically updated in the PivotTable. If you make changes in the source data, you must refresh the PivotTable to update it.

### To refresh a PivotTable:

- Click the Refresh button on the Data Ribbon or on the Options Ribbon; or

- Right click on a cell in the data area of the table and then click the Refresh Data option from the pop up menu.

## 5. Using Slicers to Manipulate PivotTables

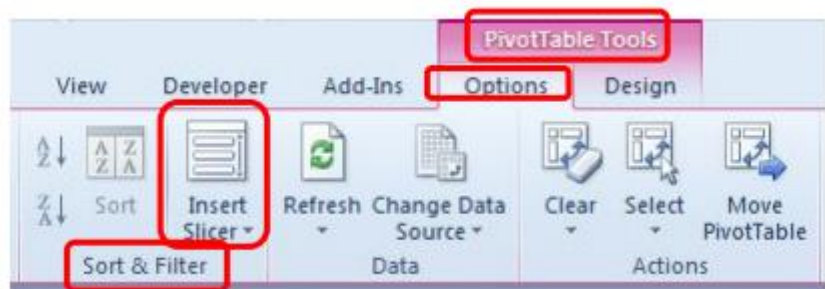
### Slicers

Slicers are visual controls that let you quickly filter data in a PivotTable in an interactive, intuitive way. If you insert a slicer, you can use buttons to quickly segment and filter the data to display just what you need. In addition, when you apply more than one filter to your PivotTable, you no longer have to open a list to see which filters are applied to the data. Instead, it is shown there on the screen in the slicer. You can make slicers match your workbook formatting and easily reuse them in other PivotTables, PivotCharts, and cube functions.

### Insert the Slicer

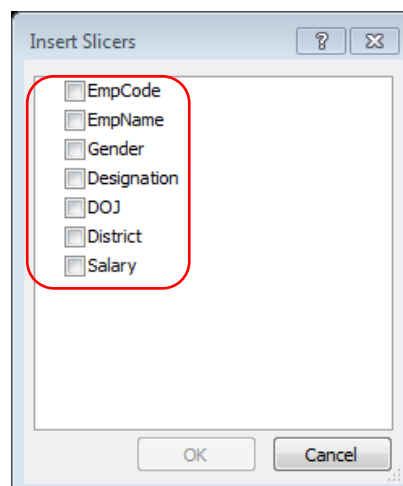
- Click anywhere in the PivotTable data area

- From the Options ribbon located in the PivotTable Tools contextual tab click the Insert Slicer button



Slicer button located on the Sort & Filter group

- From the dialogue box select all the fields that you need to use for filtering your PivotTable data





- For each field chosen, a separate filter box is displayed containing the data which can then be selected for viewing
- Place these filter boxes wherever you like

	A	B	C	D	E	F	G	H	I	J	K	L	M
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													
16													
17													
18													
19													
20													
21													
22													
23													
24													
25													

## 6. Creating a PivotChart

To create a chart based on an existing PivotTable:

- Click a cell in the table
- On the **Options** ribbon, **Tools** group, click the PivotChart button then select a chart type then click OK. You can select any chart type except XY Scatter, Bubble, or Stock charts.

Or

- On the **Insert** ribbon, **Charts** group, click on a chart type then click OK.
- Once the chart has been created, select the chart area and then the **Design** ribbon which will allow you to apply a preset format to your chart via the **Chart Styles** buttons.

Note: Any changes or rearranging of field values in the PivotTable will automatically be reflected in the PivotChart and vice versa.

