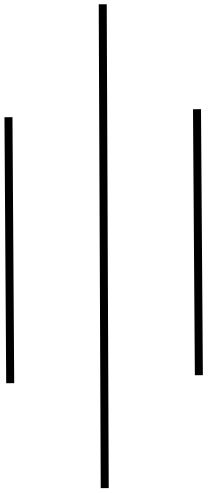
# Lab Report
# Of
# Introduction to Information Technology
## TITLE: SPREADSHEET


## Submitted To
VEDAS COLLEGE
**Jawalakhel, Lalitpur**

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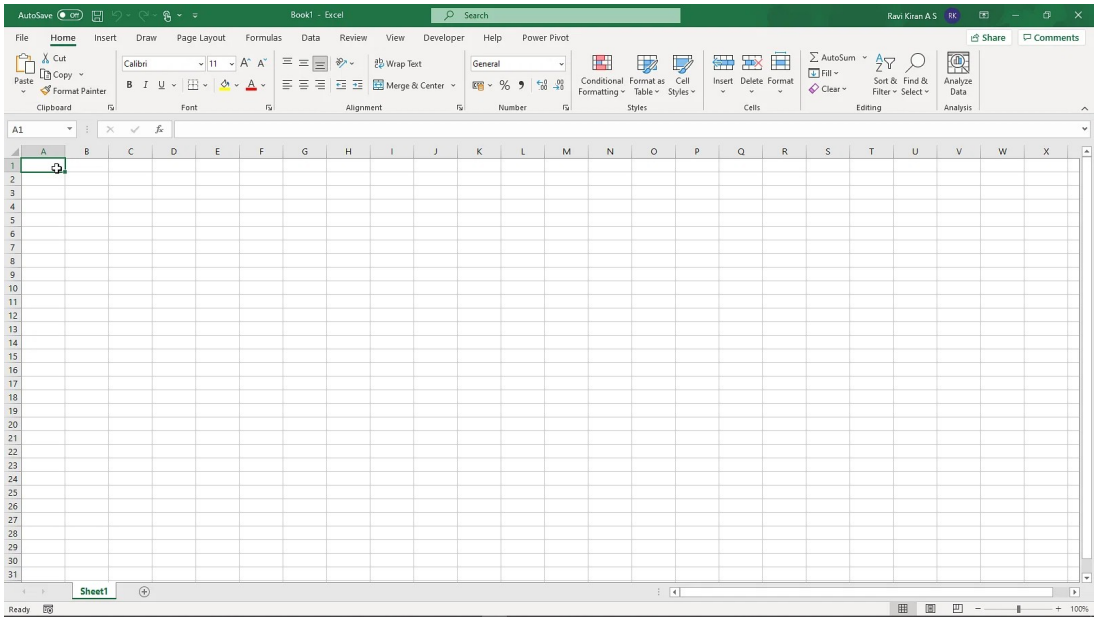
A spreadsheet is a computer application for computation, organization, analysis and storage of data in tabular form. Spreadsheets were developed as computerized analogs of paper accounting worksheets. The program operates on data entered in cells of a table. Each cell may contain either numeric or text data, or the results of formulas that automatically calculate and display a value based on the contents of other cells. The term spreadsheet may also refer to one such electronic document.


The first spreadsheet program was known as VisiCalc written for the Apple II computer in 1979. For many users, this application most vividly showed the utility of personal computers for small businesses—in some cases turning a 20-hour-per-week bookkeeping chore into a few minutes of data entry. After then one of the most prominently used spreadsheet software has been Excel which has its released version for all form of operating softwares.

Microsoft Excel is one of the most used software programs in the world. It offers a wide range of tools, functions, and facilities to popularize the software in global companies from various sectors. Excel is also known as spreadsheet. It allows us to record data in the form of tables. Also, it is a beneficial program when it comes to data analyzing, adding graphs, inserting pivot tables, performing calculations, macro programming, and more. For example, we can create an Excel spreadsheet to calculate weekly expenses, generate salary slips, accounting, and interactively sort/ filter data by different criteria. The oldest version of Excel/ Spreadsheet came for Mac in 1985 and later was also released for windows in 1987 AD.



A standard image of a spreadsheet.

## FEATURES OF SPREADSHEET

Some of the most important benefits are discussed below:

**Easy to Store Data:**The amount of information we can save in Excel mainly depends on the system resources and the capabilities. Thus, there is no particular limit to the information that can be stored in a spreadsheet. Since there is no actual limit for saving data into Excel, we can store as much data as we need.

**Easy to Recover Data:**The process of obtaining information from files saved by physical means (i.e., data on paper) is challenging, and it may take a longer time. Besides, this is not an issue with Excel. The filtering of data is so easy that we can obtain any specific information quickly from the data saved in Excel. Thus, finding or recovering the information is very easy in Excel.

**Application of Mathematical Formulas:**MS Excel also allows us to use a wide range of built-in or custom formulas on the data. This makes the complex calculation so easy and less time taking. That way, the data calculations have become more manageable by the application of mathematical formulas.

**More Secure:**The data saved in Excel can be made secured using the passwords. This ultimately helps us to keep our data secured. Also, there is the slightest possibility of losing such data. However, if the data is written on paper, it is not secure as the data saved in excel.

**More Popular:**MS Excel is currently the most popular and widely used spreadsheet software. It is used by many companies, small businesses, and organizations. Learning this software can be an excellent employment opportunity.

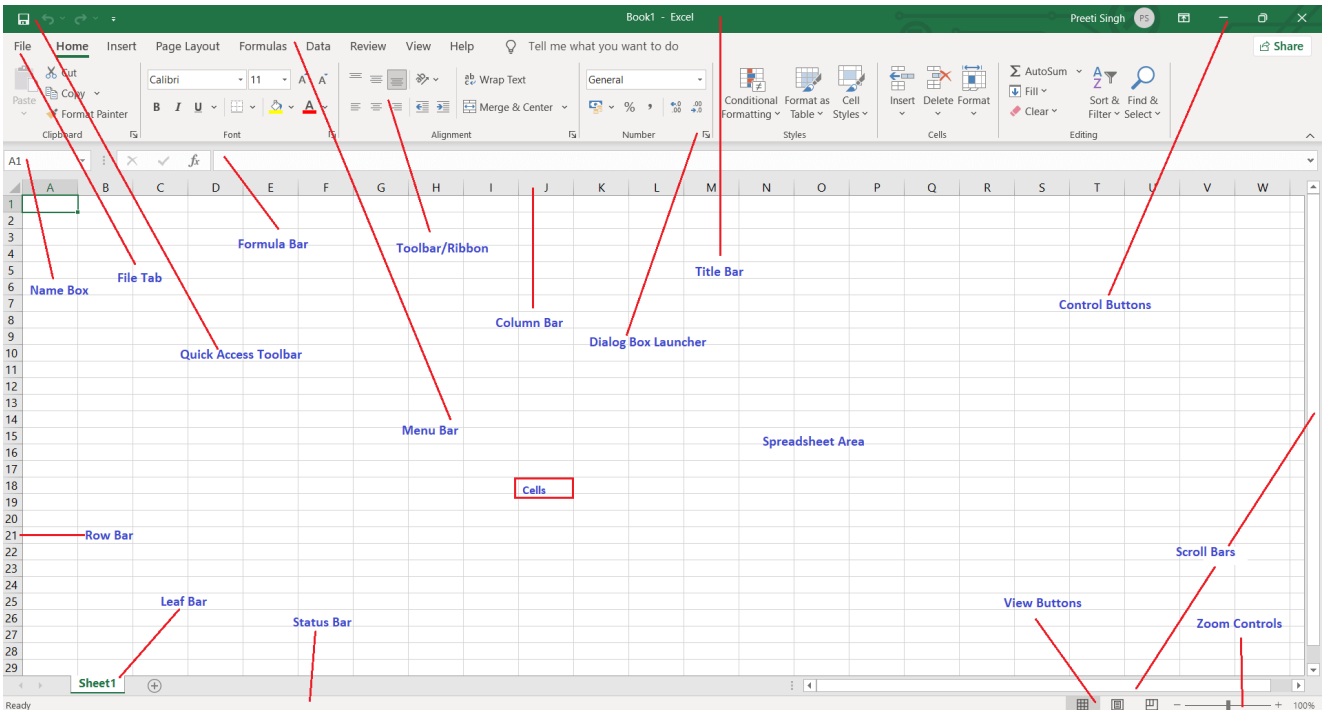
**Data at One Place:**Previously, the data was stored in multiple registers, required multiple shelves. Now, we can save the different types of data in multiple worksheets saved within a single MS Excel file.

**Easy Data Sharing:**The sharing of data saved in excel is much easier than the data written in registers or papers. We can share excel files over email or any other digital means in a minimal period.

**Neat and Clean UI:**Since excel is one of the oldest excel software from one of the leading companies, it has gone through several updates. The data saved in excel is easily readable and understandable. Additionally, the user interface is clean and straightforward, making this software easy to learn.

## ELEMENTS OF EXCEL

Some parts of the Excel window(such as Ribbon and scroll bars) are standard in most other Microsoft programs. However, other features are more specific to spreadsheets, like the formula bar, worksheet tabs, and name box.




