LUMS

Information Systems and Technology

MICROSOFT OFFICE
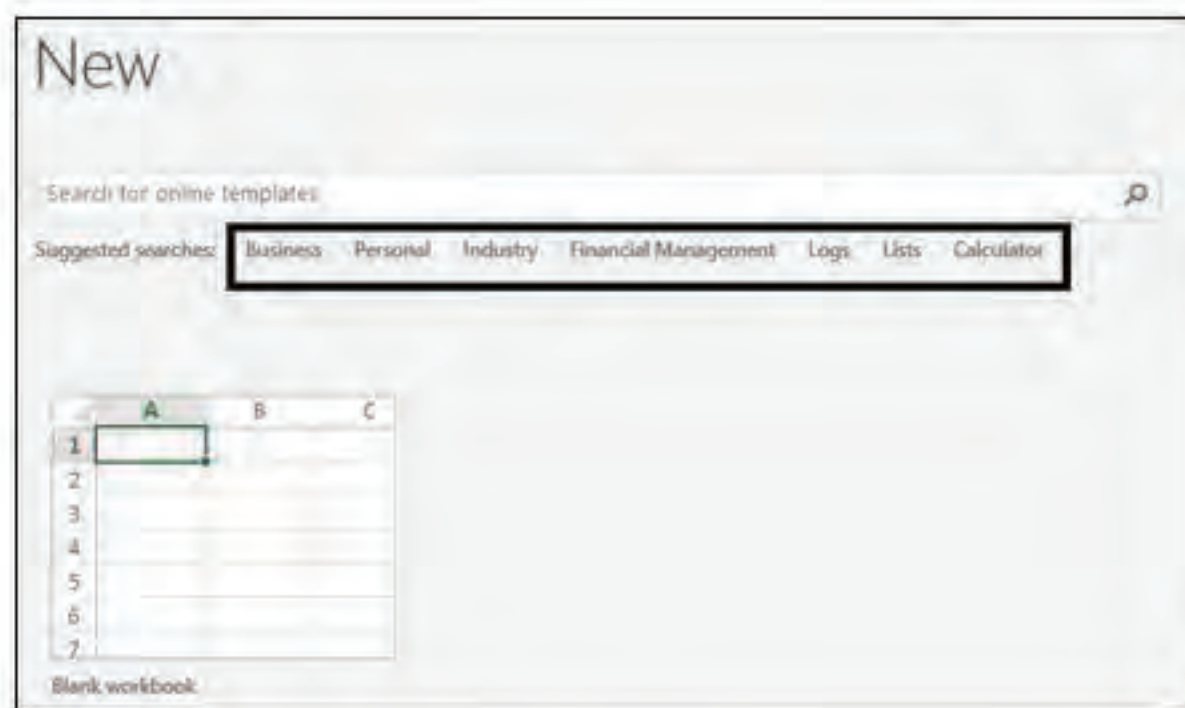# EXCEL
2017

IST TIPS

Microsoft Office Excel

Microsoft Excel is a software developed and manufactured by Microsoft Corporation that allows users to organize, format, and calculate data with formulas using a spreadsheet system divided into rows and columns. Microsoft Excel usually comes bundled with Microsoft Office and is compatible with other applications offered in the suite of products. The first software program similar to Excel was released in 1982 and was called Multiplan.

Some other popular spreadsheet programs include IBM Lotus 1 2 3 for Windows and the AppleWorks spreadsheet program for the Mac. However, Microsoft Excel has led the spreadsheet market for many years and continues to be the most popular spreadsheet program.