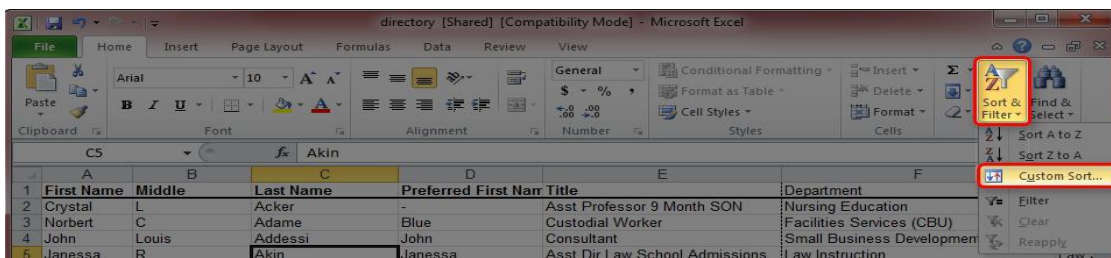
## IX. Data Analysis

### 1. Sorting Data in Ms-Excel:

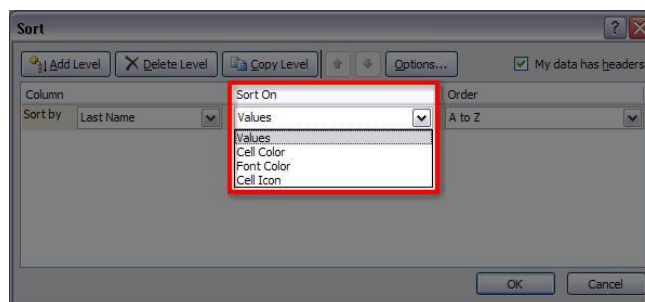
You can sort your Excel data on one column or multiple columns. You can sort in ascending or descending order.

**To do sorting based on data:**

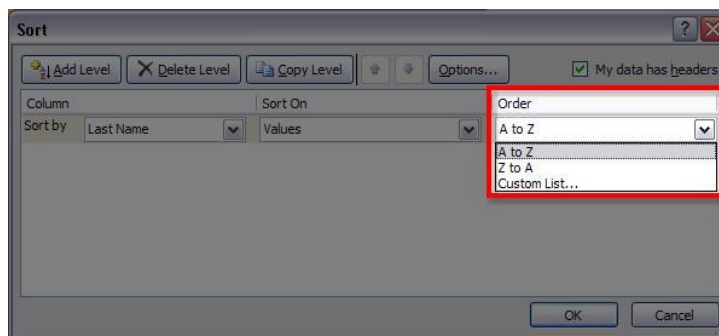
- Open the spreadsheet you want to work in
- Click the **Sort & Filter > Custom Sort**



- Select the column you want to sort by (i.e. if I want to sort alphabetically by last name I would select "Last Name" from the list. If your columns do not have headers you will just see the column letters in the list.)
- You can sort by cell value, color, font color, or cell icon (for the example I used before I would choose Values).

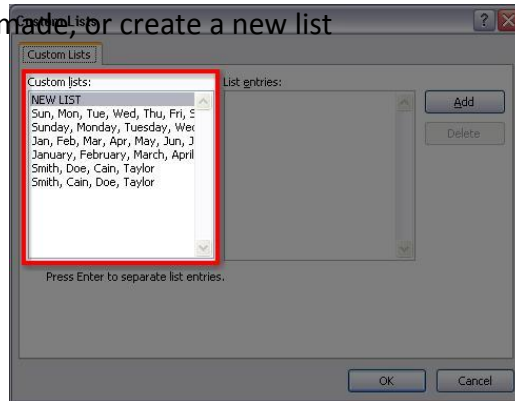


- You can sort Values from A to Z, Z to A, or create your own custom sorting order



To create your own custom sorting order:

- a. Choose Custom List... from the drop-down menu
- b. You can select from a pre-made list (week days or months), any list you previously made, or create a new list