The following are the basic parts of the Microsoft Excel Window:

1.Quick Access Toolbar

2.File Tab

3.Title Bar

4.Control Buttons

5.Menu Bar

6.Ribbon/Toolbar

7.Dialog Box Launcher

8.Name Box

9.Formula Bar

10.Scroll Bars

11.Spreadsheet Area

12.Leaf Bar

13.Column Bar

14.Row Bar Cells

15.Cells

16.Status Bar

17.View Buttons

18.Zoom control

## 1. Quick Access Toolbar

This toolbar is located in the upper left corner of the screen. Its objective is to show the most frequently used Excel commands. We can customize this toolbar based on our preferred commands.

## 2. File Tab

Excel 2007's Office button has been replaced by the File tab. We can click it to check the Backstage view, where we can open or save files, create new sheets, print sheets, and perform other file-related operations.

## 3. Title Bar

The title bar of the spreadsheet is at the top of the window. It displays the active document's name.

## 4. Control Buttons

Control buttons are the symbols that are present in the upper-right side of the window, enabling us to change the labels, minimize, maximize, share, and close the sheet.

## 5. Menu Bar

Under the diskette or save icon or the excel icon (this will depend on the version of the program), labels or bars which enable changing the sheet which is shown. These are the menu bar and contain a File, Insert, Page Layout, Formulas,Data, Review, View, Help,and a Search Bar with a light bulb icon. These menus are divided into subcategories which simplify the distribution of information and analysis of calculations.

## 6. Ribbon/Toolbar

Each menu bar contains several different elements. On the selection of the menu, a sequence of command options/icons will show on a ribbon. For example, if we select the "Home" tab, we will see cut, copy, paste, bold, italic, underline, and more commands. In the same way; we can click on the "Insert" tab, we will see tables, illustrations, additional, recommended graphics, graphics maps,among others. On the other hand, if we select the "Formulas" option.Insert functions, auto sum recently used, finances, logic, text, time, date,etc.

Ribbon/Toolbar is a set of commands organized into three sections.

- Tabs

  They are the Ribbon's top part, and they include groups of related commands. Ribbon tabs include Home, Insert, Page Layout, Formula, Data.

- Groups

  They organize related commands; the name of each group is displayed below the Ribbon. For example, a set of commands related to fonts or a group of commands related to alignment, etc.

- Commands

  They appear within each group, as previously stated.

## 7. Dialog Box Launcher

Dialog box launcher is a very little down arrow that is present in the lower-right corner of a command group on the Ribbon. By clicking on this arrow, we can explore more options related to the concerned group.

## 8. Name box

Show the location of the active cell, row, or column. We have the option of selecting multiple options.

## 9. Formula Bar

Formula bar permits us to observe, insert or edit the information/formula entered in the active cell.

## 10. Scroll bar

Scroll bar is the tools that enable us to move the document's vertical and horizontal views. We can activate this by clicking on the platform's internal bar or the arrows we have on the sides. Additionally, we can use the mouse wheel in order to automatically scroll up or down: or use the directional keys.

## 11. Spreadsheet Area

It is the place where we enter our data. It includes all the rows, cells, columns, and built-in data in the spreadsheet. We can use shortcuts to perform toolbar activities or formulas of arithmetic operations (add, subtract, multiply, etc.). The insertion point is the blinking vertical bar known as the "cursor." It specifies the insertion location of the typing.

## 12. Leaf Bar

Leaf bar is present at the bottom of the spreadsheet, which says sheet1 is shown. This sheet bar describes the spreadsheet which is currently being worked on. Using this, we can alternate a number of sheets or add a new one as per our convenience.

## 13. Columns Bar

Columns are a vertically ordered series of boxes across the full sheet. This column bar is located below the formula bar. The letters of the alphabet are used to label the columns. Begin with the letter A to Z,and then after Z, it will continue as AA, AB, and so on. The number of columns that can be used is limited to 16,384.

## 14. Rows Bar

The row bar is the left part of the sheet where a sequence of numbers is expressed. Begin with number one (1), and further rows will be added as we move the pointer down. There are a total of 1,048,576 rows available.

## 15. Cells

Cells are those parallelepipeds that divide the spreadsheet into many pieces, separating rows and columns. A spreadsheet's first cell is represented by the first letter of the alphabet and the number one(A1).

# Excel formula

Excel formula refers to the formulas used for various calculations.

## What is formula?

A formula is a set of mathematical elements that specify a rule. It connects one or more elements with an equal sign. The formula can be used to find the element's value if one or more elements are known.

For example,

**Sum = a + b**

If we know the value of a and sum, we can find the value of b (b = Sum - a). Similarly, if we know the value of a and b, we can find the sum (sum = a + b).

Or

**Mean = Sum of all the observations/ Number of observations**

The above formulas consist of three elements. If we know the value of any two elements, we can easily find the value of third element.

## What is a formula in excel?

The formula in excel is calculated based on the cells enclosed within the brackets of the function. It means that these formulas have two parameters,function name and the cells declared in a function. For example, B + C + D find the sum of the range of values from B to D. The format of the functions defined in excel as a formula is given by:

**Function (cell range1: cell range2)**

Where,

**Function:**It defines the predefined formula in excel, such as SUM and AVERAGE. The names given to the function are familiar.

For example,

SUM (B1: B4)

Here, B1 and B4 are the cell range. The SUM() function will sum all the values from B1 to B4. Similarly, other formulas in excel are defined based on the same concept.

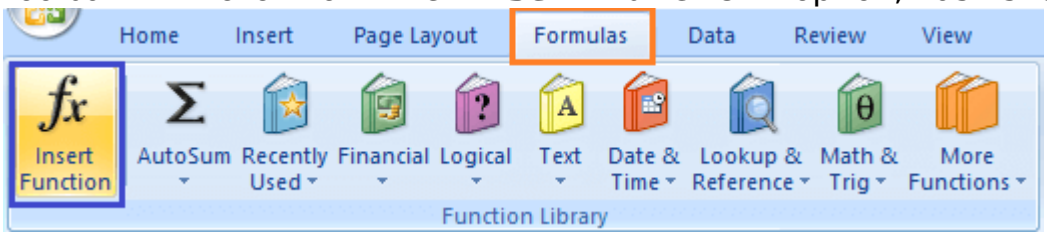
## Automatic search for formulas

Excel also provides us an option to find the available functions formulas in the form of a list. So, if anyone is not aware of the available formulas, it is best to find the available formulas in excel quickly. It is given by:

'Insert function'

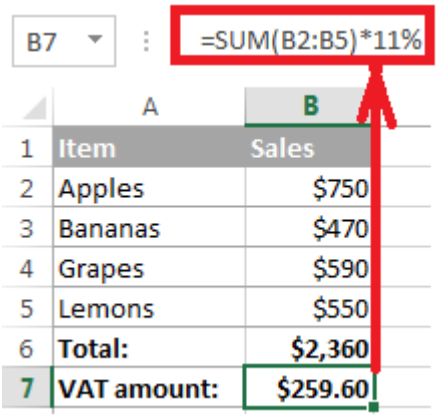
We can find this function under the formula option present on the tool bar. To operate, consider the below steps.

1.On the excel home page, click on the **Formulas** option present above the toolbar -> click on the **Insert function** option, as shown below:




2.A dialogue box will appear.

3.We can select the functions from the list, as shown above. We can also search for a function by specifying the statement for the correspondingfunction.

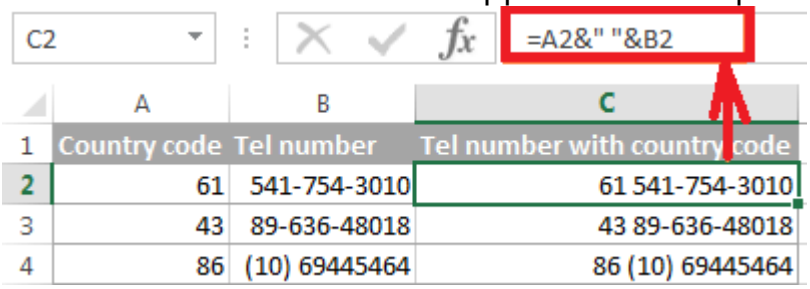



We can use the appropriate function from the table to find the minimum value.
Similarly, other functions can be easily found by specifying the related statement.

1.Click on any cell outside the given table.

2.Drag the mouse on the formula bar and type**'=SUM(C5:C11).'**Here, C5 and C11 are the name of the first and last element of the price column. Excel will add the numbers from C5 to C11.

3.Press **Enter.**The sum will appear on the specified cell, as shown below:

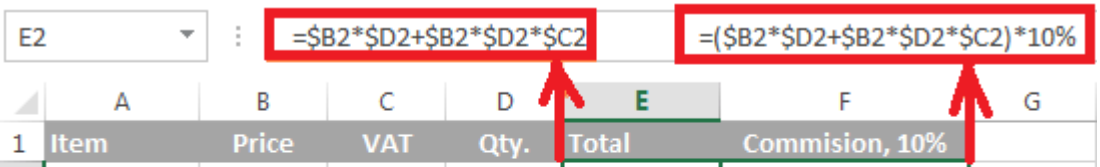



| | A | B | C |
|---|---|---|---|
| 1 | Country code | Tel number | Tel number with country code |
| 2 | 61 | 541-754-3010 | 61 541-754-3010 |
| 3 | 43 | 89-636-48018 | 43 89-636-48018 |
| 4 | 86 | (10) 69445464 | 86 (10) 69445464 |

OR

1.On the excel home page, select the numbers to be added with the help of a cursor.