1: Creating a Workbook

A new excel workbook can be created using the File menu. Go to **File>New** and select **Blank workbook**. A new workbook will be opened where you can start your work from scratch. However, Excel also gives you the option to download template spreadsheets from different designs available from categories Business, Personal, Industry etc. These are predesigned templates and can also be edited according to user requirement.
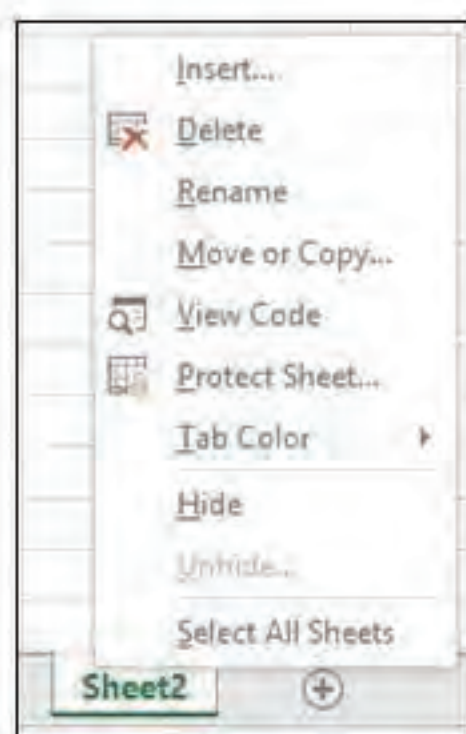

While working on excel a new workbook can also be opened using **Ctrl+N** function.

2: Add, Delete or Rename Sheets

While working on a workbook, sheets can be added, deleted or rename. To add a new sheet, use the Add button as shown in the image:
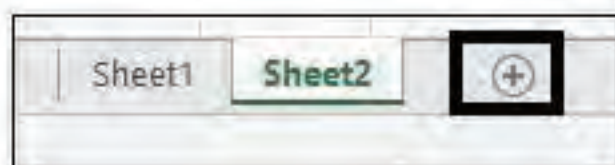

To rename or delete right click on sheet name at the bottom and select required option from the list.

3: Hide or Unhide Columns

Sometimes spreadsheets have numerous columns and they aren't required by the user while printing the spreadsheet. In this scenario a better option is to hide those unwanted columns instead of deleting them. To hide any column, select the specific column from the top, right click on it and select **Hide/Unhide** from the list.
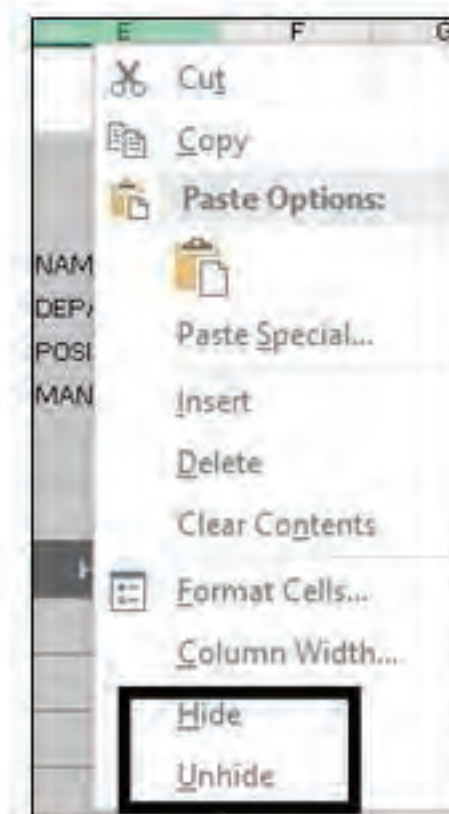
4: Freezing Rows and Columns

In excel worksheet we have numerous columns and rows to work with. If a spreadsheet has a lot of data, then you won't be able to see all the data in one screen which would make it difficult to work. So to overcome the situation, Excel gives the option of freezing rows and columns. It actually freezes specific rows and columns while you switch between the data in the spreadsheet. To freeze panes, go to **View** tab and select **Freeze Panes**.

5: Move or Copy Worksheets

You can move or copy a worksheet in the same workbook, or copy a worksheet to another workbook. To move a worksheet within a workbook, select the worksheet tab at the bottom of workbook and drag it to where you want it. In order to create a copy a worksheet to a new workbook;