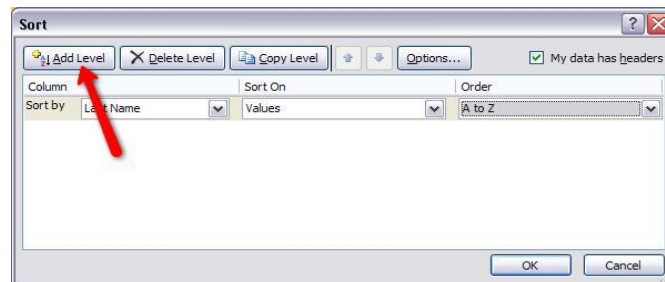


### To create a new list

- I. Click the **Add** button
- II. Type a list entry
- III. Press the **Enter** key on your keyboard
- IV. Repeat until the list is complete

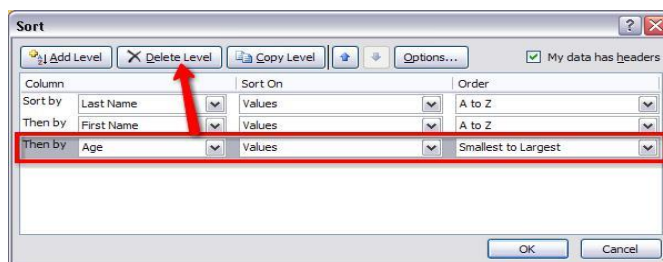
C. Click the **OK** button

6. If you would like to sort by another column as the secondary sort click the **Add Level** button

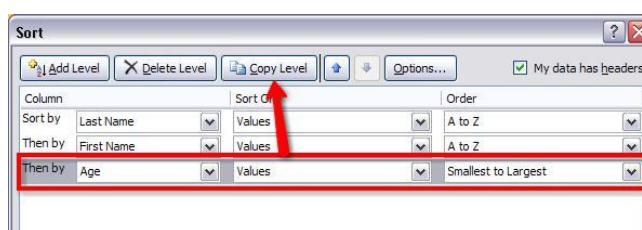


7. Follow the same process as 4 – 6. (Adding as many levels as you need.)

8. To delete a level, highlight it and click the **Delete Level** button.

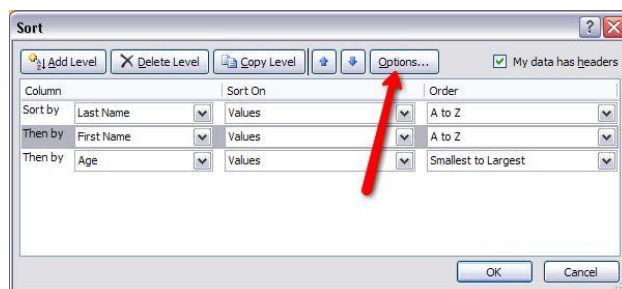


9. To copy a level, highlight it and click the **Copy Level** button.

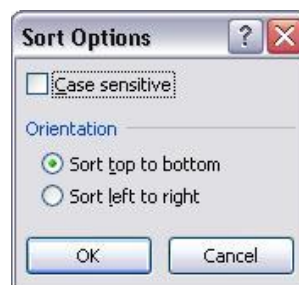


10. To move a level, highlight it and click the corresponding directional button.

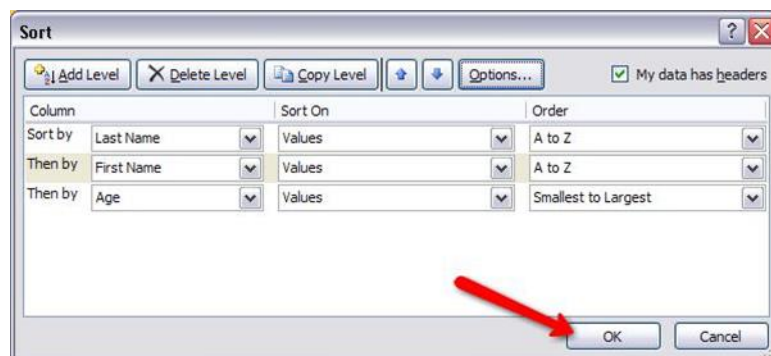
11. If you want your sort to be case sensitive or sort by rows instead of columns click the Options... button.



