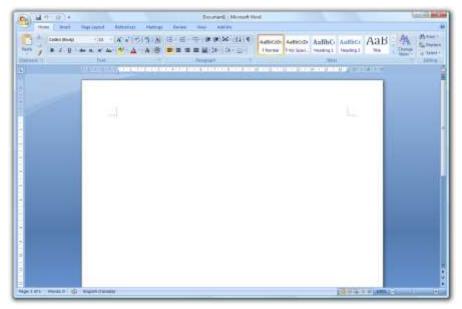
#### Computer Skills

Microsoft Word 2007

الحاسوب والبرمجيات الجاهزة دايمن النسور وآخرون, دار وائل للنشر, 2011



Prepared By The Academic Faculty Members of IT

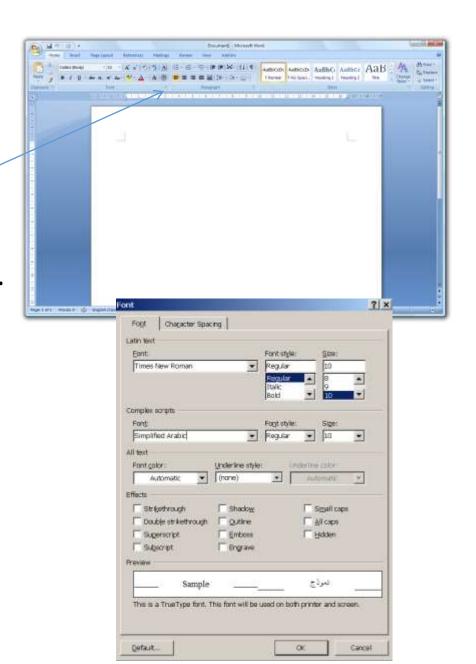
Week#1

#### Outline

- applying text effects
- applying shadow, strikethrough etc......
- subscript and superscript
- apply animated text effect
- word art
- paragraph shading

#### 1.1Text Effects

- To apply Effects on your text
- Go to font section
- Apply the effects such as Bold ... etc
- Also
- Click the arrow on the bottom corner of the right hand side of the font section
- Choose the effect you want.



#### 1.2WordArt

- Go to Insert Tab
- Go to Text Section
- Press WordArt Button



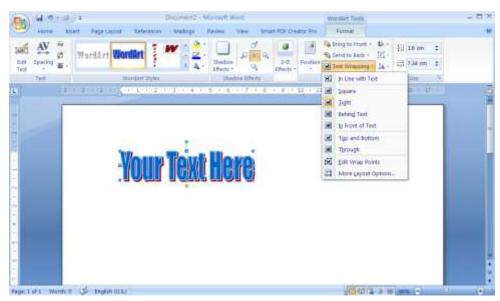
## Text Wrapping

 Before applying text wrapping you need to insert an object such as wordart of picture to your

document.

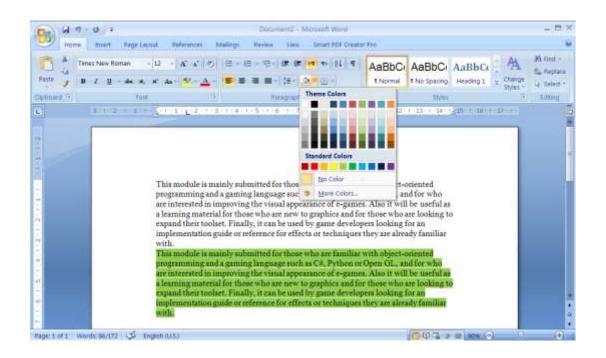
• Select the object you want

- Go to WordArt Tools tab
- Go to Format tab
- Go to Arrange Section
- Press Text Wrapping Button



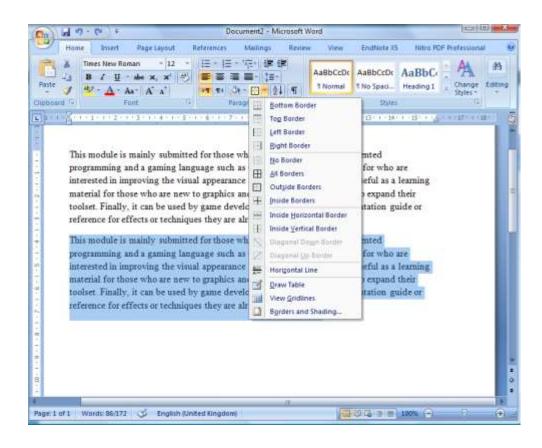
## Paragraph Shading

- To apply shading
- Select the paragraph you want
- Go to Home tab
- Go to Paragraph section
- Press shading button



## Paragraph Borders

- To add borders
- Select the paragraph you want
- Go to Home tab
- Go to Paragraph section
- Press borders button



## Track Changes

- To track the changes you want
- Go to Review Tab
- Press Track Changes Button from Tracking section.
- You can accept or reject changes by pressing the appropriate option from Changes Section



#### Comments

- To add a comment to your document
- Go to Review tab
- Comments section
- Press New Comment Button



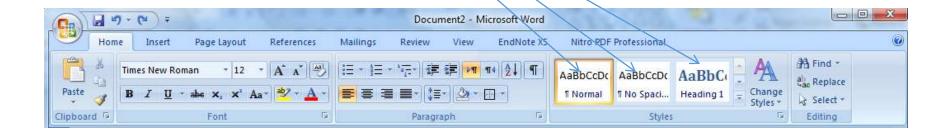
## Styles Types

- Style: A Collection of formatting characteristics that is given a name and is accessible from the style box in the formatting tool bar.
- •Styles make it easy for you to reuse complex paragraph formats without laboriously recreating them each time.



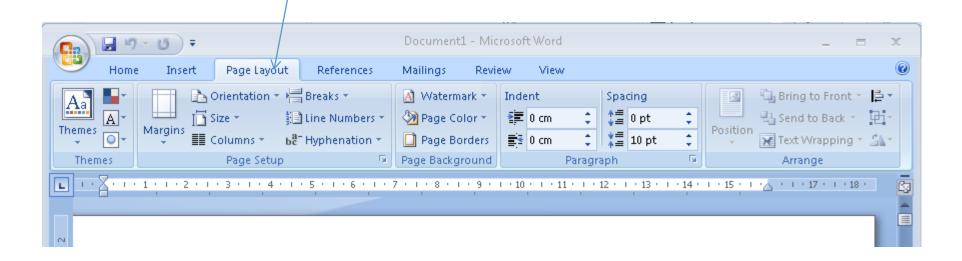
## Styles

- To apply styles to your document
- Go to Home tab
- Go to Styles Section
- Select the type you want



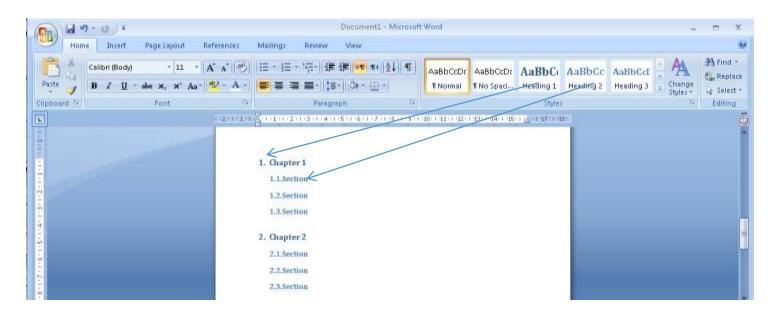
## Document Layout

- To arrange the layout of your document
- Go to Page Layout Tab
- Choose the options you want



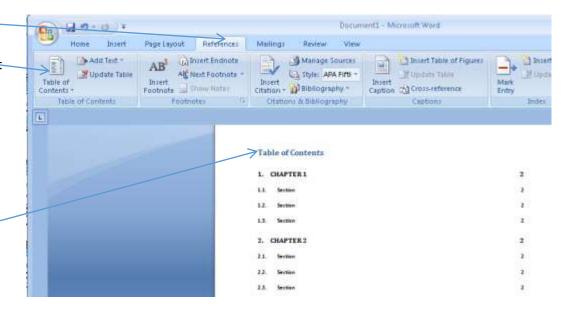
#### Table of Contents

Apply heading on chapter and section names



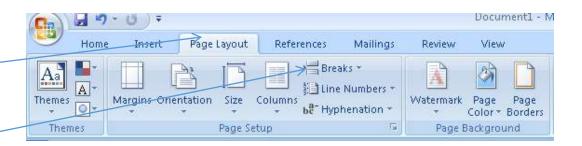
#### Table of Contents

- Go to references Tab
- Press Table of Content Button
- Choose the style you want or you can press Insert table of contents option to use a dialog box to insert the table of contents
- Update Table of Contents



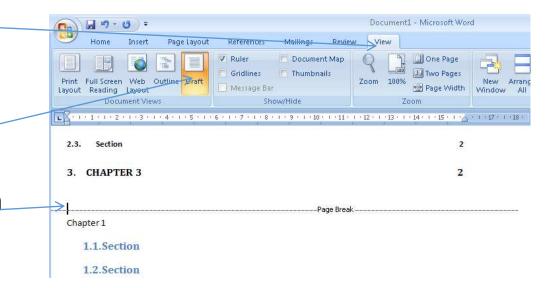
#### Section Break

- To Insert Section Break
- Click in the place or select the text you want
- Go to page layout tab
- Go to page setup section
- Press Beaks button
- Choose the section break you want.



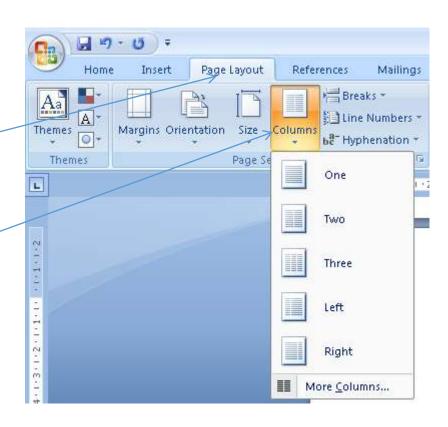
#### Section Break

- To delete section break
- Go to View Tab
- Go to Document Views section
- Choose Draft View
- Select or click the section break you want
- Press Delete button on the keyboard



#### Columns

- To divide your document into columns
- Go to Page Layout tab
- Go to page Setup Section
- Press Columns Button

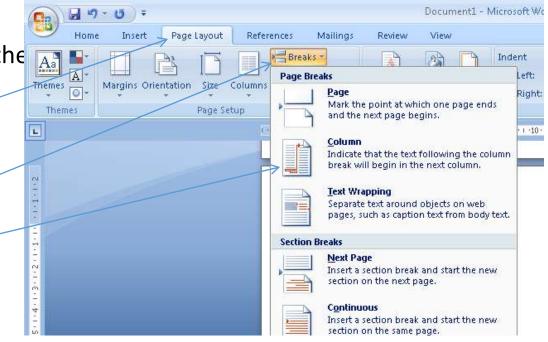


#### Column Break

To Insert Column Break

Click in the place or select the text you want

- Go to page layout tab
- Go to page setup section
- Press Beaks button
- Click Column Break



#### Book Mark

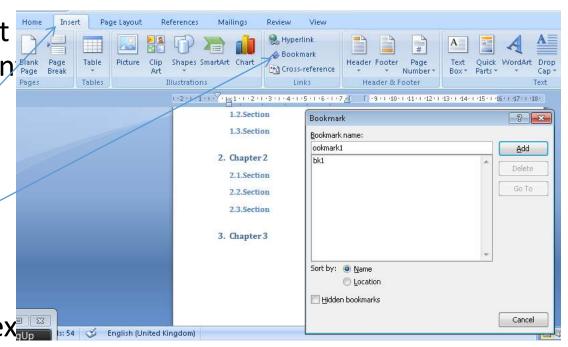
• Click in the place or select the text or object you wan to place a bookmark

Go to Insert tab

Go to Links Section

Press Book Mark Button

• This bookmark can be linked later to another texas a hyperlink



#### Footnotes and Endnotes

- Go to tab view
- Go to Document Views Section
- Choose Print Layout
- Go to References Tab
- Go to Footnotes section
- Choose insert Footnote or insert endnote.