- Right click the worksheet tab and select **Move or Copy**
- Check **Create a copy** at the bottom
- Under **to book** section, select **new book** or another workbook you have open
- Select **OK**
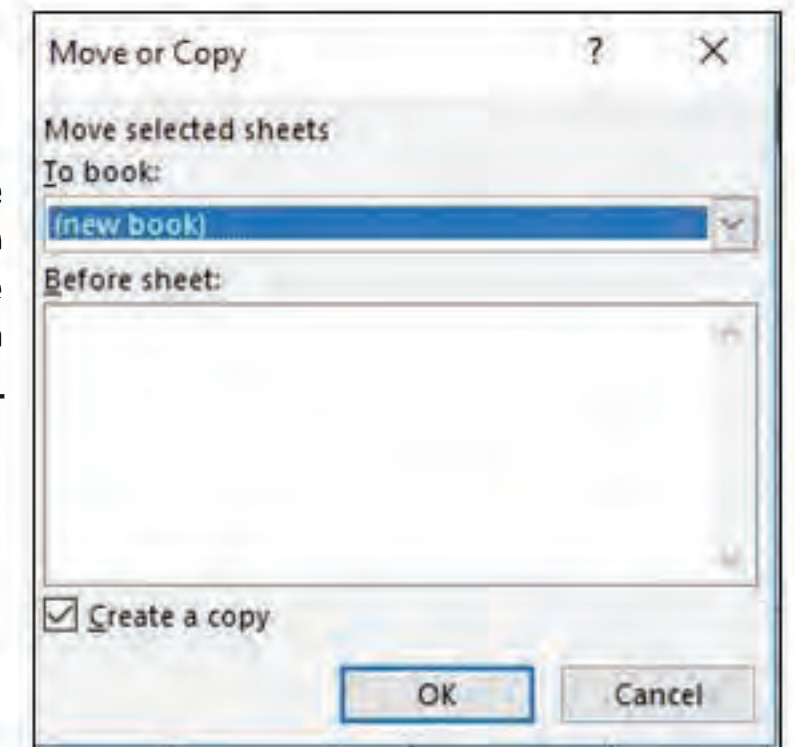
6: Merging Multiple Cells

Sometimes we need to merge multiple cells. This is a need base requirement and can be done by select the cells you want to merge and then selecting **Merge & Center** from Home tab

7: Auto Fill Time Spans

With this feature Excel allows you to automatically fill cells with data that follow a specific pattern or series. For instance, the user wants to add months from January to December in cells A1 to L1. To use this feature what you will do is type January in cell A1 and select fill handle at the lower-right corner of the cell and drag up to L1 to fill the rest of the series
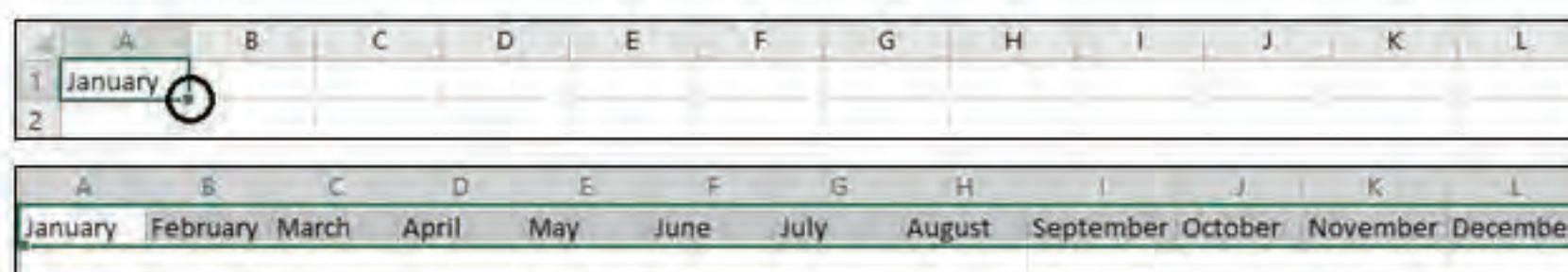
8: Creating Formulas

Excel allows the user to use built in formulas and functions to perform fast calculations. The formulas in excel are to be used with a specific syntax. Every formula in excel starts with equal '=' sign following by formula name, parenthesis open '(', range (separated by colon) and parenthesis close ')'. When a formula is entered into a cell, it also appears in the formula bar at the top.