2.Click on the AutoSum option under the formula tab, as shown below:




| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 1 | Item | Price | VAT | Qty. | Total | Commision, 10% | |
| 2 | Apples | $4 | 9% | 10 | $43.60 | $4.36 | |
| 3 | Oranges | $5 | 10% | 15 | $82.50 | $8.25 | |
| 4 | Grapes | $6 | 9% | 11 | $71.94 | $7.19 | |
| 5 | Lemons | $7 | 10% | 13 | $100.10 | $10.01 | |

3.The sum will appear beneath the cell of the last element.

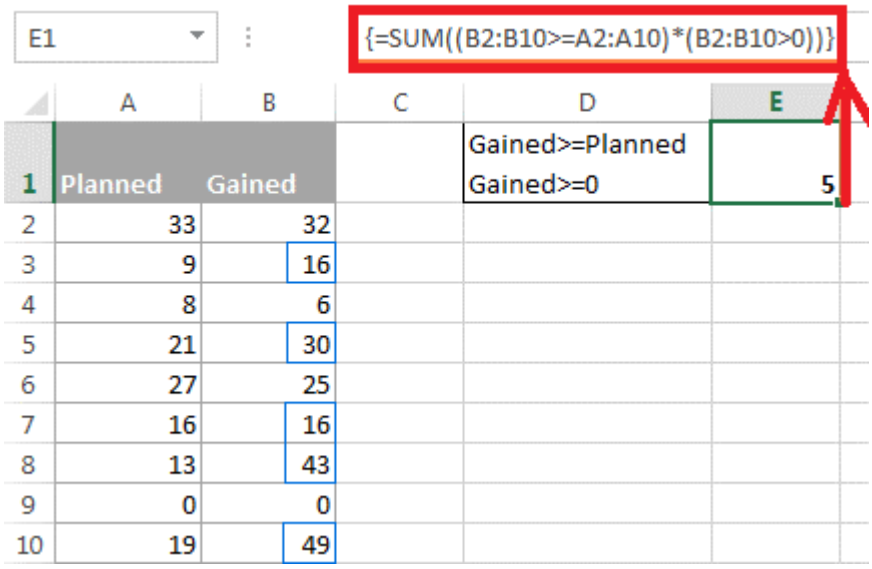
**Example 2: To find the sum of specific elements of the column.**

Consider the below steps:

1.Click on any cell outside the given table.

2.Drag the mouse on the formula bar and type **'=SUM(C5:C7,C9,C11).'**Here, the sum will be calculated of cells C5, C6,

C7, C9, and C11. The selected cells for addition are shown below:




3.Press Enter. The sum will appear on the specified cell, as shown below:

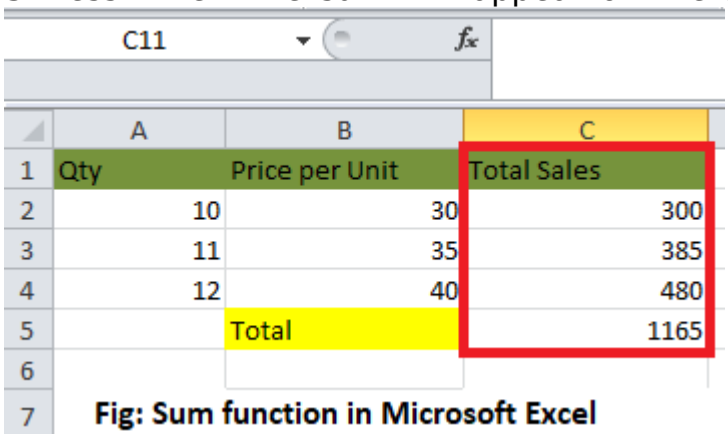



**Fig: Sum function in Microsoft Excel**

## 2. Subtraction

It is similar to the addition process. We only need to insert a negative sign behind the number we want to subtract.

The formula is given by:

SUM(cell1, -cell2)

For example,

SUM(A1, -A3)

The above formula will be used to subtract value of cell A3 from A1. It will be considered as A1 - A3.

Let's consider an example.

**Example: To find the difference between the change in prices of commodities.**

Consider the below steps:

1.Click on the first cell of the difference column, as shown below:

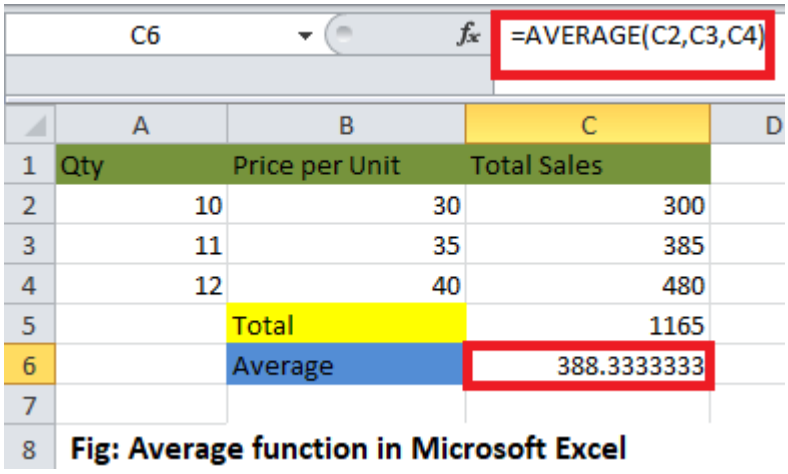



**Fig: Average function in Microsoft Excel**

2.Drag the mouse on the formula bar and type '=SUM(D3, -C3).' The value of cell C3 will be subtracted from the value given in cell D3.

3.Press **Enter.**The difference between two specified cells will appear. It is shown below:

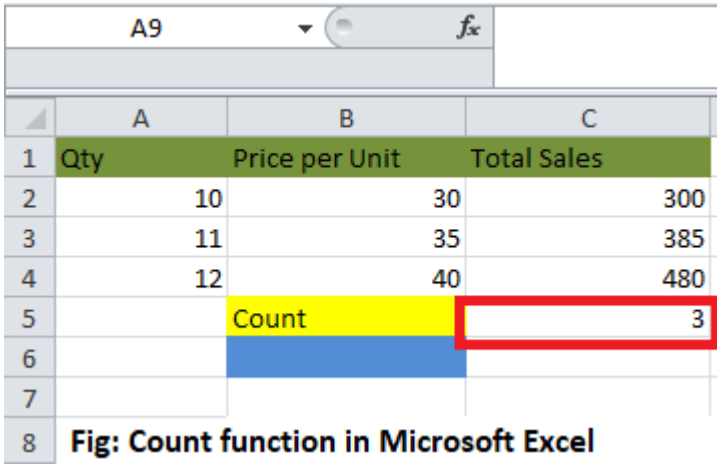



**Fig: Count function in Microsoft Excel**

Similarly, we can find perform the subtraction of multiple cells.

## 3. Multiplication and Division

A particular name does not specify these formulas. We can directly use the multiplication and division symbol between the two numbers to compute multiplication and division.

It is given by:

A1 * A2

A1 / A2

Let, A1 = 4, and A2 = 2.

Multiplication = A1*A2 = 4*2 = 8

Division = A1/A2 = 4/2 = 2

Let's understand it with an example.

**Example: to find the multiplication of two values in columns A and B.**

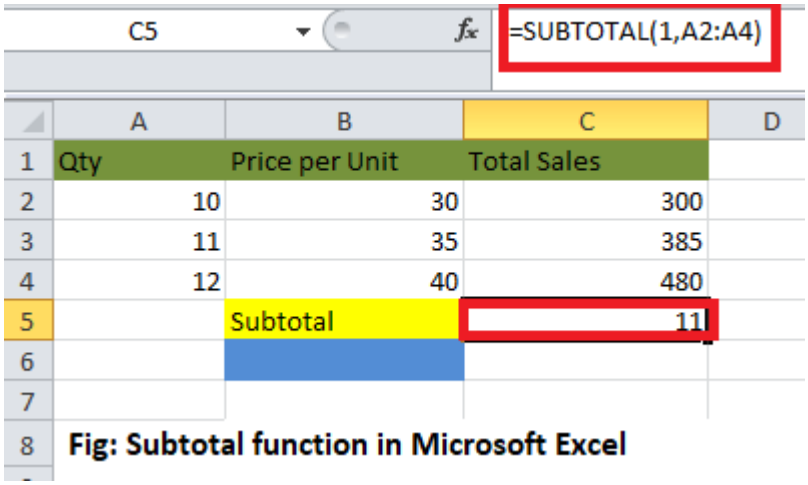
Consider the below steps:

1.Click on the first cell of the multiplication column.