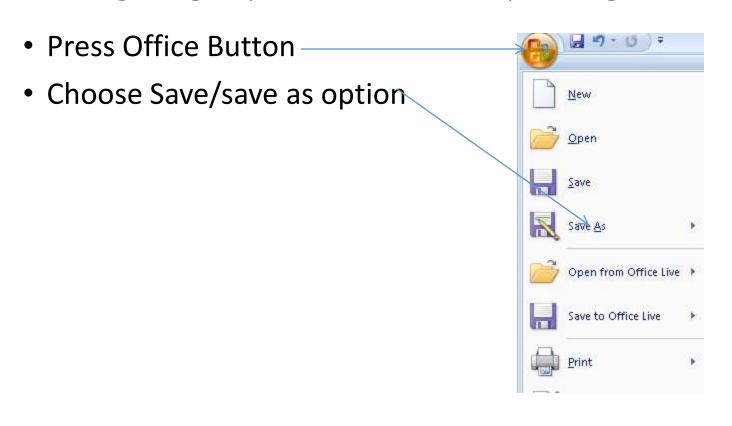
## Protection

- Adding password
- Assigning password for open
- Assigning password for modify
- Removing password

## Adding Password

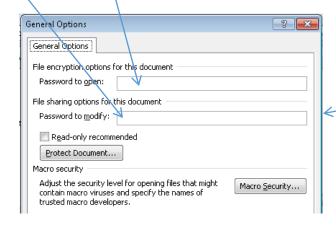
- A password is a unique string of characters used to prevent unauthorized users from accessing a protected document.
- Contains any combination of letters, numbers ...etc.
- Up to 15 characters long.

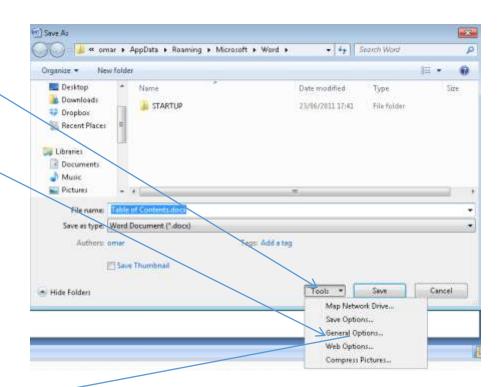
#### Assigning a password for Opening a Document



#### Assigning a password for Opening a Document

- In the dialog box press Tools button
- Click General options
- Enter Password in the password to open text box
- Click Ok
- Reenter the password in the confirm password dialog box





## Assigning a password for Modifying a Document

- Press Office Button
- Choose Save/save as option
- In the dialog box press Tools button
- Click General options
- Enter the password in the password to modify text box
- Reenter the password in the confirm password dialog box

## Removing a Password

- Press Office Button
- Choose Save/save as option
- In the dialog box press Tools button
- Click General options
- Delete the passwords (Stars)
- Click OK

# Computer Skills

Micrsoft Word

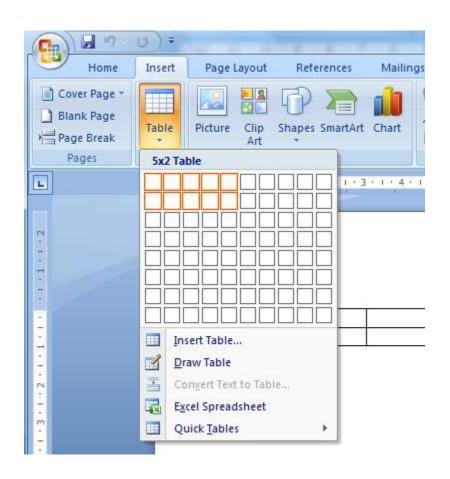
Prepared by the Academic Faculty Members of IT

## **Tables**

- Creating Tables.
- Merging Cells.
- Splitting Cells.
- Sorting Tables.
- Performing Calculations.

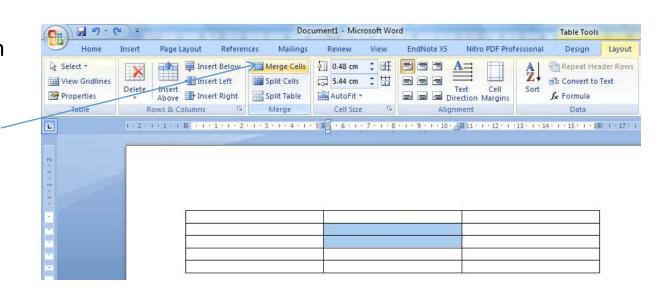
## Creating Tables

- Go to Insert Tab
- Go to Tables Section
- Press Tables Button
- You Can Change the table styles from Table Styles Section



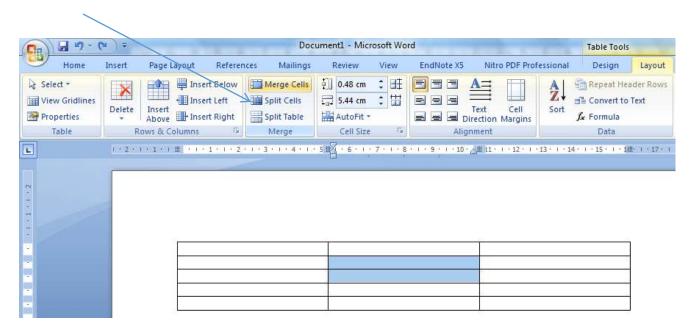
## Merging Cells

- Combining two or more cells in the same column or row into a single cell.
- Select the cells you want to merge.
- From Table Tools Tab
- Press Layout Tab
- Go to Merge Section
- Press Merge Cells



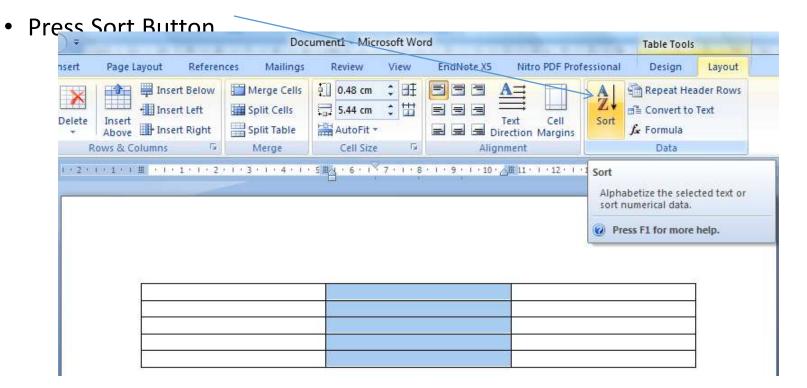
## Splitting Cells

- Select the cells you want to split.
- From Table Tools Tab
- Press Layout Tab
- Go to Merge Section
- Press Split Cells



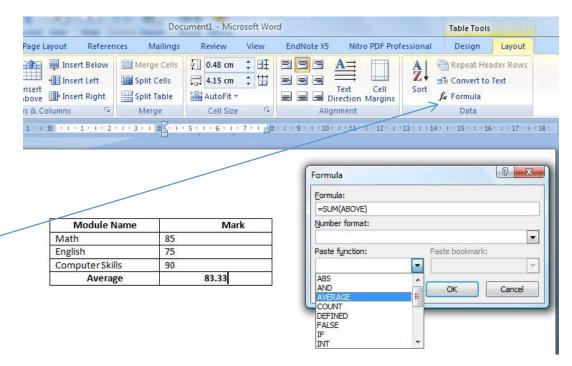
## Sorting Tables

- Select the Columns you want or you can sort the whole table.
- From Table Tools Tab
- Press Layout Tab
- Go to Data Section



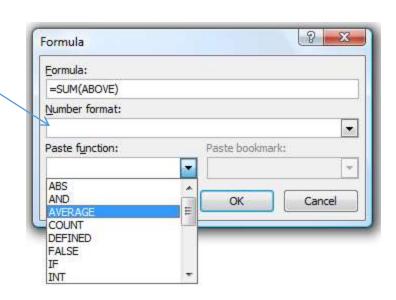
## Performing Calculations

- Click on the cell you want the formula to be displayed in.
- From Table Tools Tab
- Press Layout Tab
- Go to Data Section
- Press Formula Button
- Choose a function from Paste function Box e.g. Average



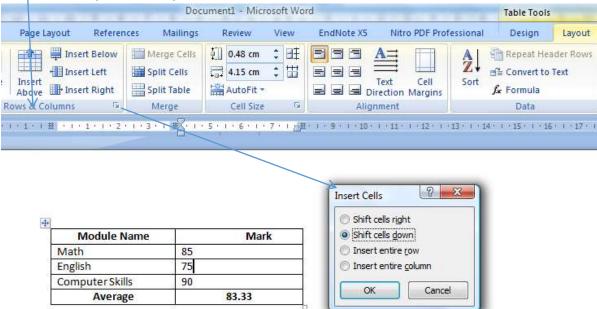
## Performing Calculations

- To reference the contents of a table cell >> Type the table reference in the parentheses, e.g. SUM(a1, b2).
- Choose Number Format to enter a format for the numbers e.g. for decimal percentages choose 0.00%.