	A	B
1	Expense A	150
2	Expense B	200
3	Expense C	125
4	Expense D	500
5		
6	Total Expense	=sum(B1:B4

To explain this, suppose we want to show the sum of the data from cells B1 to B4 in cell B6. Here what we would have to do is to **type '=sum(B1:B4)'** and press enter. The total sum of the given range will be shown in cell B6. Similarly following the syntax numerous other formulas can be used as required.
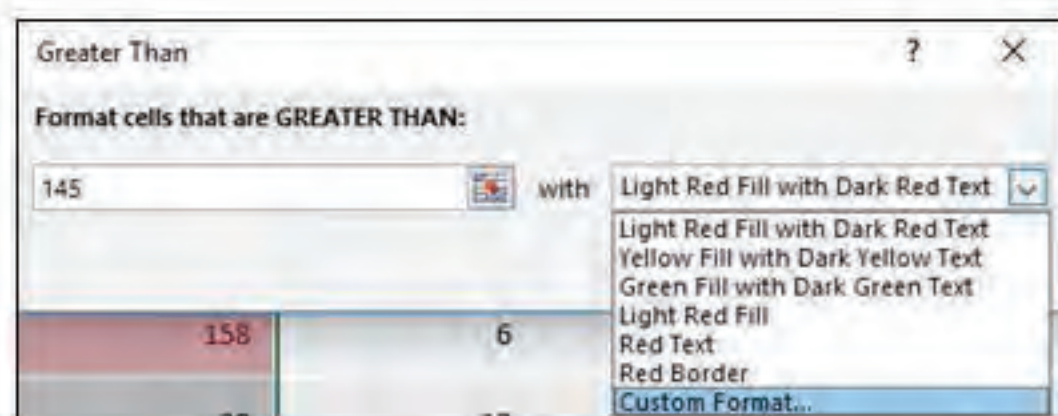
9: Conditional Formatting

Conditional formatting is another outstanding feature quickly highlights important information in a spreadsheet. For instance, you have a worksheet containing thousands of rows and columns of data. In this situation, it would be very tough to observe patterns just from examining the raw information. Similar to charts, this feature provides another way to visualize data and make worksheets easier to understand. Conditional formatting allows you to automatically apply formatting to one or more cells based on the cell value. This can be done by creating a conditional formatting rule.

A conditional formatting rule could be set to change the color of a cell when its containing data is changed by a certain value. For instance, changing the color of cell to red if value is less than 60. When this rule is successfully applied user would be able to see all the cells containing values less than 60.
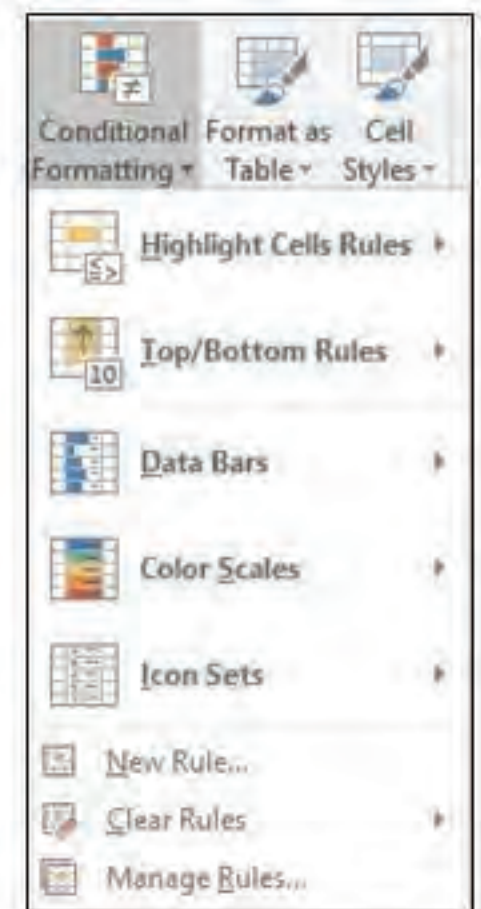
Conditional formatting can be found in **Home** tab. A drop down menu will appear and here you can set new rules, manage previously applied rules or delete rules.

The below example shows a predesigned rule to highlight cells if a value is greater than 45. Formatting schemes could be selected from default styles however custom styles could also be created.