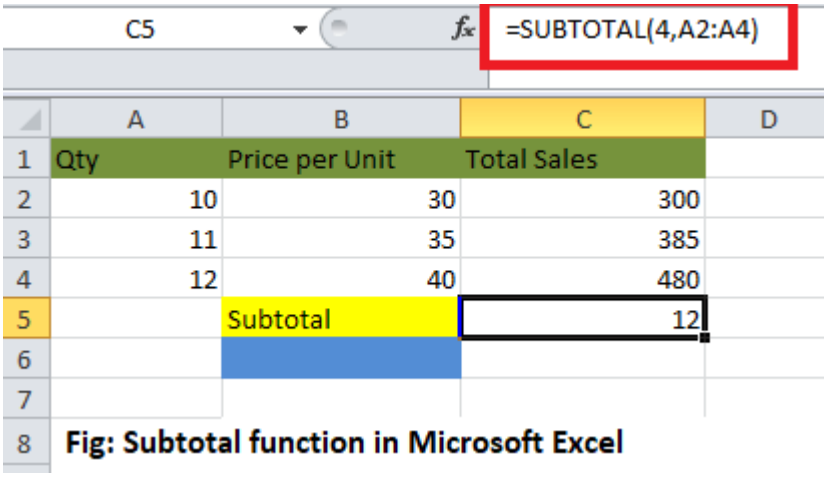
2.Drag the mouse on the formula bar and type '=C3*D3.'

3.Click on the bottom-right corner of that block and drag to the last cell of the multiplication column.

4.Press **Enter.**The result will appear on all the specified cells of the column. It is shown below:




Now, we will consider the same steps for the division. We only need to insert the formula = 'C3/D3.' It is shown below:




## 4. LEFT, MID, and RIGHT

These three formulas are used to break down the cell into different segments. Let's discuss this in detail.

**LEFT**

The LEFT formula is used to extract the starting elements from the specified cell. It is given by:

LEFT(text, Number_of_characters)

Where,

**Text** refers to the specified cell from which we want to extract the elements.

**Number_of_characters** refers to the characters we want to extract from the starting from the left most character.

**MID**

The MID formula is used to extract the number of elements in the middle position from the specified cell. It is given by:

MID(text, start position, Number_of_characters)

Where,

**Text** refers to the specified cell from which we want to extract the elements.

**Start position** refers to the position from where we want to start extracting.

**Number_of_characters** refers to the characters we want to extract.

**RIGHT**

The RIGHT formula is used to extract the number of elements from the last or right-end. It is given by:

RIGHT(text, Number_of_characters)

Where,

**Text** refers to the specified cell from which we want to extract the elements.

**Number_of_characters** refers to the characters we want to extract starting from the right-end character.

Let's consider an example for better understanding.

**Example:**

Consider the below table in excel.

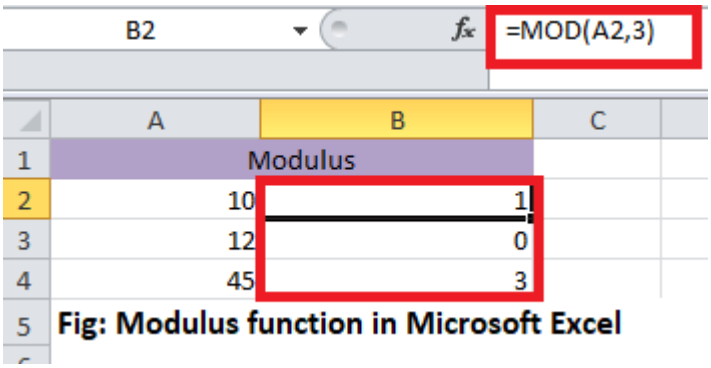



**Fig: Modulus function in Microsoft Excel**

The steps to extract the characters are as follows:

1.Click on the first cell of the **First** column, as shown below:

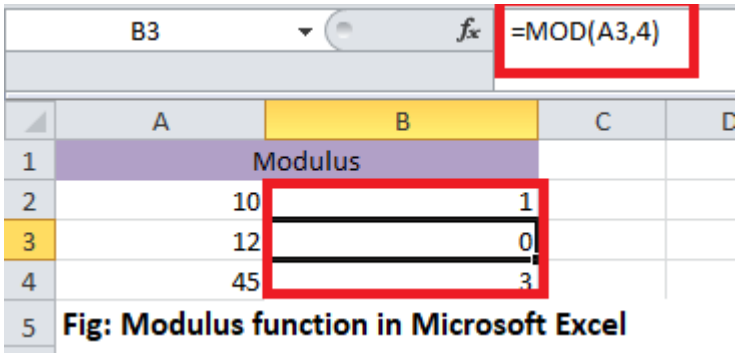



**Fig: Modulus function in Microsoft Excel**

2.Drag the mouse on the formula bar and type =' =LEFT(B3,4).'

3.Press **Enter.**The extracted characters from the specified cell will appear.

4.Drag the bottom-right corner of the first cell to the last element. It will now appear as:

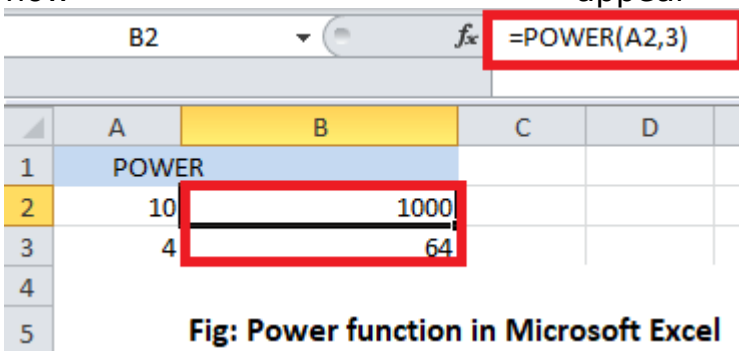



**Fig: Power function in Microsoft Excel**

5.Now, click on the first cell of the **Middle** column and type formula =' =MID(B3,5,3)' and press **Enter.**

6.Similarly, click on the first cell of the **Last** column and type formula = '=RIGHT(B3,1)'and press **Enter.**

7.Drag the bottom-right corner of the first cell to the last element of both Middle and Last column. The extracted characters will appear as:

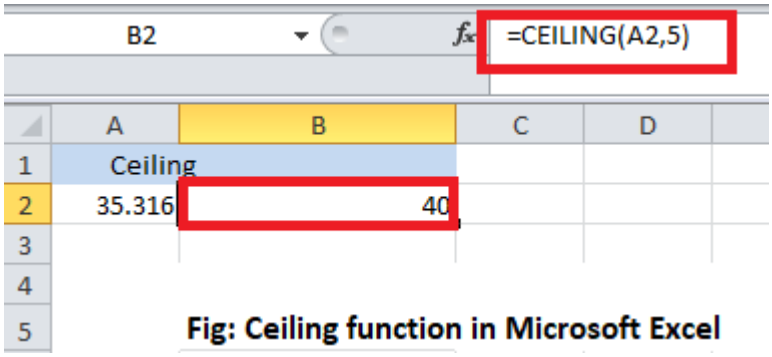



**Fig: Ceiling function in Microsoft Excel**

## 5. AVERAGE

The average function is same as the mean function of mathematics. It is used to find the average of the selected numbers or cells. We can calculate the average of multiple numbers easily.

It is given by:

AVERAGE(number1, number2,....)

In case of range of cells, we can specify it as:

AVERAGE(cell1: cell2)

AVERAGE() is similar to the SUM()/Number of elements in a given column

For example,

AVERAGE(5, 10, 15, 20) = SUM(5, 10, 15, 20)/ 4

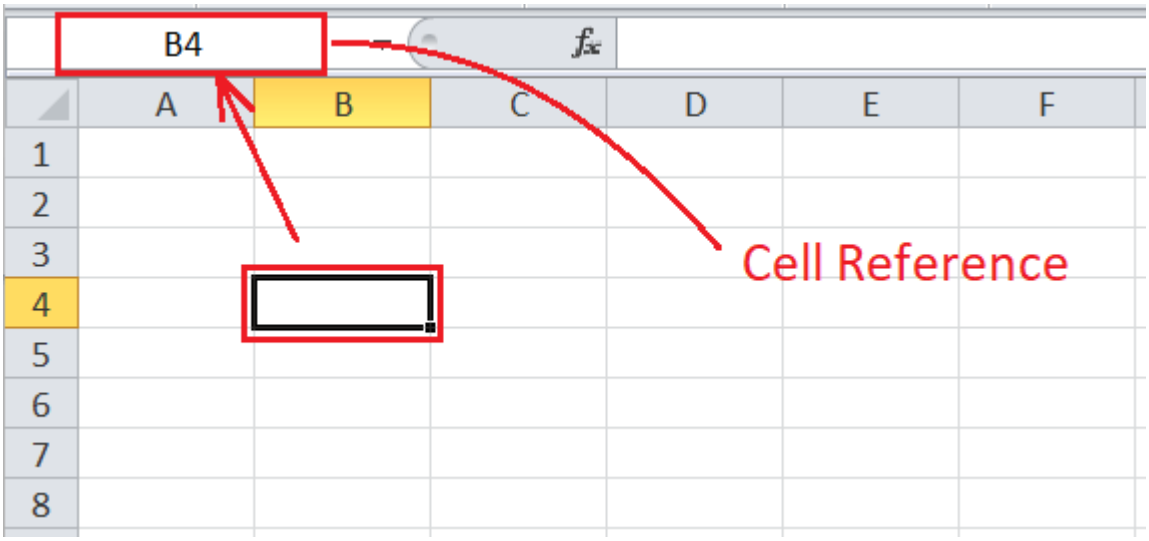
Formulas in Excel

Let's discuss the most common formulas in excel. We will also discuss examples based on each formula.

# What is a cell reference?

A cell reference refers to the name or address of a specific cell or range of cells within the spreadsheet. A cell reference is commonly used as a variable in Excel formulas. While representing the cell reference in Excel, we need to specify the column name followed by the row number of the respective cell.