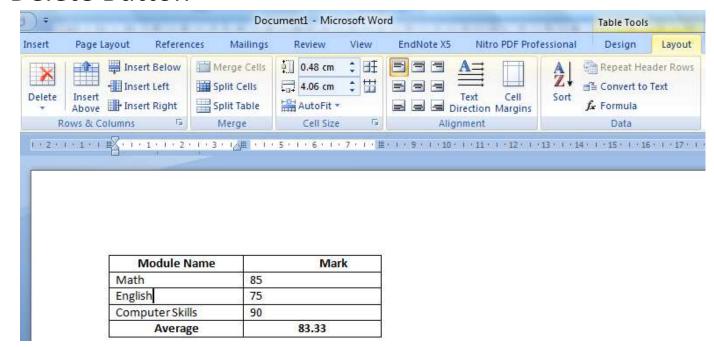
#### Insert Rows and Columns

- Click on the cell you want the formula to be displayed in.
- From Table Tools Tab
- Press Layout Tab
- Go to Rows and Columns Section
- Choose the option you want



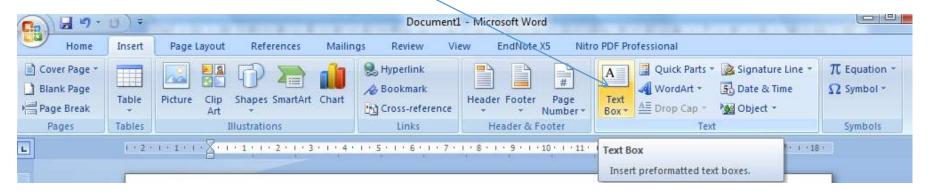
#### Delete Cells

- Click on the cell you want the formula to be displayed in.
- From Table Tools Tab
- Press Layout Tab
- Go to Rows and Columns Section
- Press Delete Button



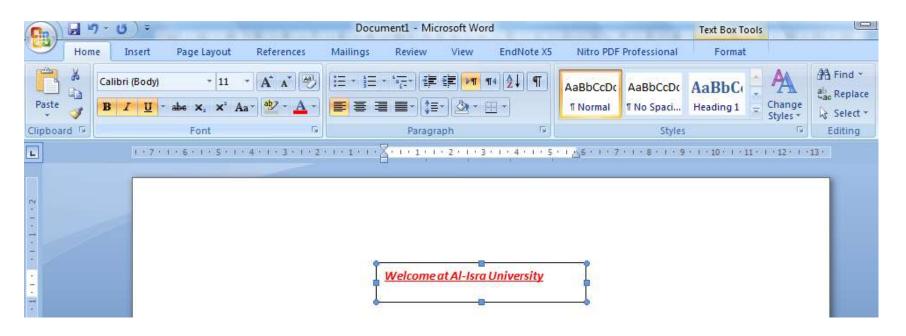
#### Text Boxes

- Text Boxes contains text or any other effect for the text that you want to separated from the main document.
- Go to Insert tab
- Go to Text section
- Press TextBox button
- You can change the position of the Text Box by dragging it >> Release the mouse
- Now you can type in the box and apply the formatting you want.



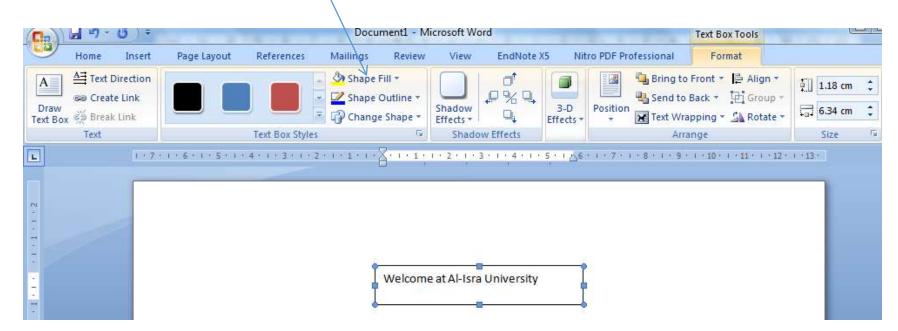
### **Editing Text Boxes**

- Te edit Click on the object (Text Box).
- You can resize, copy, move, or apply formatting to the font within the text box (Alignment, Font size).



### Filling Text Boxes

- Select the object (Text Box).
- Go to Text Box Tools Tab
- Go to Format Tab
- Go to Text Box Styles Section
- Press Shape Fill button
- Choose color.
- To remove the color >> Follow the above commands >> Choose No Fill

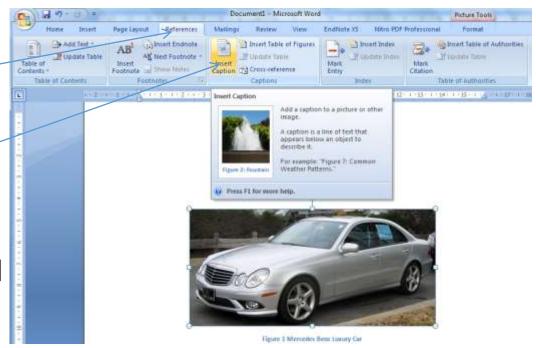


# Captions

- A Caption is a numbered label e.g. Figure 1
- Caption Parts:
  - 1) Caption Label
  - 2) Number of the caption
  - 3) Description of the caption

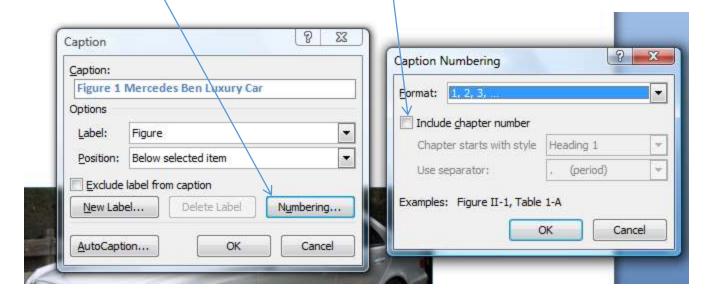
# Adding Captions

- Select the Item you want.
- Go to References Tab
- Go to Captions Section
- Press Insert Caption
- Caption dialog box appears.
- You can use the proposed caption or change it.
- Click New Label >> Enter the label name



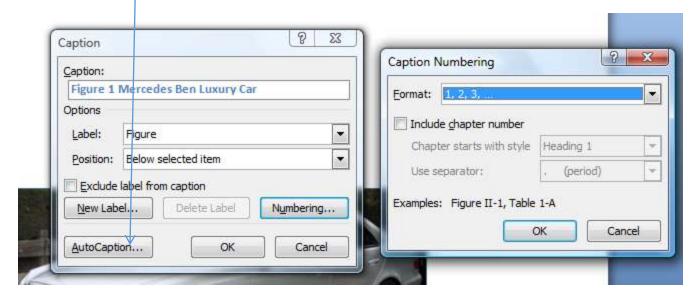
### Adding Captions

- Click Insert >> Choose Reference >> Choose caption.
- Click Numbering >> Choose include chapter Number.
- Choose the heading style that you have applied to the chapter's heading.
- Click OK.



#### AutoCaption

- Click Reference tab >> Choose Caption.
- Click AutoCaption button.
- From Add Caption When Inserting list >>Select the items for which you want word to add captions to.
- Click OK



# Printing Odd and Even Pages

Open the document you want to print.

Click office Button >> Choose Print .

Click the down arrow in Print section >> Select Odd or Even pages.

• Click OK.

# Printing a Predefined Section

- Select the part of the document you want to print.
- Click Office Button >> Choose Print.
- From Print Range >> Choose Selection.
- Click Ok.

# Printing a Number of Pages Per Sheet

- Click Office Button >> Choose Print.
- From ZOOM Section >> Click the down arrow next to Pages Per Sheet.
- Select the required number of pages.
- Click OK.

#### Templates

- A template is a document type that creates a copy of itself when you open it. In Microsoft Office Word 2007, you can create a template saving a document as a .dotx file
- Templates are documents that are created with a basic structure such as Font, Style, ... etc
- Add Template
- Modify Template

# Add Template

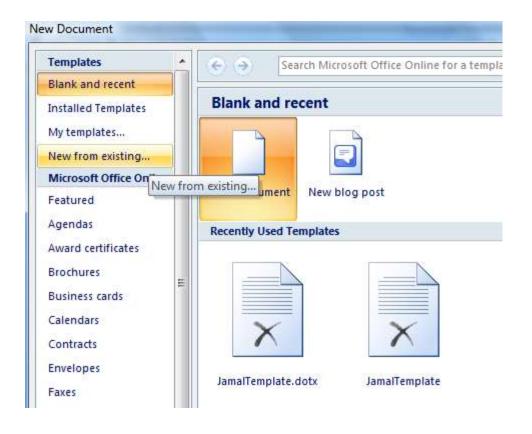
- Design your document.
- Click on Office Button >> Choose Save As.
- Enter file name.
- In Save As Type Box >> Choose Document Template.
- Click Save.

# Modify Template

- Click Office Button >> Open.
- Browse for the template file name.
- Click open.
- Modify the changes you want
- Click Save.

#### Creating Documents from Existing Templates

- Click Office Button>>New
   >> On the left hand side of the Screen >>from
   Templates section >> Select the template you want.
- Click Ok.



# Computer Skills Microsoft Excel

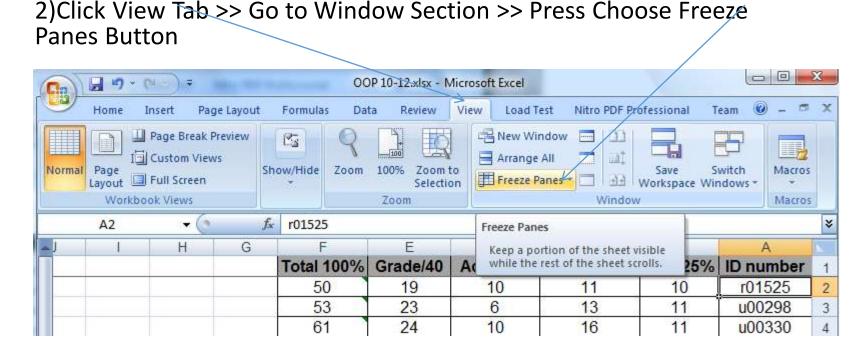
Excel

#### Microsoft Excel

- Workbook is the basic file type. It may contains various kinds of sheets e.g. Worksheets, Chart Sheets.
- Worksheet is a table consisting of rows and columns of information.
- Cell is the intersection of a row and a column, it is used to hold information.
- Cell Reference is a cell's address in terms of rows and columns e.g. C3.

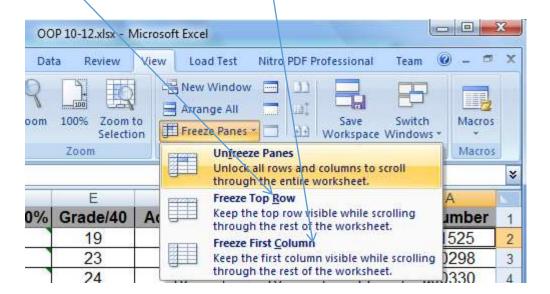
#### Freezing Titles

- It gives us the ability to see columns titles when we scroll through the rest of the table.
- To freeze columns titles
  - 1) Click on the row below where you want the split to appear.



#### Freeze Row Title

- Follow the same commands you used to freeze columns titles.
- To Freeze Rows and Columns Titles at the same time use the same commands.



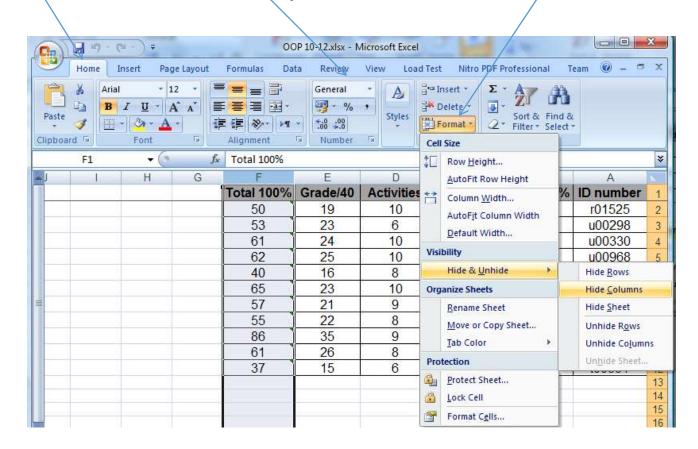
#### Continue...