Conditional formatting also allows you to set up a rule of your own as shown in the below image:
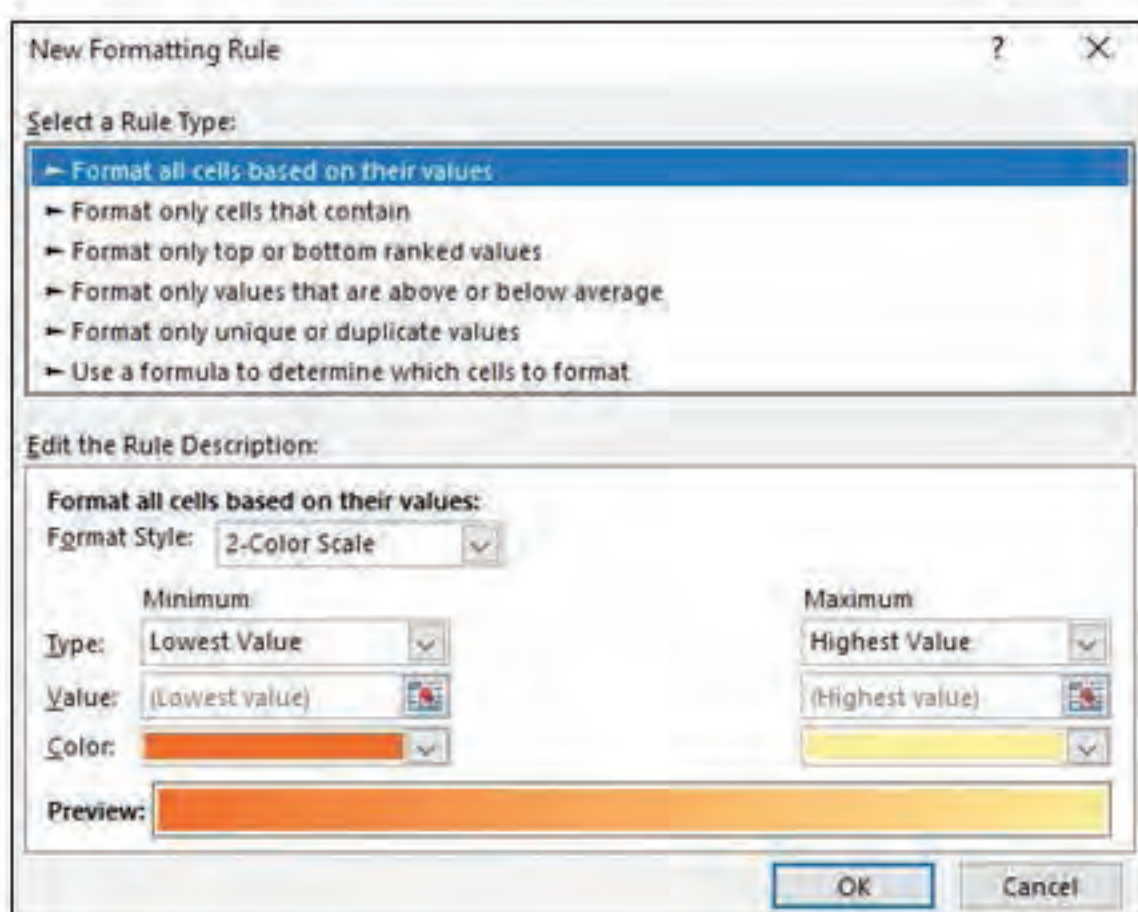
10: Data Sorting

Sorting is one of the most common tools for data management. In Excel, you can sort your table by one or more columns, by ascending or descending order, or do a custom sort. Before sorting make sure that:

- There are no empty rows or columns in the table
- Make sure there is at least one empty column between the table you want to sort, and other information on the worksheet not in that table

To Check for empty rows or columns across the table select a cell within the data and press **CTRL + A**. Now press **CTRL + .** a few times to move the active cell around the corners, and check for empty cells.

To sort the table, select a cell within the data and then select **Home > Sort & Filter**. You can choose your sorting method from given options e.g. **Sort A to Z** sorts the selected column in an ascending order, **Sort Z to A** sorts the selected column in a descending order and **Custom Sort** sorts data in multiple columns by applying different sort criteria.