12. Select the options you would like and click the **OK** button.



13. When you are done creating your sort, click the **OK** button. Your data will be sorted according to your specifications.



## 2. Filter:

### A. What are filters?

Filtering is a quick and easy way to find and work with a subset of data in an Excel range. Filters enable you to quickly find all the entries for a particular item, e.g. an employee name or a product, in a large worksheet.

Filters allow you to select just the data you need, and to hide any data that is not relevant to your search. For example you might want to find the students with the highest grade, or the records for a specific department. You can also create your own filters, such as figures within a specific range or above a particular amount.

Unlike sorting, filtering does not rearrange your data, it simply hides the rows you don't want. This will allow you to then edit, format, chart and print your filtered data as you wish.

#### Preparing to filter

Ensure the data in your worksheet is neat and tidy and you will find filtering easy. Use the following guidelines to prepare your data:

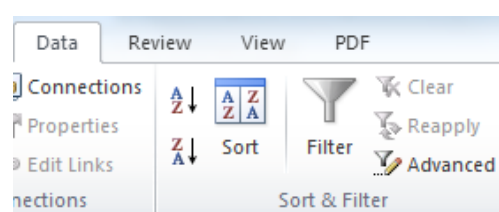
- |                           |   |
|---------------------------|---|
| <b>Use headings</b>       | The top row of each column should have a heading.   |
| <b>Don't mix the data</b> | The data in a column should all be the same type – don't mix text and numbers.  |
| <b>Don't interrupt</b>    | Don't have blank rows or columns. Individual blank cells are OK.  |
| <b>Keep separate</b>      | The data to be filtered should be in its own worksheet. If not, separate it from other data with a blank row or column. |

### B. Filtering with AutoFilter

The AutoFilter feature in Excel provides a quick way of creating a filter.

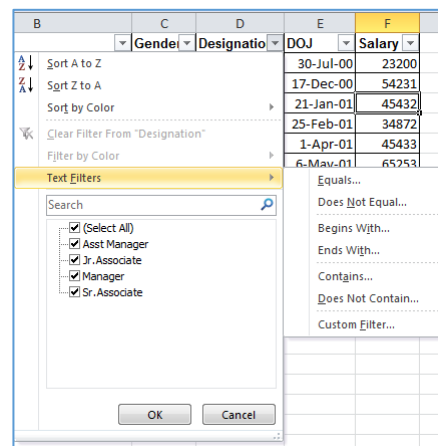
### C. Filtering Text

To use AutoFilter, click in a cell containing a text data item. Then, on the Data tab, select Filter.



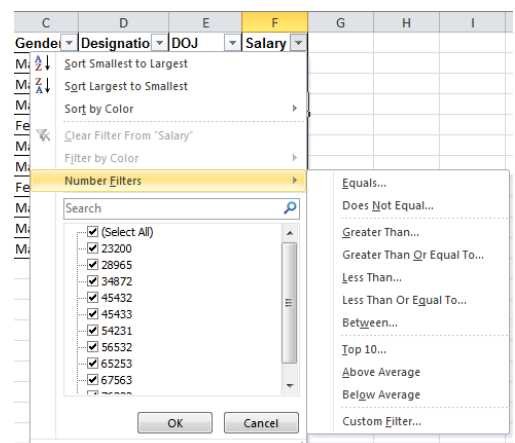
Filter arrows will appear next to each column heading:

- To begin filtering, click on the down arrow next to the column heading. Excel displays a list of options as well as all the items in the column.
- To see the data for just one item either:
  - Remove the ticks from the items you do not wish to see, or
  - Choose Text Filters, Equals and type the text item for which you want to see the data in the box that appears.
- All the other rows on the worksheet will be hidden



You can continue to refine your data by filtering on other columns.