• The difference between the three types of freezing titles is in the cell you select before applying the commands.

# Hiding Columns

• Select the column you want to hide.

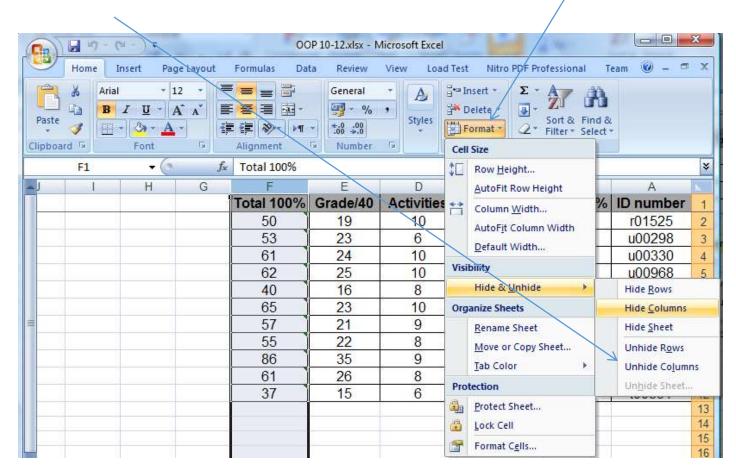
Go to Home Tab >> Cells Group >> Press Format Button



### Unhiding Columns

• Go to Home Tab >> Cells Group >> Press Format Button

Click Unhide

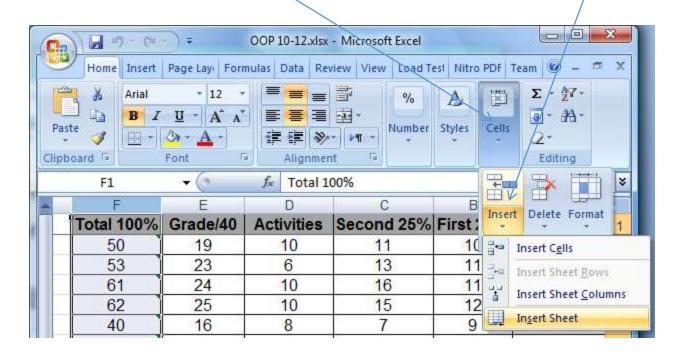


# Working With Worksheets

- Add.
- Rename.
- Hide/Display.
- Delete.

#### Add Worksheet

- Right click on the tab that contains the sheet name.
- Select Insert >> Choose Worksheet
- Click Ok. OR
- Go to Home Tab >> Cells Group >> Press Insert Button



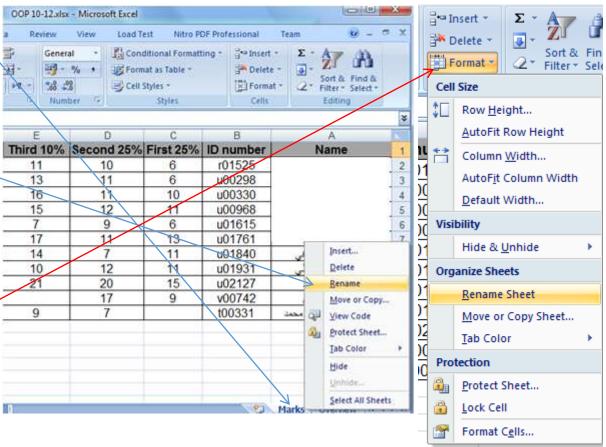
#### Rename Worksheet

 Right click on the tab containing the sheet name you want to change.

Select Rename.

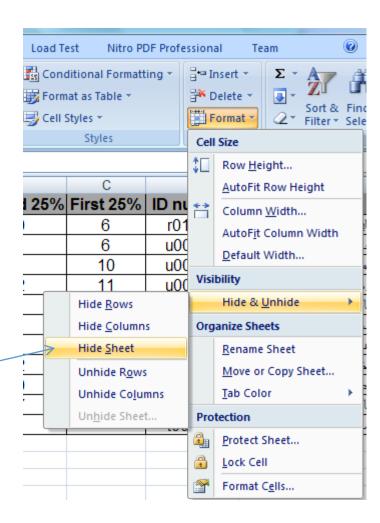
Type the new name.
 OR

Go to Home Tab >> \_\_\_\_
 Cells Group >> Press \_\_\_
 Format Button \_\_\_



# Hiding Worksheet

- Select the sheet by clicking the tab containing the sheet name.
- Go to Home Tab >> Cells Group >> Press Format Button >> Hide Sheet
- Follow the Same Command to Unhide sheets



#### Delete Worksheet

- Right click on the tab containing the sheet name you want to change.
- Select Delete. OR
- Go to Home Tab >> Cells Group >> Press Delete Button

# Using Formulas and Functions

• Formulas are used to perform calculations and produce new values from constants or other formulas.

#### Formula Fundamentals

- Click on the Cell you want.
- A Formula must begin with = sign.
- No space can be used in the formula.
- All values must be enclosed in ().
- Use signs to separate variables or values.

# Cont.

Operand	Meaning	Example
%	Percentage	5%
^	Exponentiation	3^2
*	Multiplication	5*6
/	Division	8/2
+	Addition	5+7
-	Subtraction	9-3

#### **Character Priority**

In Maths there is a priority order of mathematical symbols (What happens first).

5+(7-3)\*4\*4/6

- Brackets ()
- Multiplication \* and Division / (Left to right)
- Addition + and Subtraction (Left to right)

As an Example, this formula in excel;

The answer to this formula =1+2\*6 is 13 not 18 (The multiplication must be done first)

The answer to this formula =(1+2)\*6 is 18 (The brackets must be done first)

The answer to this formula =10-6/2 is 7 not 2 (The division must be done first)

The answer to this formula =6\*(1+2)\*2 is 36 (The brackets must be done first)

The answer to this formula =6/(1+2)\*2 is 4 (The brackets must be done first, then the division, then the multiplication (Left to right))

# Formula Errors

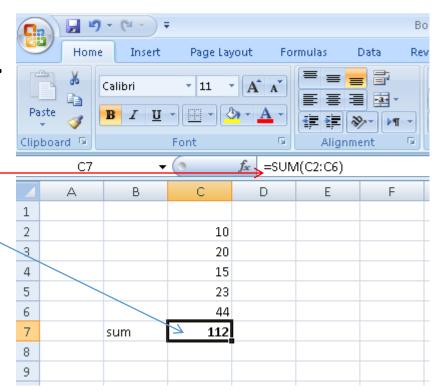
Error	Meaning
#Name	Text has been used in the formula
#N/A	The value is not available
#Ref	Cell reference in invalid
####	Column is not wide enough
#VALUE	A text is entered when the formula is expecting a number
#DIV/0	Division by zero
#NUM	Invalid number

#### Cont.

 In a formula you can use a cell reference e.g. C1+C2 or a number of different cells A1,B3, C4 or You can specify a range e.g. D2:D6

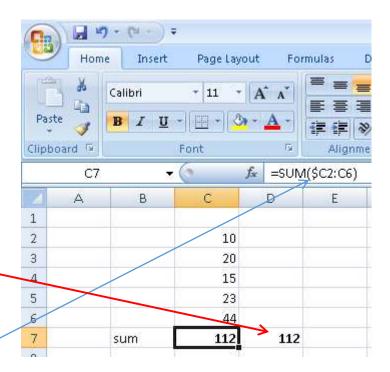
# Editing Formula

- Click on the Formula Bar or Double click on the cell that contains the formula.
- Make your changes.
- Press Enter to accept changes.
- Pres Esc to reject changes



#### Relative and Absolute Cell Addresses

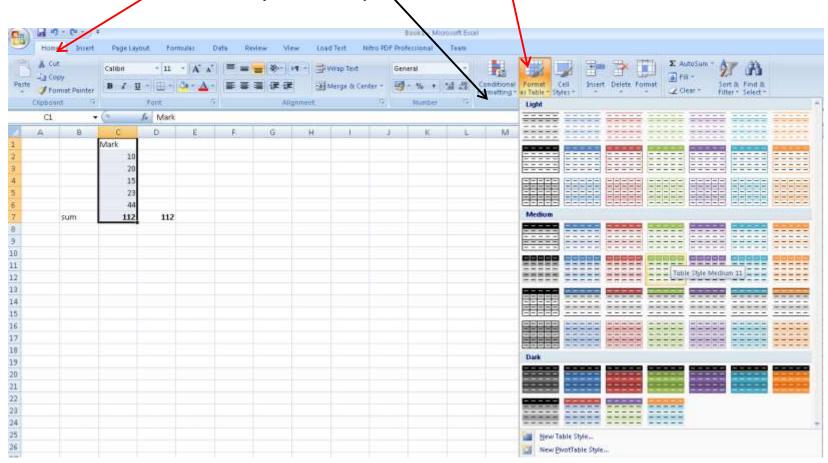
- Relative Addressed when a formula is copied to another location, excel automatically adjusts the cell reference.
- Absolute Reference is used when you do not want the cell reference to be adjusted automatically. To use it, columns and rows numbers must be proceeded with \$.
- You can fix row, column, cell



#### Applying Automatic Formatting to a Cell range

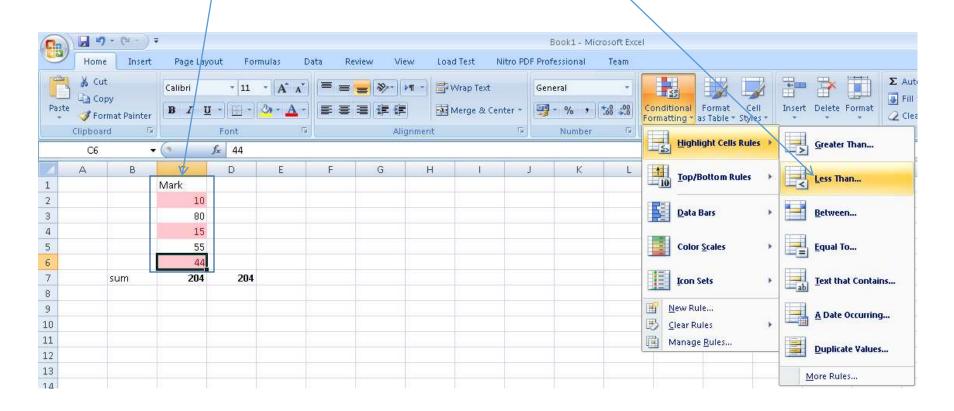
• Select the Cells you want.