11: Using Charts

Excel allows to create charts that help you visualize your data in a way that creates maximum impact on your audience. To create charts, select the cells with the data that you require in your chart and then go to **Insert > Recommended Charts**. In the charts section you can select from different options available. You can also use **Alt + F1** to create a chart but it might not be the best chart for the data. If you don't see a chart you like, select the All Charts tab to choose a different one.

12: Making your Workbooks Password Protected

Excel gives an option of protecting your workbook with a password to prevent others from accessing your file. To protect your sheet, go to **File>Save As** and select **Tools>General Options**. Enter a password in the **Password to open box** and then select **OK**. Select **Save**, and then select **Yes** if you wish to replace the existing file.
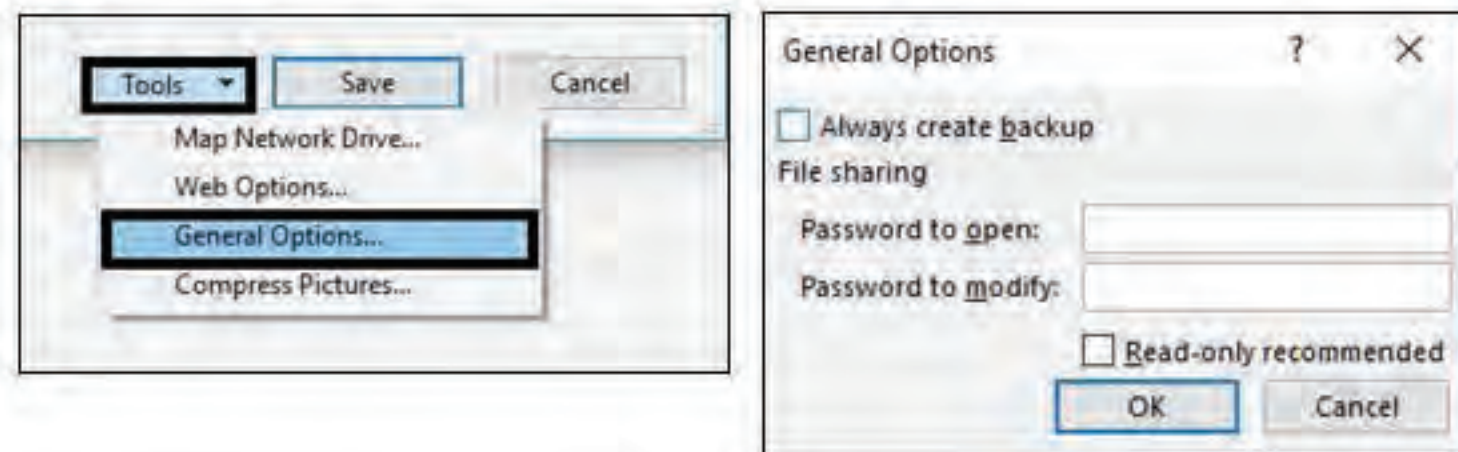
Useful Short Keys

KEYSTROKE	FUNCTION
F2	Edit the selected cell
F4	Repeat last action
F5	Go to a specific cell.
F7	Spell check for selected cell/text
F11	Create a chart for selected data
Shift+F3	Open formula window
Shift+F5	Open search box
Ctrl+1	Open format cells window
Ctrl+A	Select all contents of the worksheet
Ctrl+B	Bold highlighted selection
Ctrl+I	Italic highlighted selection
Ctrl+S	Save the open worksheet
Ctrl+U	Underline highlighted selection.
Ctrl+D	Fills the cell beneath with the contents of the selected cell
Ctrl+R	Fills the cell to the right with the contents of the selected cell
Ctrl+P	Print document
Ctrl+Z	Undo last action
Ctrl+F9	Minimize current window

Useful Short Keys

Ctrl+F10	Maximize currently selected window
Ctrl+F6	Switch between open workbooks or windows
Ctrl+Page up	Move between work sheets in the same document
Ctrl+Page down	Move between work sheets in the same document
Ctrl+Tab	Move between Two or more open Excel files
Ctrl+Arrow key	Move to next section of text
Ctrl+Space	Select entire column
Shift+Space	Select entire row
Ctrl+-	Delete selected column or row
Ctrl+Shift+=	Insert a new column or row
Ctrl+Home	Move to cell A1.

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