Where you have applied a filter, the row numbers will appear in blue and the drop down arrow will change to a filter symbol. You will also see the number of records found in the status bar at the bottom of the screen.

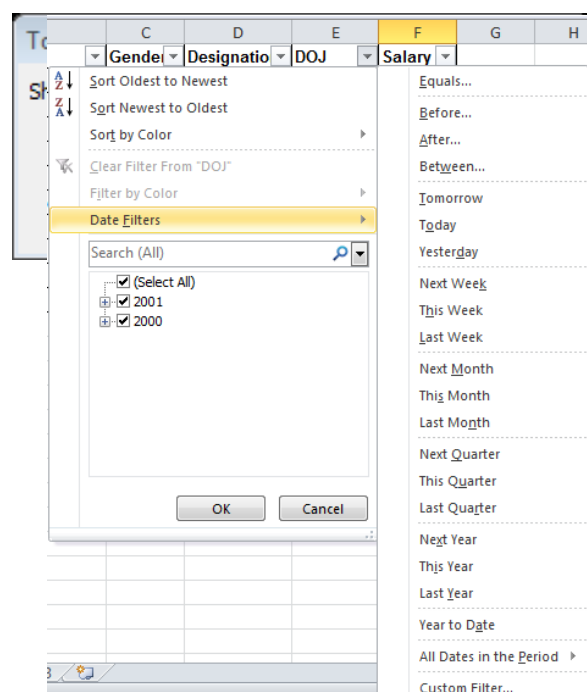


#### D. Filtering numbers: searching for the 'Top 10'

Searching for the **Top 10** is available when **filtering a column of numbers**. This option does more than its name suggests. With it you can actually find the top or bottom 1 to 500 items.

You can also filter by percentage of total rows in a column.

- From the Number filters menu click on Top 10...
- Select Top or Bottom. the number of items you want to display, and Items or Percent
- Click OK



### E. Filtering dates

Excel provides many options for filtering a column of dates. For example you can select all this or last year's dates.

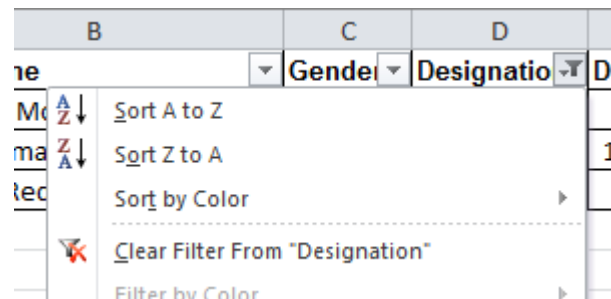
In addition you still have the option to custom filter dates.



### F. Removing a filter

AutoFilter can be turned off completely, or just turned off for specific columns.

- To turn it off completely, go the Data tab and click Filter.
- To remove it for a specific column, click the autofilter symbol at the top of the column and select Clear Filter From Name of Column from the menu.



### 3. Creating advanced filters

The Advanced Filter command enables you to filter on complex criteria and specify which records to include in the query results.

To use Advanced Filter you first need to type your criteria into a range on the worksheet. This range is then used as the source for the complex criteria.

#### To use the advanced filter:

Copy the column labels you want to use as criteria from the list and paste them into a blank area of the worksheet. Ensure that there is at least one empty row between your criteria range and the list to be filtered. The column labels must be exactly the same as in the list, therefore it is better to **copy and paste** rather than type them in.

Enter the criteria values.