Go to Home Tab >> Styles Group ≥> Format As Table



#### Conditional Formatting

- Select the cells you want.
- Go to Home Tab >> Styles Group >> Conditional Formatting



## Linking Data within a Cell

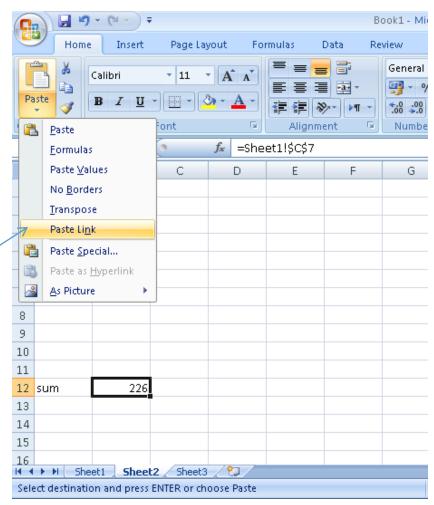
- Select the cell you want to be the second in the list.
- In that cell type = sign then enter the cell reference of the source cell.

#### SIGN(number)

Returns the sign of a number: 1 if the number is positive, zero if the number is zero, or -1 if the number is negative.

#### Linking Worksheets within Workbook

- Open the first Worksheet.
- Select and copy the data you want to link.
- Click the tab of the second Worksheet.
- In the second sheet click on the location you want to link
- Go to Home Tab >> Click Paste
   Button >> Paste Special >> Paste
   Link



# Computer Skills Microsoft Excel

Microsoft Excel

#### Protection

• Protection means assigning a password for a cell or a worksheet. Thus users who know the password can access the protected cell, worksheet, ... etc.

#### Protection

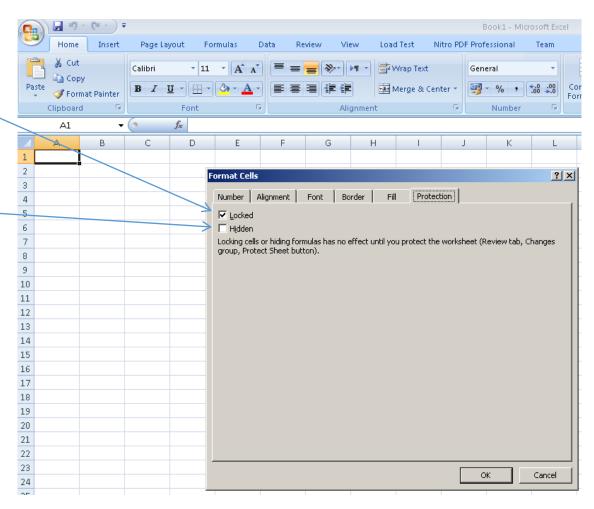
- Protecting Cells.
- Protecting a worksheet.
- Protecting Excel workbook.
- Password for opening a workbook.

## Protecting Cells

- Cell protection will take effect until the worksheet is protected.
- Excel gives you the ability to make some cells unprotected.
- Select the cells that will not be protected.
- Go to Home Tab >> Click the arrow on the bottom corner at the right hand side of Font Section .
- Click Protection tab from the Format Cells dialog box. You have two options.

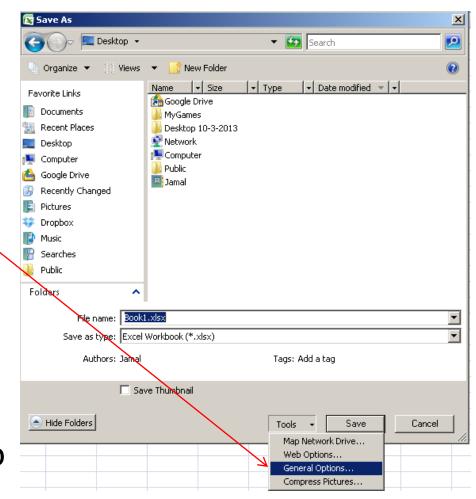
## Protecting Cells

- Locked: prevents cells modification after the sheet is protected.
- Hidden: once the sheet is protected, the formula will be hidden.



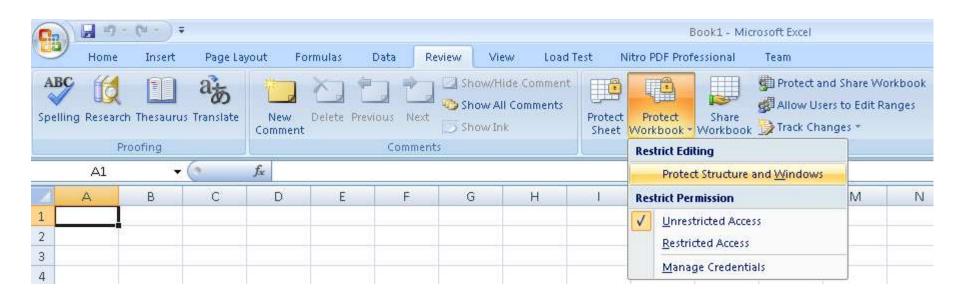
### Protecting a WorkBook

- Press Office Button >>
   Save >> press Tools
   button >> Choose
   General options
- >> Enter the password and Select the options you want You will be asked to reenter the password.
- Click OK.
- Follow the same steps to unprotect Worksheet



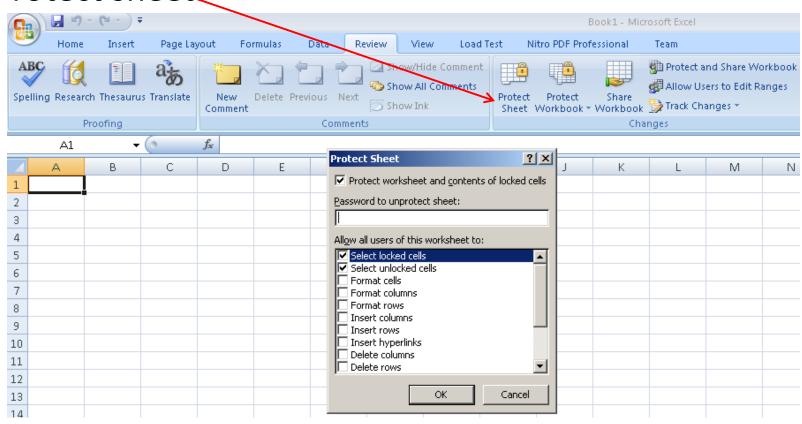
## Protecting a Workbook

- Structure: prevents you from changing the structure of the workbook i.e. you can not insert, delete, edit, copy, move or hide sheets.
- Windows: prevents you from changing the size of the workbook i.e. close, maximize, minimize and restore icons are hidden.



## Protecting a Worksheet

 Go to Review Tab >> Changes Section >> Choose Protect sheet.



#### Lists

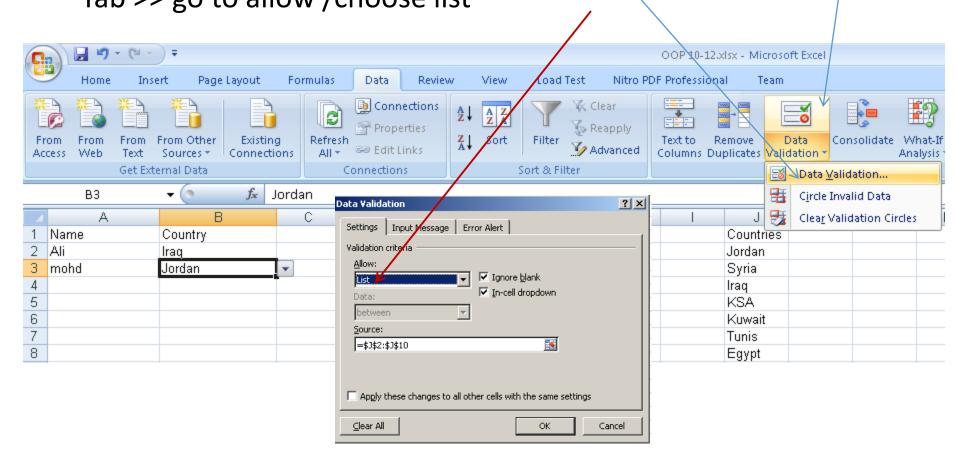
- An Excel list: A series of rows that contains related data or a series of rows that you designate to function as a datasheet by using the Create List command.
- List provides features designed to make it easier to manage and analyze groups of related data in a worksheet.

#### Lists

- When you designate a range (range: Two or more cells on a sheet.
- The cells in a range can be adjacent or nonadjacent.) as a list, you can manage and analyze the data in the list independently of data outside the list.
- For example, using only the data contained within the list, you can filter columns, add a row for totals, using only the data contained within the list.

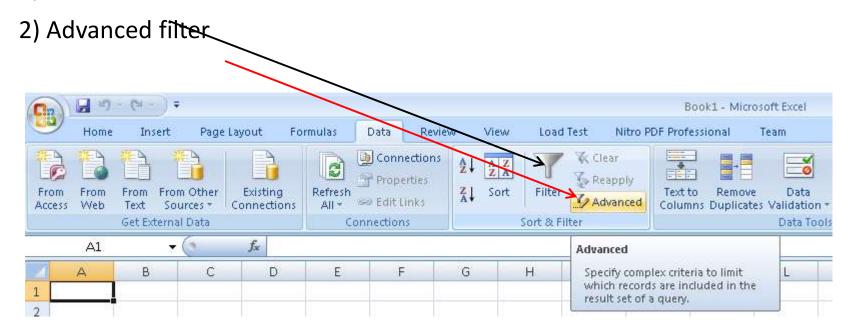
### Creating a list

Click Data Tab >> Go to Data Tools Section>> Press Data
 Validation Button >> Click Validation option >> Click Settings
 Tab >> go to allow /choose list



### Filtering

- Excel provides powerful functions to search for certain condition or criteria.
- Types of filters:
  - 1) AutoFilter.



#### AutoFilter

- AutoFilter is used to retrieve data that meets the conditions.
- Select the cells you want to filter.
- Click Data Tab >> Go to Sort and Filter Section >> Press Filter Button
- AutoFilter arrow appears to the right of the column label

#### AutoFilter

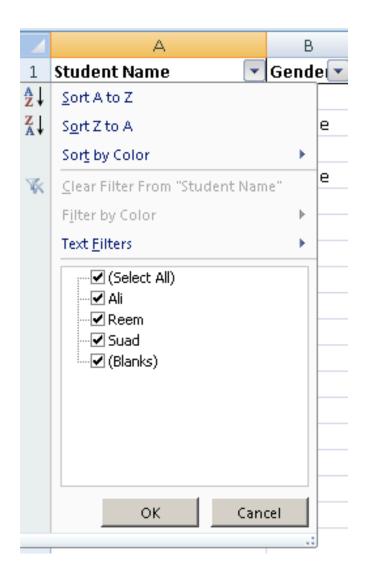
 If you click AutoFilter arrow you can choose from several options

All: To display all rows in the list.

Custom: Applies two criteria values within the column.