The following image displays the cell reference of the selected cell in an Excel sheet:




Cell reference mainly helps the Excel program locate the cell within the sheet and read or use its data in the specified formula to generate the result. We can use cell references or a range of multiple cells in other cells when creating a formula, even if the corresponding cell is on the same sheet, different sheet, or different workbook.

In Excel, cell referencing uses values or properties of another cell or range in a different cell/range. When referencing cells from other worksheets, this is usually called external referencing. When cells are referenced from other spreadsheet programs, it is referred to as remote referencing.

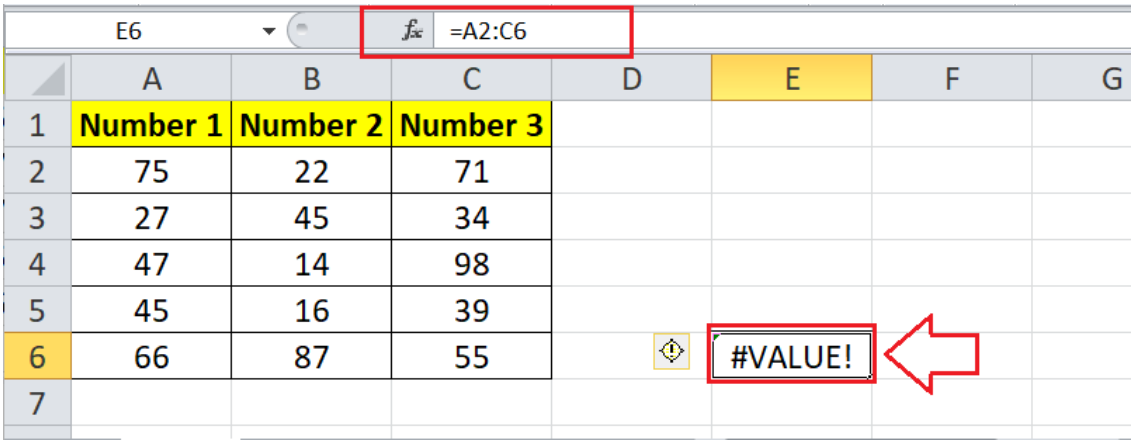
Let us now understand simple examples of using cell references in Excel:

## A Simple Reference

The basic use of a cell reference can be displayed by simply mentioning the referred cell with the equal sign. For example, if we enter "=A1" without quotes in another cell within the sheet, the value of A1 will be displayed in the corresponding cell. This means that the value of the selected cell, where the cell reference is entered, is exactly equal to that of cell A1.

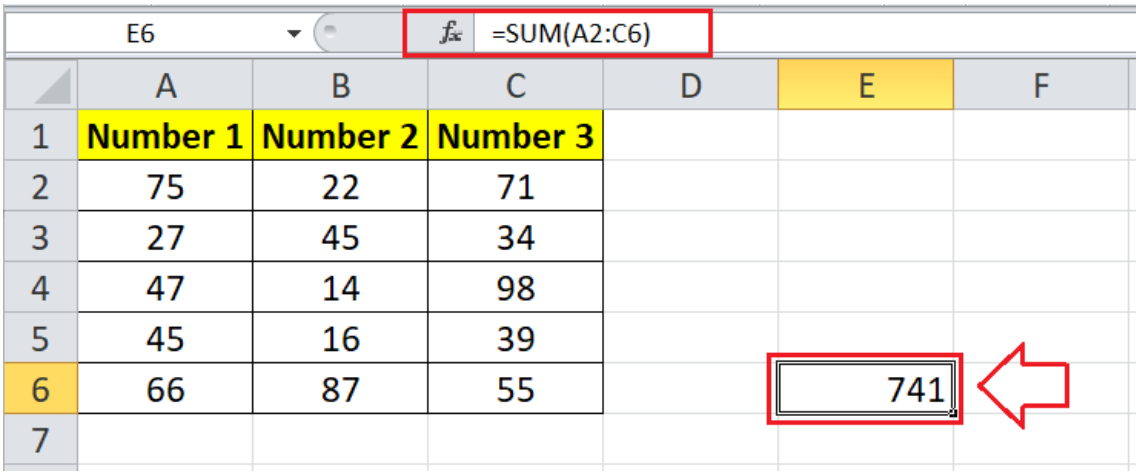
## Reference to a Cell Range

We can also use the reference of multiple cells at once by referring to their cell range. For example, if we use the notation "=A2:C6" without the quotes, we refer to the entire cell range from A2 to C6. However, a range alone is not valuable data in Excel. When we use this cell reference in an Excel cell, Excel gives the #VALUE! error, which means that the formula is missing. Therefore, a reference to a cell range (A2:C6) has meaning only when used within a function or formula (as discussed next).

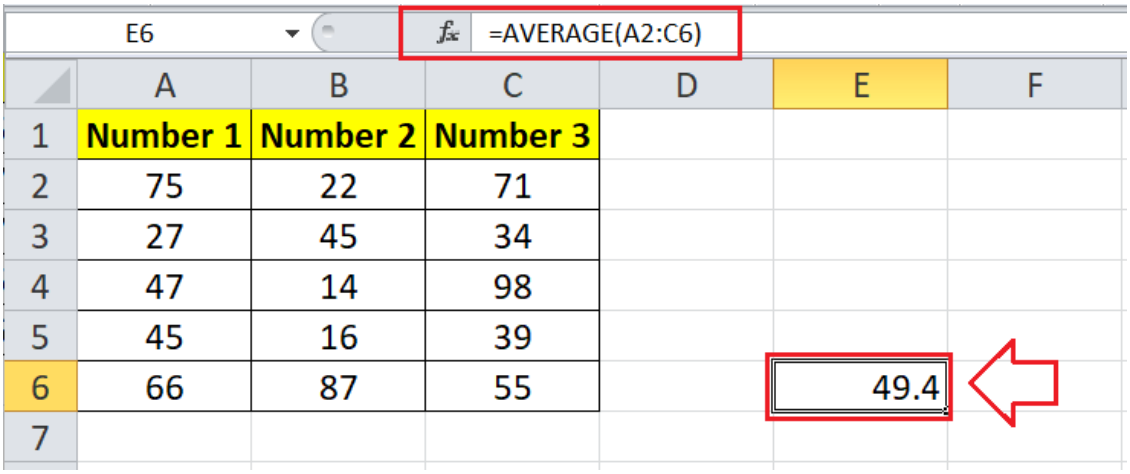



## Cell Reference in a Function

Excel can perform a tremendous job when we use a cell range in a function. For example, if we supply the range A2:C6 in SUM function, Excel adds up all values of the cell range from A2 to C6 gives the calculated value as a result.




Similarly, if we supply the same range (A2:C6) to an AVERAGE function, Excel returns the average of the corresponding cell range, as shown below:




In this way, we can leverage cell references in Excel and perform various operations or calculations on the recorded data within the cells. There are different ways to use cell references in Excel, depending on the use cases.

# How to sort in Excel?

Sorting of data is an essential part of data analysis. In Excel, you can rearrange the data by sorting to find the record quickly. Data can be sorted in various ways, such as alphabetically (A to Z, Z to A), highest to lowest, lowest to highest, date & time-wise, and using many other ways.

# What is sort() function?

SORT() is a function that is used in Excel to sort the columns and arrange the table data. It allows the users to sort the data alphabetical, numeric, or date-wise. You can also make the group and then apply this sort() function to these groups individually.

By default, it sorts the data of an Excel table in ascending order using the first column.

## Syntax

Here is the syntax for the following sort() function having four parameters, in which one is permanent and the other three are optional:

1. =SORT(array,[sortIndex],[sortOrder],[byColumn])

## Parameters

array:It is a range or array in an Excel table selected for sorting.

[sortIndex]:It is an optional parameter. In this parameter, specify the column number for sorting the table data. Its default value is 1, which means it choose first column of the Excel table.

[sortOrder]:It is also an optional parameter. Using this parameter, you can specify the order of sorting. Its default value is also 1 means ascending order sorting.

Pass 1 for ascending order sorting and -1 for descending order sorting.

[byColumn]:It indicates either sorting by column or by row. Its default value is FALSE.