In the example these are **Manager and >45000**

	A	B	C	D	E	F
1				Designation	Salary	
2				Manager	>45000	
3						
4						
5	EmpCode	EmpName	Gender	Designation	DOJ	Salary
6	E001	Madhan Mohan	Male	Manager	30-Jul-00	23200
7	E002	Sunil Kumar	Male	Manager	17-Dec-00	54231
8	E003	S.Govind Kumar	Male	Asst Manager	21-Jan-01	45432
9	E004	Sudha Rani	Female	Asst Manager	25-Feb-01	34872
10	E005	M Khaja Moinuddin	Male	Jr.Associate	1-Apr-01	45433
11	E006	Naveen Chadra Madap	Male	Jr.Associate	6-May-01	65253
12	E007	S Kanaka Durga	Female	Sr.Associate	10-Jun-01	67563
13	E008	J.Ajay Kumar	Male	Sr.Associate	15-Jul-01	76332
14	E009	Yogesh Reddy	Male	Manager	3-Sep-00	56532
15	E010	N.G Naresh	Male	Asst Manager	8-Oct-00	28965



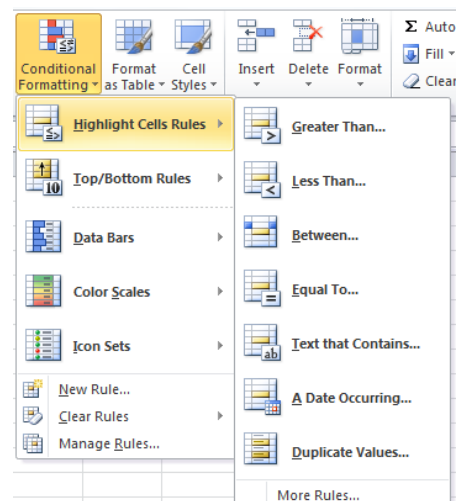
- Click in the list to be filtered, click the **Data tab** and choose **Advanced** from the **Sort and Filter** group to display the **Advanced Filter** dialog box.
- Click in the **Criteria range** and type the range.
- Click **OK**. Only the records matching the criteria will be displayed

EmpCode	EmpName	Gender	Designati	DOJ	Salary
E002	Sunil Kumar	Male	Manager	17-Dec-00	54231
E009	Yogesh Reddy	Male	Manager	3-Sep-00	56532

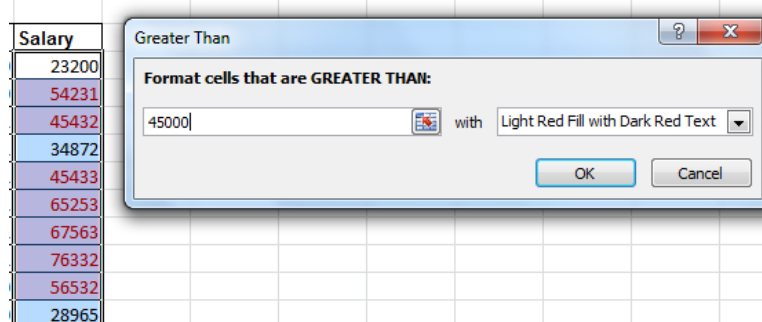
#### 4. Conditional Formatting:

Excel 2010's conditional formatting lets you change the appearance of a cell based on its value or another cell's value. You specify certain conditions, and when those conditions are met, Excel applies the formatting that you choose. You might use conditional formatting to locate dates that meet a certain criteria (such as falling on a Saturday or Sunday), to call out the highest or lowest values in a range, or to indicate values that fall under, over, or between specified amounts.

- Select the cells to which you want to apply conditional formatting.
- On the Home tab, in the Styles group, click the Conditional Formatting button.
- Point to Highlight Cells Rules and then select the type of criterion you want to use.
- Enter the values you want to reference in the text box.



- Click the arrow next to the drop-down to the



format options and select the desired formatting.

- Click OK.