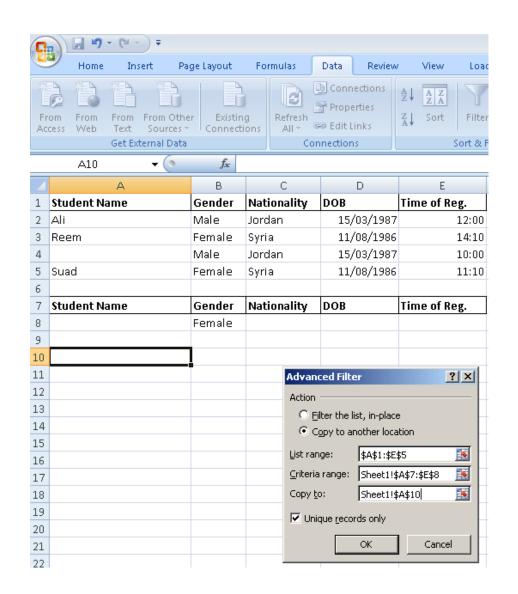
Blanks: Displays rows containing empty cells.

Non Blanks: Displays rows containing values.



- Similar to AutoFilter but it does not display dropdown list for the columns.
- Instead you type the criteria you want above the list in a separate criteria range.
- It gives the ability to filter more complex criteria or conditions.

- Select the cells you want.
- In the first cell e.g. A1 type criteria.
- Copy columns names to the first row below criteria.
- On the third row type the entry you want to use when filtering.



- Select the cells containing data.
- Click Data Tab >> Go to Sort and Filter Section >> Select Advanced Filter.
- In the Advanced Filter dialog box set the options you want.
- Press OK.

- Filter the List in place: hides the rows that do not meet the criteria.
- Copy to another location: copies the filtered data to another location.
- Unique records only: copies only one row of the rows that meet the criteria.

- In List range box: enter the range of cells you want to filter.
- Criteria range box: cells range that contain the criteria.
- Copy to box: the range of cells to which the filtered data will be copies to

# Computer Skills Microsoft Excel

Microsoft Excel

## Sorting

- Click a cell in the column you would like to sort by.
- Click Sort Ascending or Sort Descending Icon.

## Sorting Multiple Columns

- Worksheet data can be sorted based on alphabets, numbers, dates.
- Select any cell from the list you want to sort.
- Click Data Tab >> Go to Sort and Filter Section >> Press Sort Button >> Sort dialog box appears.
- You can sort the lists in Ascending or descending order.
- You can use the Then by fields to sort the worksheet based on more than one field.
- You can choose up to three fields.

## Defining Names

- You can name ranges of cells, Formulas, ... etc.
- Select the cells.
- Go to Formula Tab >> Define names section >> Define name.
- Define Name Dialog Box appears
- Enter Name >> Click OK.

#### Date and Time Functions

• Excel provides Built-in functions to perform calculations on date and time.

## Display Current Date

- Select the cell you want.
- Enter the following equation =TODAY()
- Press Enter
- You can change the format of the displayed date by clicking on Format menu >> choose Cells

## Display date and time

- Select the cell you want.
- Enter the following equation =NOW()
- Press Enter

## Day Function

- Insert the Date in a cell e.g. C5.
- Click on the cell in which you want to display the day.
- Enter the following equation =DAY(C5).
- Press Enter.

#### Month Function

- Insert the Date in a cell e.g. C5.
- Click on the cell in which you want to display the month.
- Enter the following equation =MONTH(C5).
- Press Enter.

#### YEAR Function

- Insert the Date in a cell e.g. C5.
- Click on the cell in which you want to display the year.
- Enter the following equation = year(C5).
- Press Enter.

## Math and Trig Functions

- SUM
- SUMIF
- ROUND

#### SUM Function

- **SUM(number1**, number2, ...)
- Number1, number2, ... are 1 to 30 arguments for which you want the total value or sum.

#### **SUMIF** Function

- This function is used to calculate the sum of values within a range that meets a specific condition or criteria.
- **SUMIF**(range,criteria,sum\_range)
- Range is the range of cells you want evaluated.
- Criteria is the criteria in the form of a number, expression, or text that defines which cells will be added. For example, criteria can be expressed as 32, "32", ">32", "apples".
- Sum\_range are the actual cells to sum

#### **SUMIF** Function

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose SUMIF function >> SUMIF dialog box appears.
- Set the option in the dialog box.
- Press OK.

#### **ROUND** Function

- ROUND(number,num\_digits)
- Number is the number you want to round.
- Num\_digits specifies the number of digits to which you want to round number

### **ROUND Function**

Function	Result
Round(364.667,1)	364.7
Round( <b>364.667</b> ,2)	364.67
Round( <b>364.667</b> ,3)	364.667
Round( <b>364.667</b> ,0)	365
Round( <b>364.667</b> ,-1)	360

#### **ROUND** Function

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose ROUND function >> ROUND dialog box appears.
- Set the option in the dialog box.
- Press OK.

## Round Down and Round Up

- Rounds a number up, away from 0 (zero).
- ROUNDUP(number,num\_digits)
- Number is any real number that you want rounded up.
- Num\_digits is the number of digits to which you want to round number.

## Round Down and Round Up

- Rounds a number down, toward zero.
- ROUNDDOWN(number,num\_digits)
- Number is any real number that you want rounded down.
- Num\_digits is the number of digits to which you want to round number.
- RoundDown and RoundUp can be triggered from insert function icon

- Returns the largest value in a set of values.
- MAX(number1, number2,...)
- Number1, number2, ... are 1 to 30 numbers for which you want to find the maximum value.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose MAX function >> MAX dialog box appears.
- Set the option in the dialog box.
- Press OK.

- Returns the smallest number in a set of values.
- MIN(number1,number2,...)
- Number1, number2, ... are 1 to 30 numbers for which you want to find the minimum value.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose MIN function >> MIN dialog box appears.
- Set the option in the dialog box.
- Press OK.

- Returns the k-th smallest value in a data set. Use this function to return values with a particular relative standing in a data set.
- SMALL(array,k)
- Array is an array or range of numerical data for which you want to determine the k-th smallest value.
- K is the position (from the smallest) in the array or range of data to return.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose SMALL function >> SMALL dialog box appears.
- Set the option in the dialog box.
- Press OK.

- Returns the k-th largest value in a data set. You can use this function to select a value based on its relative standing. For example, you can use LARGE to return the highest, runner-up, or third-place score.
- LARGE(array,k)
- Array is the array or range of data for which you want to determine the k-th largest value.
- K is the position (from the largest) in the array or cell range of data to return.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose LARGE function >> LARGE dialog box appears.
- Set the option in the dialog box.
- Press OK.

- Counts the number of cells that contain numbers and also numbers within the list of arguments. Use COUNT to get the number of entries in a number field that's in a range or array of numbers.
- **COUNT(value1**,value2,...)
- Value1, value2, ... are 1 to 30 arguments that can contain or refer to a variety of different types of data, but only numbers are counted.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose COUNT function >> COUNT dialog box appears.
- Set the option in the dialog box.
- Press OK.

- Counts the number of cells that are not empty and the values within the list of arguments. Use COUNTA to count the number of cells that contain data in a range or array.
- COUNTA(value1, value2,...)
- Value1, value2, ... are 1 to 30 arguments representing the values you want to count. In this case, a value is any type of information, including empty text ("") but not including empty cells. If an argument is an array or reference, empty cells within the array or reference are ignored. If you do not need to count logical values, text, or error values, use the COUNT function.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose COUNTA function >> COUNTA dialog box appears.
- Set the option in the dialog box.
- Press OK.

Counts empty cells in a specified range of cells.

- COUNTBLANK(range)
- Range is the range from which you want to count the blank cells.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose COUNTBLANK function >> COUNTBLANK dialog box appears.
- Set the option in the dialog box.
- Press OK.

### THE BASIC COUNT FUNCTIONS

Function	Description	Syntax
COUNT	Counts the number of cells in a given range which contain numerical data. It ignores blank cells and cells containg text.	=COUNT (range)
COUNTA	Counts the number of cells in a given range which contain numeric or text data, and ignore blank cells.	=COUNTA (range)
COUNTBLANK	Counts the number of cells in a given range which are blank.	=COUNTBLANK (range)

- Counts the number of cells within a range that meet the given criteria.
- COUNTIF(range, criteria)
- Range is the range of cells from which you want to count cells.
- Criteria is the criteria in the form of a number, expression, or text that defines which cells will be counted. For example, criteria can be expressed as 32, "32", ">32", "apples".

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose COUNTIF function >> COUNTIF dialog box appears.
- Set the option in the dialog box.
- Press OK.

- Returns the median of the given numbers. The median is the number in the middle of a set of numbers; that is, half the numbers have values that are greater than the median, and half have values that are less.
- MEDIAN(number1,number2,...)
- Number1, number2, ... are 1 to 30 numbers for which you want the median.

# How to Find the Median Value in odd amount of numbers

- Example: find the Median of 12, 3 and 5
  - Put them in order:
  - 3, 5, 12
  - The middle number is **5**, so the median is **5**.
- Example: find the Median of 3, 13, 7, 5, 21, 23, 39, 23, 40, 23, 14, 12, 56, 23, 29
  - When we put those numbers in order we have:
  - 3, 5, 7, 12, 13, 14, 21, 23, 23, 23, 23, 29, 39, 40, 56
  - There are fifteen numbers. Our middle number will be the eighth number:
  - 3, 5, 7, 12, 13, 14, 21, **23**, 23, 23, 23, 29, 39, 40, 56
  - The median value of this set of numbers is 23.

# How to Find the Median Value in Even amount of numbers

- Example: find the Median of 3, 13, 7, 5, 21, 23, 23, 40, 23, 14, 12, 56, 23, 29
  - When we put those numbers in order we have:

• There are now **fourteen** numbers and so we don't have just one middle number, we have a **pair of middle numbers**:

- In this example the middle numbers are 21 and 23.
- To find the value half-way between them, add them together and divide by 2:
- 21 + 23 = 44 $44 \div 2 = 22$
- So the Median in this example is 22.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose MEDIAN function >> MEADIAN dialog box appears.
- Set the option in the dialog box.
- Press OK.

## Computer Skills

Microsoft Excel

Microsoft Excel

## Logical Functions

- Logical Functions are used to test the existence of specific conditions.
- Types
  - 1)IF
  - 2)AND
  - 3)OR

- Returns one value if a condition you specify evaluates to TRUE and another value if it evaluates to FALSE.
- Use IF to conduct conditional tests on values and formulas.
- IF(logical\_test,value\_if\_true,value\_if\_false)

- Logical\_test is any value or expression that can be evaluated to TRUE or FALSE.
   For example, A10=100 is a logical expression; if the value in cell A10 is equal to
   100, the expression evaluates to TRUE. Otherwise, the expression evaluates to
   FALSE. This argument can use any comparison calculation operator.
- Value\_if\_true is the value that is returned if logical\_test is TRUE. For example, if this argument is the text string "Within budget" and the logical\_test argument evaluates to TRUE, then the IF function displays the text "Within budget". If logical\_test is TRUE and value\_if\_true is blank, this argument returns 0 (zero). To display the word TRUE, use the logical value TRUE for this argument. Value if true can be another formula.