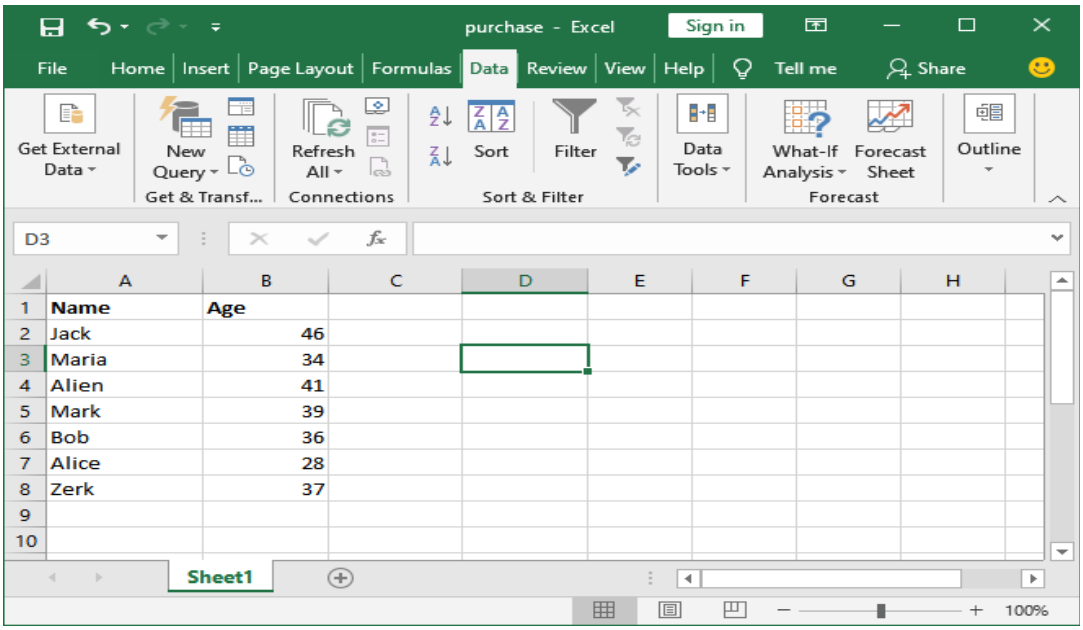
TRUE - Sort by column

FALSE - Sort by row

## Implementation of sort() formula

Now, we will show you how you can implement this formula in your Excel sheet. But this can only be implemented by Excel 365 subscription users. In Excel 2016, 2019, this way of sorting does not work. We have another method for this discussed in this chapter below.

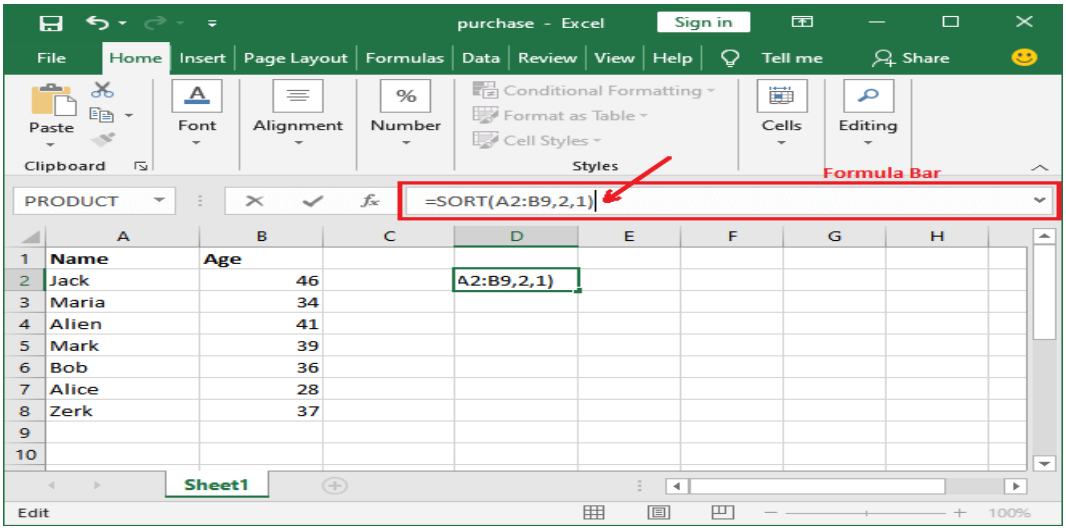
Step 1:We have this set of data containing Name and Age data in unsorted order. We will use the sort() function and rearrange it.




## Ascending Order Sorting

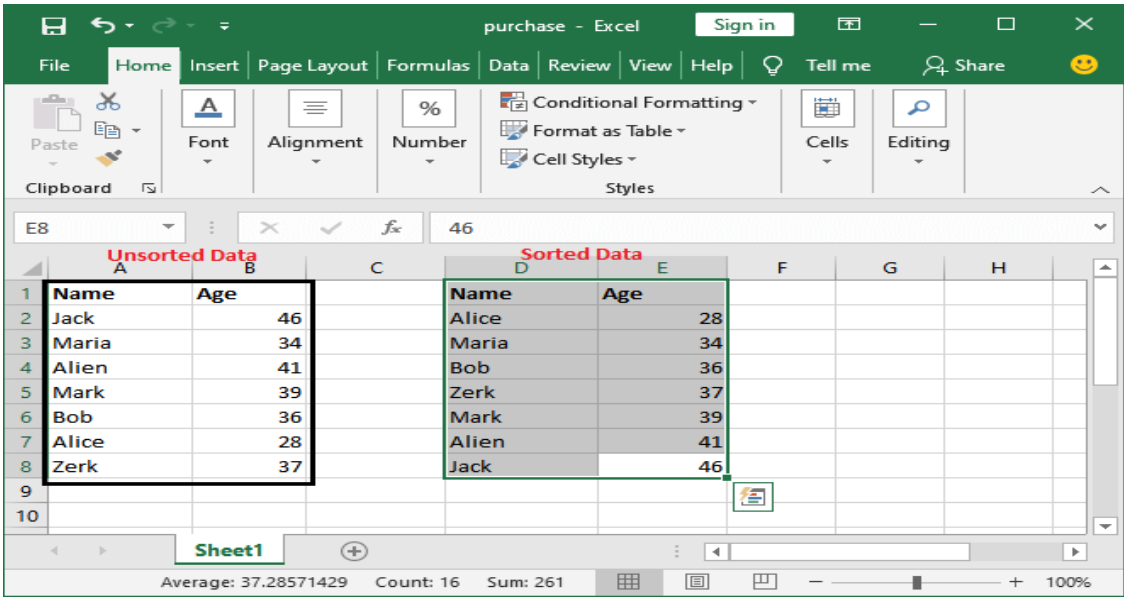
Step 2:On the Excel home page, go to the formula bar and type this sort() formula to get the data sorted with respect to the Age column.

1. =SORT(A2:B8,2,1)
    - Here,A2:B8 are the source/range of array for sorting
    - 2 is the specified column2 (Age) for sorting
    - 1 is ascending order of sorting




| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | Name | Age | | | | | | |
| 2 | Jack | 46 | | | | | | |
| 3 | Maria | 34 | | | | | | |
| 4 | Alien | 41 | | | | | | |
| 5 | Mark | 39 | | | | | | |
| 6 | Bob | 36 | | | | | | |
| 7 | Alice | 28 | | | | | | |
| 8 | Zerk | 37 | | | | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |

Step3:Now, press the Enter key and see the sorted result has been automatically pasted into new cells (D and E).

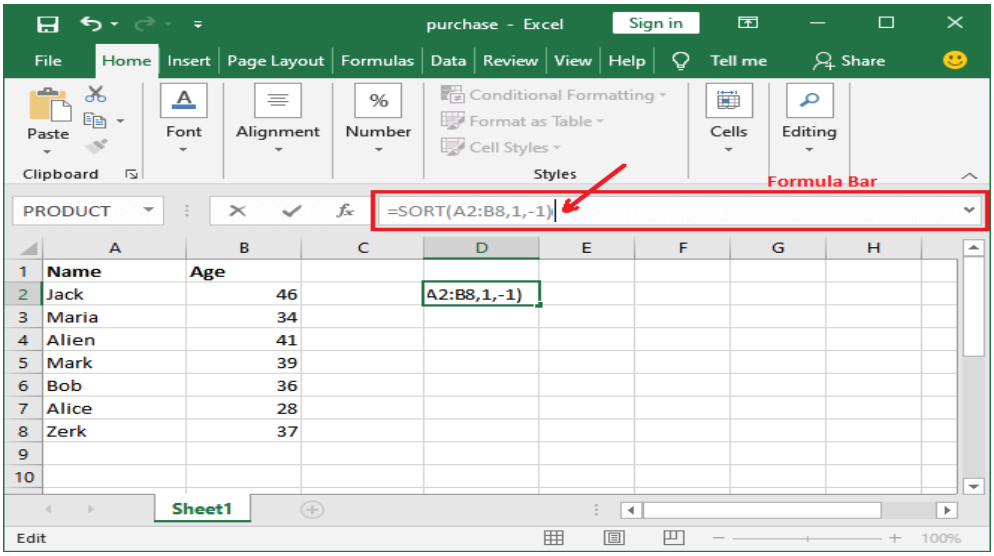



| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | Name | Age | | Name | Age | | | |
| 2 | Jack | 46 | | Alice | 28 | | | |
| 3 | Maria | 34 | | Maria | 34 | | | |
| 4 | Alien | 41 | | Bob | 36 | | | |
| 5 | Mark | 39 | | Zerk | 37 | | | |
| 6 | Bob | 36 | | Mark | 39 | | | |
| 7 | Alice | 28 | | Alien | 41 | | | |
| 8 | Zerk | 37 | | Jack | 46 | | | |
| 9 | | | | | | | | |
| 10 | | | | | | | | |