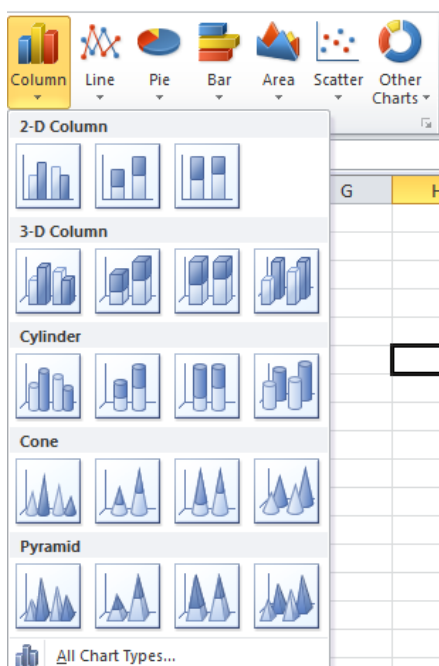
To clear conditional formatting, select the formatted cells and then click the Conditional Formatting button on the Home tab. Point to Clear Rules and then select Clear Rules from Selected Cells.

## 5. Charts

Charts and graphs are a great way of representing your data. Microsoft Excel 2010 offers almost every chart type and makes it easier to draw them so that your data can quickly understood in a graphical format.

### A. How To Draw Charts In Excel 2010

First of all make sure that there is some data in your excel sheet and that your excel sheet does not contain any blank cells between the different columns, then click the *Insert* menu and choose the chart type that you wish to draw.



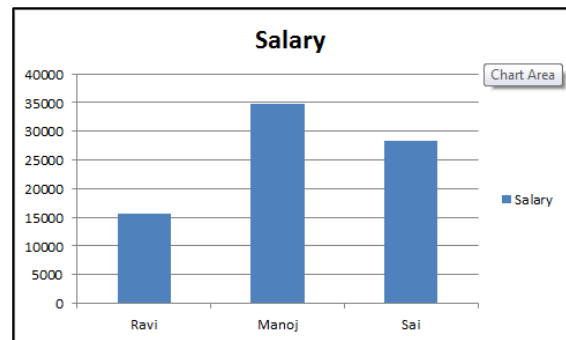
### B. Chart and Graphs Types In Excel 2010

The chart or graph type will depend on the data for which you are going to plot the chart. The most commonly used types include Column Chart, Line Graphs, Pie Chart, Bar Graph, Area Chart, Scatter Graphs, Stock Chart, and Surface Chart, among many others. Let's discuss these chart types, and the situations in which a specific chart type is used.

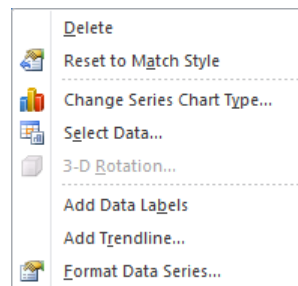
### C. Column Chart

The Column chart is one of the most commonly used chart type and is used to show the changes in data over a period of time or illustrate comparisons among items.

Name	Salary
Ravi	15620
Manoj	34850
Sai	28420

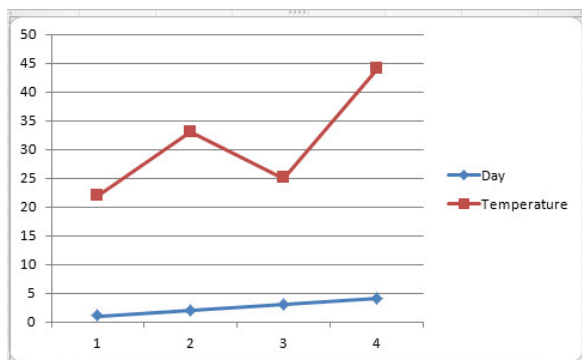


Once the chart is drawn, it becomes very easy to change the attributes, right-click the chart and you will see the options for changing chart types, data, and other formatting.