• Value\_if\_false is the value that is returned if logical\_test is FALSE. For example, if this argument is the text string "Over budget" and the logical\_test argument evaluates to FALSE, then the IF function displays the text "Over budget". If logical\_test is FALSE and value\_if\_false is omitted, (that is, after value\_if\_true, there is no comma), then the logical value FALSE is returned. If logical\_test is FALSE and value\_if\_false is blank (that is, after value\_if\_true, there is a comma followed by the closing parenthesis), then the value 0 (zero) is returned. Value if false can be another formula.

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose IF function >> IF dialog box appears.
- Set the option in the dialog box.
- Press OK.

## AND Logical Function

- Returns TRUE if all its arguments are TRUE; returns FALSE if one or more argument is FALSE.
- AND(logical1, logical2, ...)
- **Logical1**, **logical2**, ... are 1 to 30 conditions you want to test that can be either TRUE or FALSE.

## AND Logical Function

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose AND function >> AND dialog box appears.
- Set the option in the dialog box.
- Press OK.

## OR Logical Function

- Returns TRUE if any argument is TRUE returns FALSE if all arguments are FALSE.
- **OR**(**logical1**,logical2,...)
- Logical1,logical2,... are 1 to 30 conditions you want to test that can be either TRUE or FALSE.

## OR Logical Function

- Enter = in the cell you want the result to be displayed in.
- Click on Insert function icon >> Choose OR function >> OR dialog box appears.
- Set the option in the dialog box.
- Press OK.

## Paste Special

After copying data, you can use the Paste Special command on the Edit menu to paste specific cell contents or attributes such as formulas, formats, or comments from the Clipboard into an Excel worksheet (worksheet: The primary document that you use in Excel to store and work with data. Also called a spreadsheet. A worksheet consists of cells that are organized into columns and rows; a worksheet is always stored in a workbook.). You can also use Paste Special to paste a link to Excel data or data from another program, such as Microsoft Word.

## Paste Special

- All:Paste all cell contents and formatting.
- Formulas: Paste only the formulas as entered in the formula bar.
- Values: Paste only the values as displayed in the cells.
- Operations: Allows performing arithmetic operations between the pasted cell and the cell it overwrites.

#### Paste Special

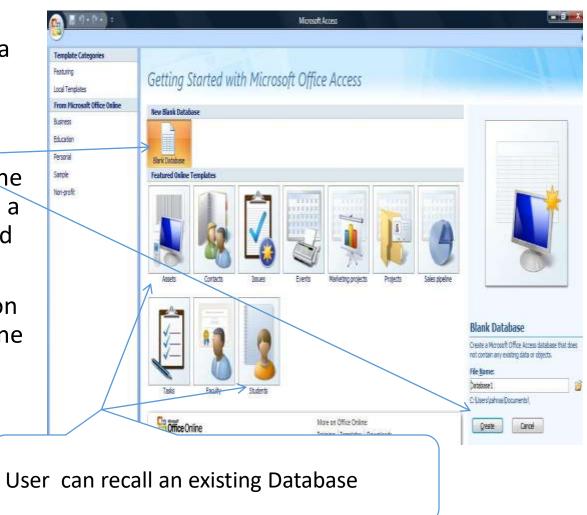
- Transpose: switch the orientation of your data.
- Skip Blanks: only cells that contain formulas or data are copied.
- Paste Link: allows you to create a link between two ranges of cells.

# Computer Skills Microsoft Access

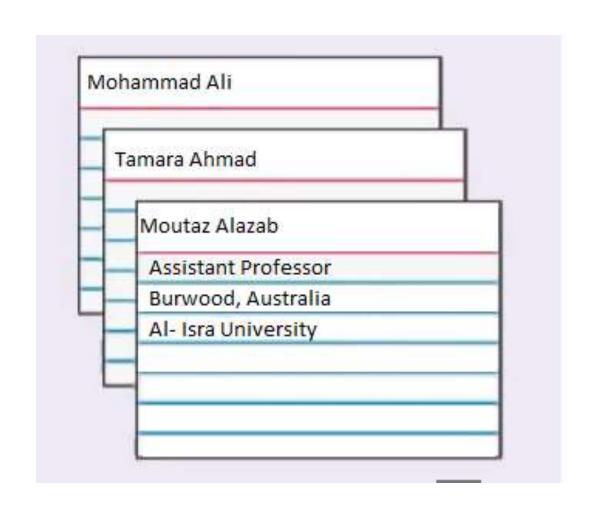
Microsoft Access

#### Microsoft Access

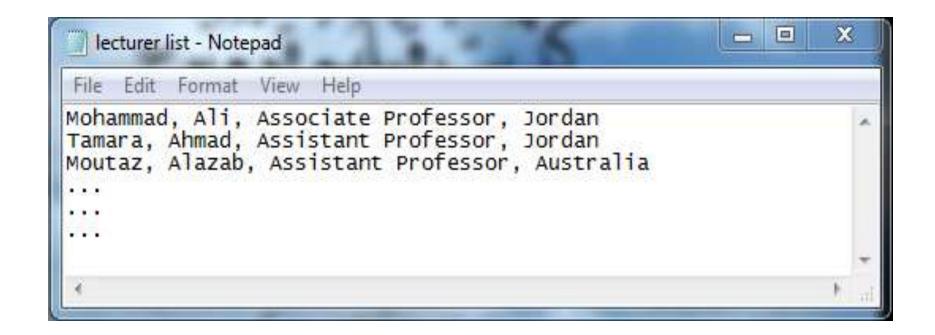
- A computer database is a program that lets you store, organize and manipulate data.
- Microsoft Access gives the user the ability to create a database for the required data.
- A Data Base is a collection of related data, e.g. Phone book.



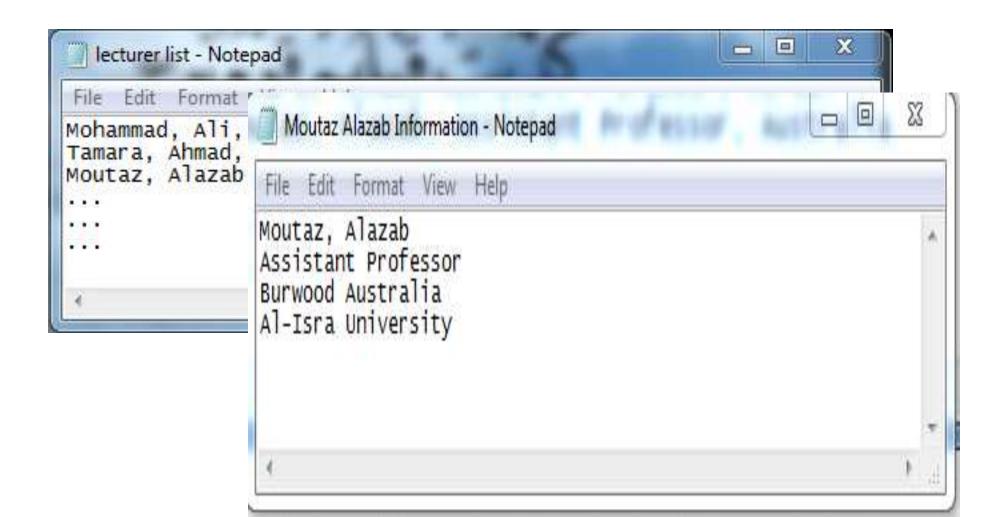
# Paper Ledgers or Index Cards



## Early DataBase



# Early DataBase



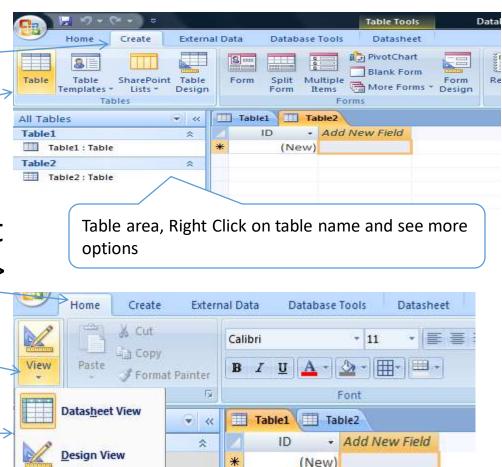
# Why Access!

- Can be difficult for users.
- Control what people can do in their database.
- Much easier in using data validation.
- Duplicate data are minimized
- Data entry is easier and faster.
- Information can be viewed in the way you want.
- information is more secured because of the password.
- multiple users can use the database in the sometime.

#### Create New Table

 Click Create Tab >> Go to Tables section >> Press table button.

 To view the table in Design view or datasheet view > Click Home Tab >> Go to Views group >> Press View Button >> Choose Datasheet or Design view



#### Access Objects

- <u>Tables:</u> (Store the Data) An Access object that is used to collect and organize data that is related to a particular subject.
- Queries: (Organise Data) Questions you ask from your database.
- Forms: (Display Data on Screen) A form is a type of a database object that is primarily used to enter or display data in a database.

## Access Objects

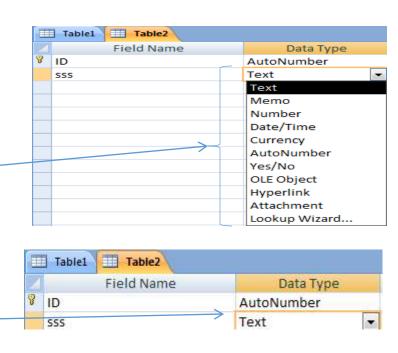
- **Reports** (Print the information out.) used to print, summarize and print data from the database.
- Macro: (Automate Tasks) Tools that are used to automate repetitive, complex, manual, and time consuming tasks.
- **Modules:** (Programming) Programs created by advanced users using Access Basic as a programming language.

## **Database Concepts**

- Tables are a connection of fields.
- Fields: (Coulmn) Places in a table that are used to store information.
- Record: (Row) Information in one row of an access datasheet.
- File: all records of a database.
- Folder: Used to store different files.

#### Design View

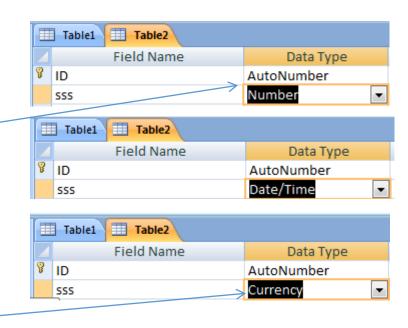
- You can choose from several data types:
  - 1) Text: Alpha numeric data letters, numbers, spaces, symbols, .. , etc, up to 255 characters.
  - 2) Memo: Alpha numeric data, it is used when you need to enter several sentences to describe a record. Up to 64000 characters.

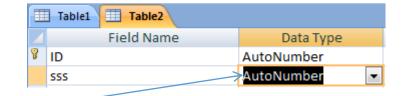




#### Design View

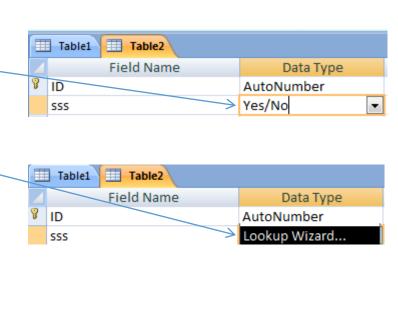
- 3) Numbers: numeric data that is used when performing calculations.
- 4)Date/Time.
- 5)Currency: A dollar sign will lead the number you enter. Used for currency values such as dollars,—euro, .., etc.
- 6) AutoNumber: Numeric value that is incremented automatically by 1 for every record.