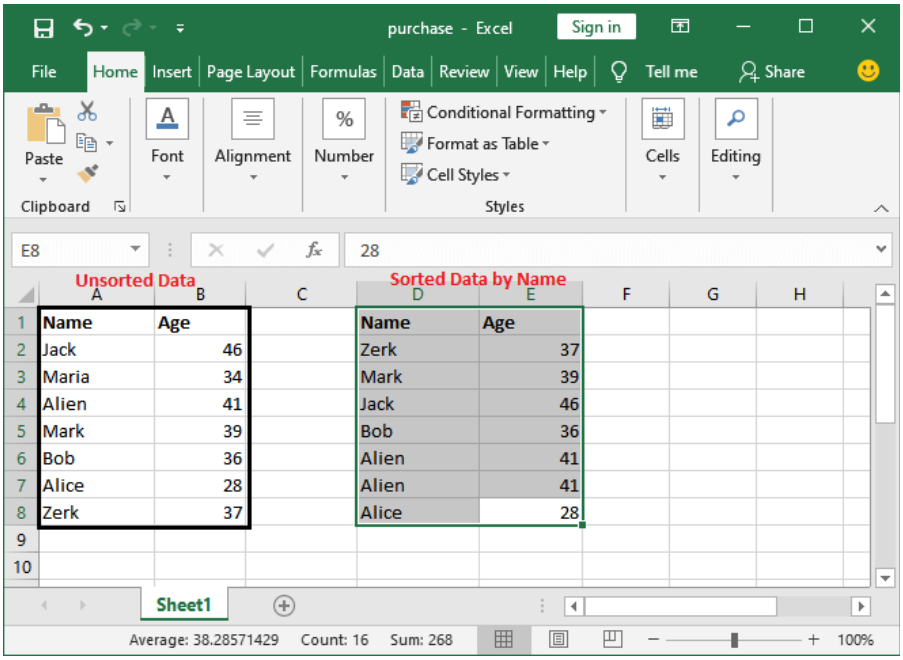
## Descending Order Sorting

**Step 1:**On the Excel home page, go to the formula bar and type this sort() formula to get the data sorted with respect to the **Name** column.

1. =SORT(A2:B8,1,-1)
    - Here,**A2:B8** are the source/range of array for sorting
    - 1 is the specified column1 (Name) for sorting
    - -1 is descending order of sorting

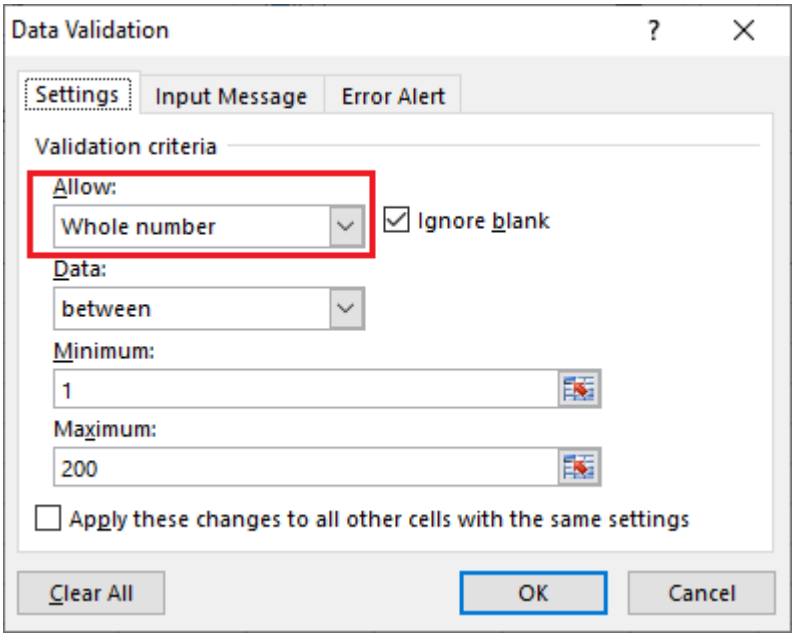



**Step 2:**Now, press the **Enter** key and see the sorted result has been automatically pasted into new cells (D and E).

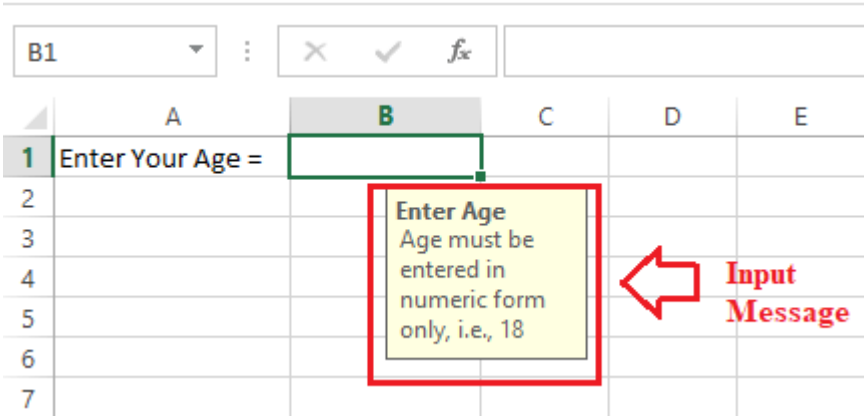



## How does Data Validation work in Excel?

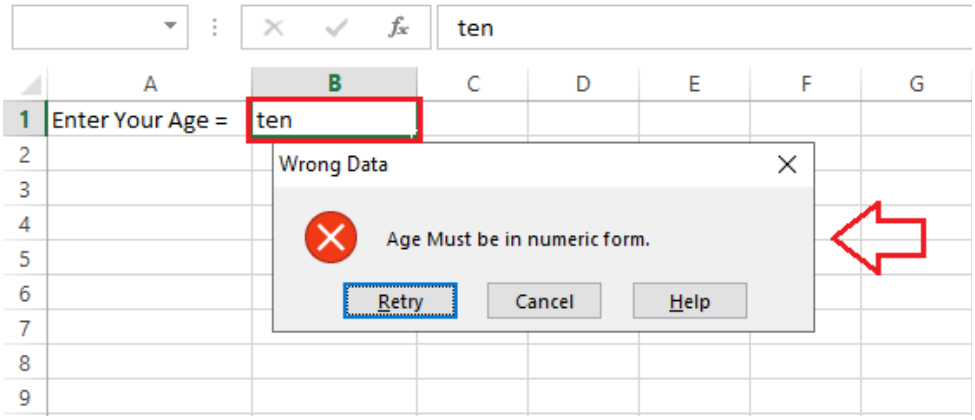
Applying Data Validation on any cell or range of cells in an Excel sheet restricts the users from entering any undesired entries in corresponding cells based on the validation rules. For instance, if we set validation to accept only numbers or numeric values, other users or we will not be able to enter any values other than numbers.




Data Validation can be configured to show an input message to users when the respective cell is selected, informing them what is allowed in it, as shown below:

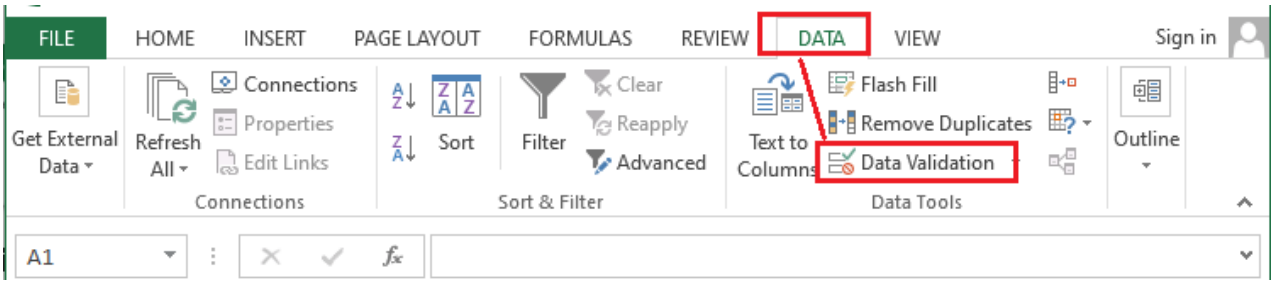



As soon as we try to enter any other type of data in restricted cells, Excel instantly displays an error message and even can display which type of data the respective cells can accept. The error message can be of different styles and customized or created manually while setting up the validation rules on the Excel sheet.



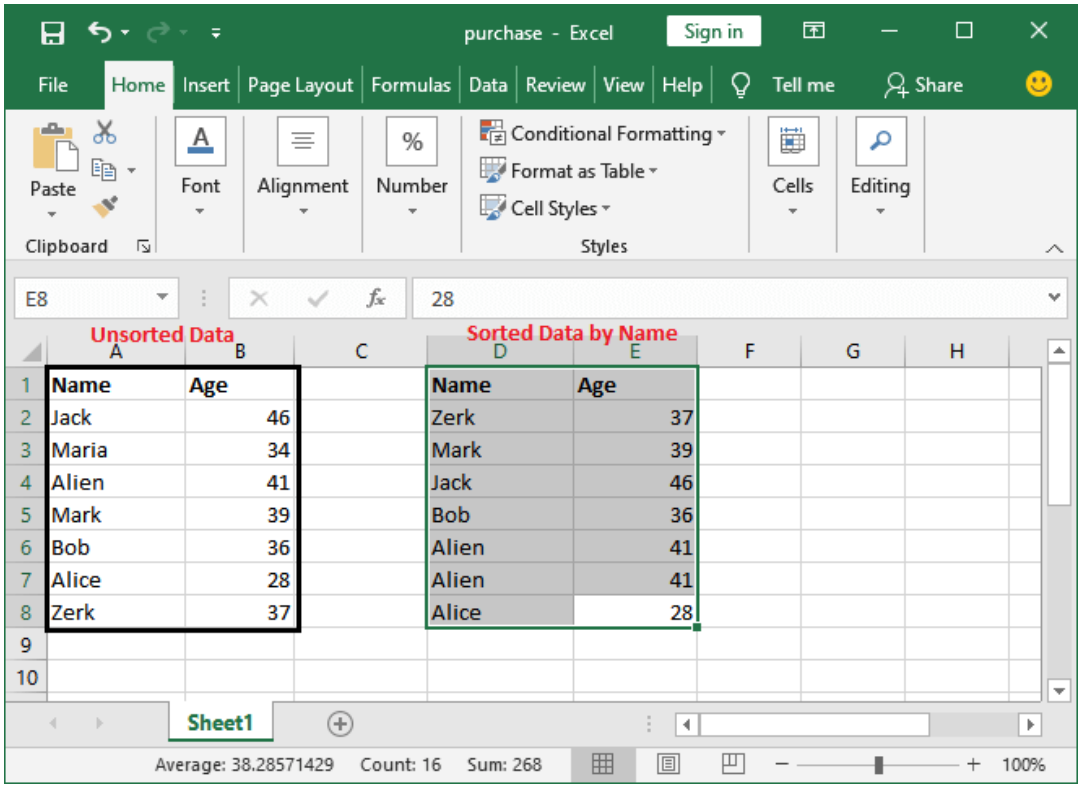

# Data Validation Controls

The Data Validation feature or its controls can be found on the ribbon under the Data tab. By default, it is placed under the category 'Data Tools'.