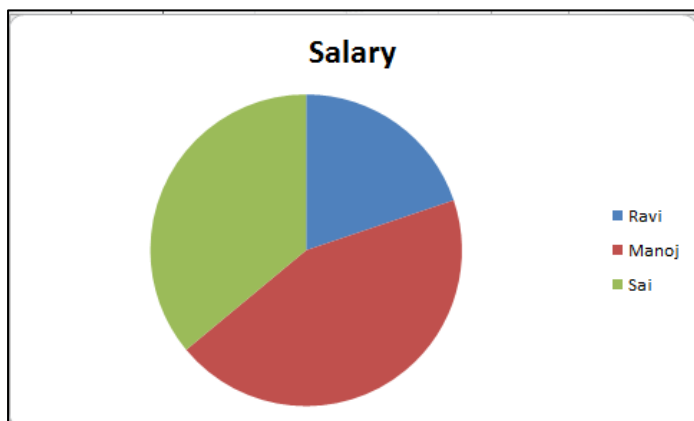
### D. Line Graphs

Line Graphs are mainly used to plot changes in data over time. The best example of this chart type can be the weekly change in temperature.



### E. Pie Chart

The Pie Chart is very useful when you wish to emphasize on a significant element in the data. It represents data in the form of a pie.



## 6. Tables:

A table is a range of cells that hold data, with each row corresponding to a single occurrence of an entity. When you create a table, you can manage and analyze the data in that table *independently of data outside the table*. You can format the table, filter the table columns and also publish a table to a server that is running Windows SharePoint Services 3.0 or Windows SharePoint Services "4". Usually there is an initial row of text headings that describe the columns of data. For example, you might have rows and rows of employee data with the following column headings:

- ECode
- Name
- Age
- Salary

Each row in the table would hold the above details for a particular employee. But as Excel 2010 handles tabular data perfectly well by default, why would you want to put your data into a table? Well, tables allow Excel to respond more appropriately to your data if it is held in a a table. For example, if you create a chart based on the data in a table, the chart will expand as you add more rows to that table.

### A. Creating Tables In Excel 2010

It's quite easy to create a table in Excel 2010; you simply make a cell active that is in the range of cells you want to convert into a table and then click Insert > Tables > Table. If your data has headers, make sure to check the *My table has headers* box in the create table window, and then those headers will be used. The good thing is that you don't need to select the entire range of cells: Excel can identify the limits of the data and also identify the headings. The following is an example of tabular data before we convert it into a table.

	A	B	C	D
1	Ecode	Name	Age	Salary
2	E001	Naveen	35	22648
3	E002	Arun	48	26345
4	E003	Kavitha	29	19854
5	E004	Neha	38	24153
6	E005	Dinesh	30	27741
7	E006	Sonam	37	26542

After we convert it to a table, it looks like this:

	A	B	C	D
1	Ecode ▼	Name ▼	Age ▼	Salary ▼
2	E001	Naveen	35	22648
3	E002	Arun	48	26345
4	E003	Kavitha	29	19854
5	E004	Neha	38	24153
6	E005	Dinesh	30	27741
7	E006	Sonam	37	26542

If you create a table this way, it is given default formatting that you can change using the Table Styles on the Design tab that appears when the table is selected. Alternatively, you can select a style when you create the table. To do this, activate any cell in the range you want to convert and click Home > Styles > Format as Table. Choose a style from the panel that opens and your table will be created with that style.

### B. Properties Of Excel Tables

The main things to notice about tables are:

- When any cell in the table becomes active, the Table Tools contextual tab is displayed.
- Each column heading contains a drop down list that you can use to sort or filter the data in that column.

- If you scroll so far down the table that the column headings disappear, the letters that mark the column headings in the worksheet are replaced with the table's column headings.
- The cells have background colours to enhance readability.
- Background colours are applied to the cells to help readability.

### C. Deleting an Excel Table

If you later decide that you'd prefer your data in its original form (i.e. not in a table), you can convert it back to a range of cells. Click anywhere in the table and then on the Table Tools tab, click Design → Tools → Convert to Range. Once the data is converted back to a range, the table features are no longer available.

Note that the formatting that was applied to the table is still present. If you want to delete the table and all its data, select the table and press the delete key.