#### Design View

- Yes/No: Logical or Boolean values.
- LookUp Wizard: Used when the values you need exist or is part of a static list. (A lookup field displays a list of values from which the user can choose. This can make data entry quicker and more accurate. When data entered in a field already exists in another table, you can avoid duplication and possible errors from reentering the data. Lookup fields can be either simple or complex.)



# Computer Skills Microsoft PowerPoint

#### Microsoft PowerPoint

- PowerPoint is a set of slides that contain graphics, text, charts ... etc.
- It is the most simple way to create a series or a set of slides to display or present your work.

#### Running PowerPoint

 Click Start >> Select Programs >> Go to Microsoft Office >> Choose Microsoft PowerPoint.

## Slide Background

- View or select the slide to which you want to control background color.
- Click Design Tab >> Go to Themes Group
- You can choose a Style or you can change color, Font and add Effects.
- Also you can do the following:
- View or select the slide to which you want to control background color.

# Background Effects

 Click Design Tab >> Go to Background Group >> Press the arrow of Background Styles Button >> Format Background >> A dialog box appears where you can choose the option you want.

• In the dialog box you can choose the option you want >> Click Apply/Apply to All.

## Creating a Template

- Open a blank presentation.
- Click View Tab >> Go to presentation views tab >> Click Slide Master.
- From slide master tab >> Go to edit master group >> press insert slide master
- Apply the styles you want >> Click office button >> Click save >> in the dialog box change the save as type to PowerPoint Template

# Editing a Template

- Open the template you want to edit
- Apply the changes you want
- Save the template

#### Applying Template to a Presentation

- Open a new presentation
- From the new presentation dialog box you can choose from :
- My Templates, Installed Templates, Installed Themes and New From Existing.

# Deleting Template

 Select the template you want >> Press Delete button on the key board.

#### Adding Slides from Another Presentation

- Click Home tab >> Go to slides group >> press New Slide Button >> Choose Reuse Slides.
- On the pane the appears on the right hand side of the window >>
   Press Browse Button >> Select the option you want.

## Drawing Tool Bar

- To get the drawing tools
- Click Home Tab >> Go to Drawing Group >> Choose the option you want.

#### 3-D Shapes

- Select the object you want.
- Click Home Tab >> Go to Drawing Group >> Shape Effects >> Choose
   3-D Rotation >> select the option you want.

#### Free Rotation

- Select the object you want.
- Click on the green circle of the object and drag it in the direction you want to rotate.
- Click outside the object to set the rotation.
- To restrict the rotation to 15-degree hold Shift while using free rotate.

#### Free Rotation

- To rotate the object in a direction opposite to the handle hold CTRL when using Free Rotate.
- To rotate an object 90-degree to the left Select the object >> Go the Drawing Tools Tab >> Go to Arrange Group >> Press Rotate >> Choose Rotate Left (To rotate right choose rotate right).

# Flip

- To flip an object horizontally
- Select the object >>Go to the Drawing Toolbar >> Click Rotate or Flip >> Choose Flip Horizontal.
- To flip an object vertically
- Select the object >>Go the Drawing Tools Tab >> Go to Arrange Group >> Press Flip >> Choose Flip Vertical (To Flip Horizontal choose Flip Horizontal).

## Grouping and Ungrouping

- Sometimes you want a group of objects to be treated as one object to make it easy to resize, move these objects. To group objects:
- Select the objects you want by holding the Shift key while clicking on them.
- Right click on one of the selected objects >> Choose Grouping then select Group.

## Grouping and Ungrouping

- Or you can follow the steps below
- Select the object >>Go the Drawing Tools Tab >> Go to Arrange Group
   >> Press Group Button >> Choose Group

# Grouping and Ungrouping

- To Remove Grouping
- Right click on the on the selected objects >> Choose Group >> select ungroup.
- You can find group commands on the Drawing toolbar under Draw.
   OR
- Go the Drawing Tools Tab >> Go to Arrange Group >> Press Group Button >> Choose UnGroup

#### Sending an Object to the Back or to the Front

- Select the object you want
- Go the Drawing Tools Tab >> Go to Arrange Group >> Press Bring to Front/Send to Back Button >> Choose the object you want.

#### Shadow

 Select the object you want >> Click Home Tab >> Go to Drawing Group >> Shape Effects >> Choose Shadow >> select the option you want.

## Removing a Shadow

- To remove the shadow of an object
- Select the object >> Click Home Tab >> Go to Drawing Group >> Shape Effects >> Choose Shadow >> select no shadow.

#### Creating the Color of a shadow on an Object

 Select the object you want >> Click Home Tab >> Go to Drawing Group >> Shape Effects >> Choose Shadow >> Press shadow options >> Format shape Dialog Box appears >> click Shadow Tab >> Change the color

## Changing the Offset

- To change the offset direction of an object
- Select the object you want >> Click Home Tab >> Go to Drawing Group >> Shape Effects >> Choose Shadow >> Press shadow options >> Format shape Dialog Box appears >> click Shadow Tab >> Drag Distance Bar.

### Media Clips

- You might need to add music to your presentation.
- There are several sounds provided by Microsoft Office.
- Select the slide you want >> Click Insert Tab >> Go to Media Clips Group >> choose Movies or Sounds.

## Media Clips

- Do one of the following:
- If you want to insert a sound/movie from a clip organizer >> Follow the steps mentioned before >> Press Sounds/movie Button >> Click Sound/movie from Clip Organizer >> Choose the sound you want.
- If you want to insert a sound from another location >> Follow the steps mentioned before >> Press Sounds/movie Button >> Click Sound/movie from File >> Choose the file you want >> A sound icon will appear on the slide

### Media Clips

- A message will appear >> Click Yes if you want the sound to be played when you go to the slide Or Click No which means the sound will be played when you click the sound icon on the slide.
- To preview the sound in Normal View Double click the sound icon.

#### Set Media Options

- To control when the sound will be played:
- Select the sound icon >> Click Sound/movie Tools Tab >> Click options
   >> Go to Sounds Options Group >> Go to Play sound Options

#### **Action Buttons**

- Action buttons contain shapes like right and left arrows.
- You can use them when including common symbols such as go next, previous, first.

#### **Action Buttons**

- To create an action button:
- Click Insert Tab >> Go to Illustrations group >> Click Shapes Button >> Go to Action Buttons >> Choose and drag the shape of the button you want >> Action Settings dialog box appears >> Make sure that the Mouse Click tab is Selected >> Click the hyperlink to option From the list >> choose the options you want >> Click OK

## Using Action Buttons to Move to another Presentation

Click Insert Tab >> Go to Illustrations group >> Click Shapes Button >> Go to Action Buttons >> Choose and drag the shape of the button you want >> Action Settings dialog box appears >> Make sure that the Mouse Click tab is Selected >> Click the hyperlink to option From the list >> choose the options you want >> Choose Other PowerPoint Presentation >> Select the file you want >> Hyperlink to Slide dialog box appears >> Select the slide you want the hyperlink to jump to >> Click OK

#### Using Action Buttons to Move to a File

Click Insert Tab >> Go to Illustrations group >> Click Shapes Button >>
 Go to Action Buttons >> Choose and drag the shape of the button you
 want >> Action Settings dialog box appears >> Make sure that the
 Mouse Click tab is Selected >> Click the hyperlink to option From the
 list >> choose the options you want >> Choose Other File >> Select
 the file you want >> Click OK.

#### Editing Action Buttons

- To change the destination of an action button after creating it
- Right click on the action button >> Choose Hyperlink >> Go to Edit Hyperlink >> Change the link

# Computer Skills Microsoft PowerPoint

#### **Custom Show**

- Custom shows allow different parts of the presentation to be presented as different shows for different level of audiences without the need for creating different versions of the same presentation.
- A custom show can be used to skip certain slides when needed in the presentation.

#### Creating a Custom Show

- Open the presentation you want to create a custom show for >> click Slide Show Tab >> Go to start slide show Group >> Press Custom Slide Show Button >> Click New.
- From Slides and Presentations Choose the slides to be included in your custom presentation >> Click Add

#### Creating a Custom Show

- To select multiple slides hold Ctrl Button while selecting the slides you want.
- To change the order of the slides >> Choose the slide you want >> click one of the arrow buttons to move the slide up or down.
- Enter the name in the Slide show name box >> Press OK.

#### Add or Remove Slides to a Custom Show

- click Slide Show Tab >> Go to start slide show Group >> Press Custom Slide Show Button >> Click Edit.
- Add or remove the slides you want >> Press Ok.

#### Removing a Custom Show

 click Slide Show Tab >> Go to start slide show Group >> Press Custom Slide Show Button >> Click remove

#### Using Action Buttons to Run a Custom Show

- To Create an action button:
- Click Insert Tab >> Go to Illustrations group >> Click Shapes Button >>
   Go to Action Buttons >> Choose and drag the shape of the button you
   want >> Action Settings dialog box appears >> Make sure that the
   Mouse Click tab is Selected >> Click the hyperlink to option From the
   list >> choose the options you want >> Select the custom show you
   want >> Press OK.

#### **Transitions**

- Transitions are effect you add to your presentation to improve the transition between slides.
- Select the slide you want >> Animations Tab>>Go to Transitions to this slide Group >> Choose Slide Transition you want

#### Setting Slide Show Timing Manually

- You must be in Normal or Slide Sorter View.
- Select the slide you want >> Animations Tab>>Go to Transitions to this slide Group >> Choose Slide Transition you want
- Go to Advance Slide>> Choose Automatically after >> Enter the time for which the slide will appear (in Seconds) >> Click Apply or Apply to All.

## Linking Object

- When an object is linked it will be updated if you update the source file only.
- The Linked data is stored in a file and the destination file stores the location of the source file.

## Linking Texts

Select the slide you want >> Click Insert Tab >> Go to Text Group >>
 Press Object Button >> Select Create from file >> Enter the file name
 >> Select Link check box >> To display the linked object select Display
 as icon check box.

#### Linking a Cell Range to a Presentation

- Go to the Excel file you want >> Select the data you want to include in your presentation >> Click copy.
- Go to your presentation >> Place the cursor in the slide where you
  want to paste the data copies from Excel >> Click Edit menu >>
  Choose Paste Special >> Click Paste link >> Press OK.

#### Linking Image to a Presentation

- Click Insert Tab >> Choose Picture >> Select From File >> In the Look in box insert the location of the file.
- On Insert button >> Click the arrow >> Choose Link to File option.

#### Saving a Slide as a Picture

- A slide can be save as a picture in GIF format.
- Select the slide you want >> Press Office Button >> Choose Save as.
- In the Save as type box >> Choose GIF Graphic Interchange Format >> Press Save.

#### Saving a Presentation to open as a Slide Show

- Open the Presentation you want >> Press Office Button >> Choose Save As
- In the Save as type box >> Choose PowerPoint Show >> Press Save.
- (The File extension will be .pps)