As soon we click the 'Data Validation' icon from the ribbon, it immediately launched a **Data Validation dialogue box**.

In addition to the Data Validation shortcut on the ribbon, we can also use the keyboard shortcut '**Alt + D + L**' without quotes. It will launch the Data Validation dialogue box instantly.




## Conditional formatting basics

Before moving to apply conditions on an Excel spreadsheet, let's understand the basic concepts of conditional formatting.

### If-then Logic

Conditional formatting logic is based upon the if-then logic. It works in such an if-then manner to format the cells.

**For example**, X is a certain condition and Y is formatting to be applied on data. In such a scenario, if the X condition is satisfied (if TRUE), Y formatting will be applied to the data.

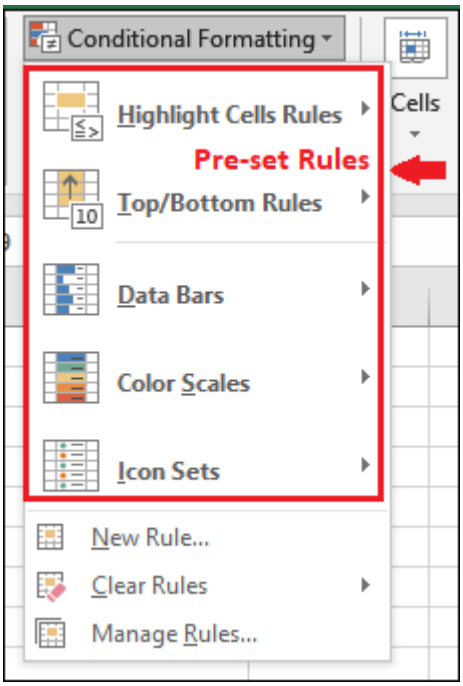
Hence, it can be written as X →Y. Simply, it means that if X is True, then Y is applied. All conditional formatting follows the same logic.

### Pre-set conditions

Conditional formatting offers several pre-set conditions that a user usually needs, such as greater than, less than, duplicate values, unique values, etc. Hence, to

save the time of users in writing formulas, Excel offers them some pre-set conditions.

Following are the pre-set conditions. You can use any of them from here.




Excel has vast library of pre-set conditions that a user usually wants to apply using functions but we can also set custom conditions.

**How to Create a Chart in Excel?**

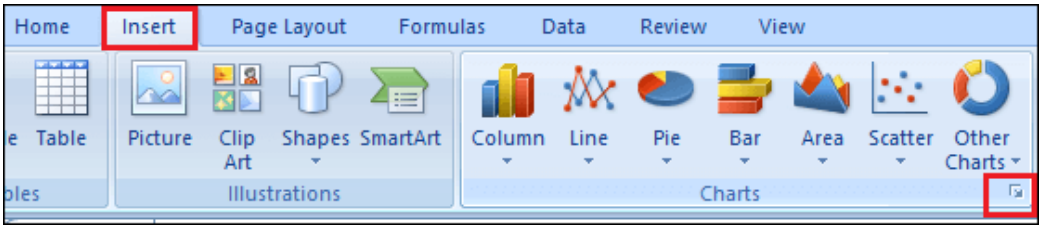
Follow the following steps to create a chart in Excel:

**Step 1:**Select the data for which you want to create a chart.

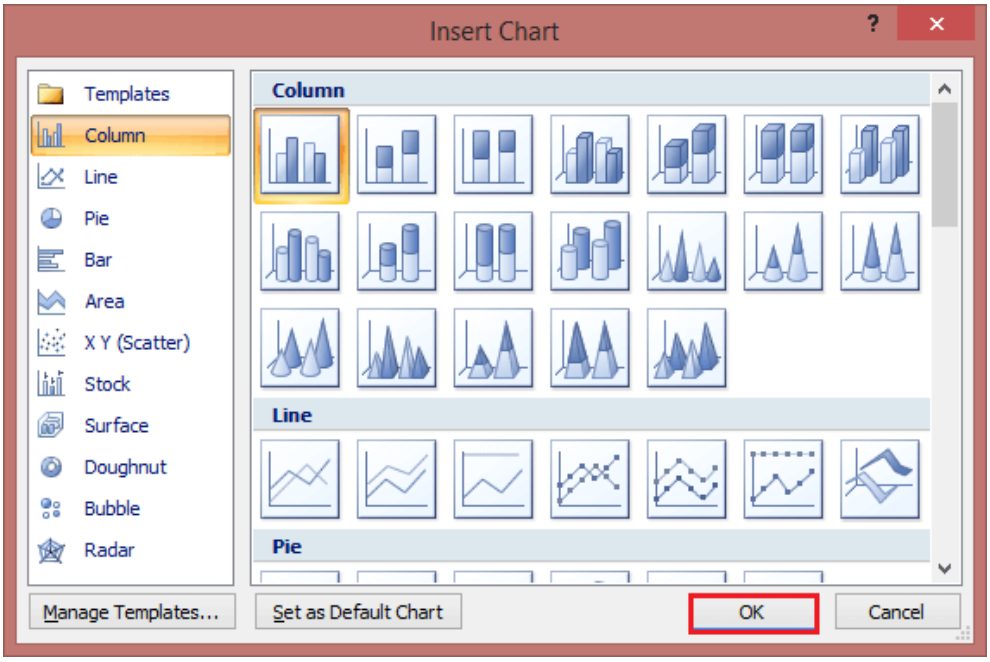
| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1 | | **2017** | **2018** | **2019** | **2020** |
| 2 | **Mobiles** | 22 | 16 | 12 | 15 |
| 3 | **Laptops** | 35 | 42 | 36 | 50 |
| 4 | **Speakers** | 15 | 11 | 18 | 14 |
| 5 | **Printers** | 80 | 14 | 85 | 15 |
| 6 | | | | | |

**Step 2:**Click on the **Insert** tab and go on the recommended **Charts** option.

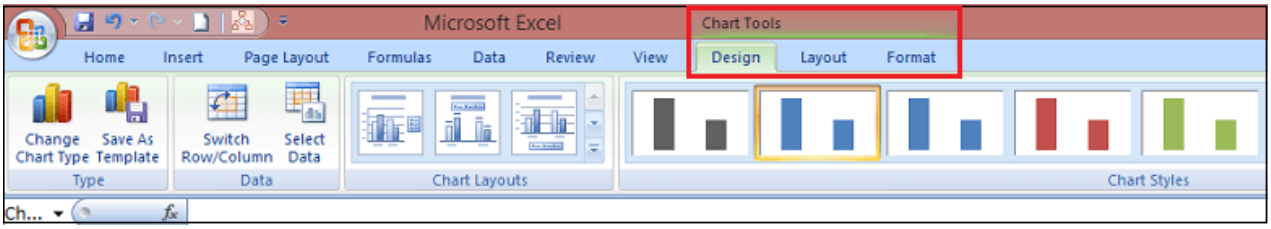
On the Recommended **Charts** tab, scroll through the list of charts that Excel recommends for your data. If you don't see a chart you like, click **All Charts** to see all the available chart types.




**Step 3:**Select the chart type according to your data and click on the **Ok** button.




**Step 4:**Use the **Chart Elements, Chart Styles,** and **Chart Filters** buttons next to the upper-right corner of the chart to add chart elements like axis titles or data labels, customize the look of your chart, or change the data is shown in the chart.




**Step 5:**To access additional design and formatting features, click anywhere in the chart to add the **CHART TOOLS** to the ribbon, and then click the options you want on the **DESIGN** and **FORMAT** tabs.

## CONCLUSION

Excel is widely used now days in all sorts of fields because of the versatility that it provides. For most analysts(especially those working with accounting/finance), knowing Excel is a must because it's an excellent tool if you are not looking to create a complex model or pipeline or if the amount of data you work with is not very large. Furthermore, it has an excellent interface, which makes it easier for almost all users to use whether they are technical or not.

This is why spreadsheet or excel has been a must learn tool for everyone and this also proves that it’s uses are endless.