1. What is spread sheet? Write features of it?

An electronic document in which data is arranged in the rows and columns of a grid and can be manipulated and used in calculations.

Its features are:

* It allows us for keeping records in the worksheet and workbook.
* It allows us for shorting, filtering and conditional formatting of given data.
* It provides various charts for presenting data.
* It offers the features for data validation and data entry rules.
* It helps for analyzing data using pivot table and pivot chart.

1. Explain application of spread-sheet with its type and examples?

The application of spread sheet are given below:

* It helps us for preparing annual budget and report.
* It helps for maintaining database and also helps for data presentation using charts.
* It helps for preparing mark sheet, salary sheet, bills, ledgers, inventory etc.
* It helps for statistical analysis, financial analysis, scientific, engineering data analysis and research works.

The types of spread sheet are:

* MS Excel
* IBM Lotus 123
* Tabulus
* Corel Quattro Pro
* KSpread
* Apple Numbers (part of iWork)

1. Writ short notes on workbook work sheet, cell and cell address?

A workbook is a file created by MS excel. A workbook contents multiple worksheets. Its default name is book1, book2, and so on. A worksheet is an electronic sheet that contents number of rows and columns. A row is defined by the integer number 1, 2, ….up to 1048576 and a column is defined by the roman alphabets A, B, C,….up to XFD.

A **worksheet**, in the word's original meaning, is a sheet of paper on which one performs work. In [education](https://en.wikipedia.org/wiki/Education), a worksheet may have questions for students and places to record answers. In [accounting](https://en.wikipedia.org/wiki/Accounting), a worksheet is, or was, a sheet of ruled paper with rows and columns on which an accountant could record information or perform calculations.

A **cell** is the intersection between a [row](https://www.computerhope.com/jargon/r/row.htm) and a [column](https://www.computerhope.com/jargon/c/column.htm) on a spreadsheet that starts with cell A1 Below is an example of a highlighted cell in [Microsoft Excel](https://www.computerhope.com/jargon/e/excel.htm) "column D, row 8 is the selected cell and the [location](https://www.computerhope.com/jargon/a/address.htm) of what is being modified.

1. What is cell reference? Explain with its type and examples?

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

## Absolute cell references

Absolute cell reference always points to the same place, even if you change the position of any of those cells. In other words, if you have cell A1 which refers to the contents of cell B1 (=$B$1) and then you change the position of A1 it will still refer to cell B1. If you drag cell B1 to another location, for example, B3, then A1 will point to the new location of the same cell (=$B$3).

**Mixed cell references**

A mixed reference is a reference that refer to a specific row or column. For example, **$A1** or **A$1**. If you want to create a mixed reference- press the **F4** key on the formula bar two or three times depending on whether you want to refer to row or column. Press **F4** one more time to go back to the relative cell reference.

1. Describe cell formatting and conditional formatting with examples?

All cell content uses the same **formatting** by default, which can make it difficult to read a workbook with a lot of information. Basic formatting can customize the **look and feel** of your workbook, allowing you to draw attention to specific sections and making your content easier to view and understand.

Conditional formatting allows you to automatically apply formatting—such as **colors**, **icons**, and **data bars**—to one or more cells based on the **cell** **value**. To do this, you'll need to create a **conditional formatting** **rule**. For example, a conditional formatting rule might be: **If the value is less than $2000, color the cell red**.

What is formula in MS-excel write any 10 formulas used in MS- excel?

## Microsoft Excel formulas - the basics

In MS Excel, formulas are equations that perform various calculations in your worksheets. Though Microsoft has introduced a handful of new functions over the years, the concept of Excel spreadsheet formulas is the same in all versions of Excel 2016, Excel 2013, Excel 2010, Excel 2007 and lower.

## Operators in Excel worksheet formulas

To tell Microsoft Excel what type of operation you want to perform in a formula, you use special symbols that are technically called **operators**. There exist 4 types of operation.

**Text concatenation operator**

Text concatenation operator in Excel is the ampersand symbol (**&**). You can use it to join two or more text strings in a single string.

For example, if you have country codes in column A and telephone numbers in column B, you can use the following formula to get the telephone numbers combined with the country codes:

## Absolute, relative and mixed cell references in Excel formulas

There exist 3 types of cell references in Excel: absolute ($A$1), relative (A1) and mixed ($A1 or A$1). All three of the above references refer to the same cell, and the dollar sign ($) is used only for one purpose - it tells Microsoft  Excel whether to change or not to change cell references when the formula is moved or copied to other cells.

1. Write difference between filtering and shorting?

Shorting : When I use **Sort** to sort data in Excel, **it sorts the entire table** – which makes sense but might not be the best way forward.  **Sort** is great for arranging a client list alphabetically for example, or sorting from lowest value to the highest value – but it may not be the best method as data can still be buried among the other rows and columns of detail.

Filtering : A **filter** is a **computer** program or subroutine to process a stream, producing another stream. While a single **filter** can be used individually, they are frequently strung together to form a pipeline. Some operating systems such as Unix are rich with **filter** programs.

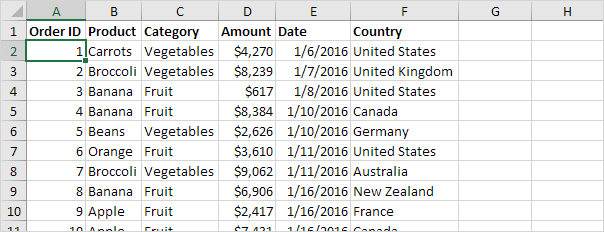
1. What is pivot-table show it with any 2 examples?

# **Pivot Tables**

[Insert a Pivot Table](http://www.excel-easy.com/data-analysis/pivot-tables.html#insert-pivot-table) | [Drag fields](http://www.excel-easy.com/data-analysis/pivot-tables.html#drag-fields) | [Sort](http://www.excel-easy.com/data-analysis/pivot-tables.html#sort) | [Filter](http://www.excel-easy.com/data-analysis/pivot-tables.html#filter) | [Change Summary Calculation](http://www.excel-easy.com/data-analysis/pivot-tables.html#change-summary-calculation) | [Two-dimensional Pivot Table](http://www.excel-easy.com/data-analysis/pivot-tables.html#two-dimensional-pivot-table)

**Pivot tables** are one of **Excel**'s most powerful features. A pivot table allows you to extract the significance from a large, detailed data set.

Our data set consists of 213 records and 6 fields. Order ID, Product, Category, Amount, Date and Country.



1. Write short notes on goal seek scenario and scenario manager? ( what .. if.. analysis )

The **Goal Seek**scenario tool is complementary to the [What If](https://msdn.microsoft.com/en-us/library/dn282336.aspx) scenario tool. The **What-If** tool tells you the impact of making a change, whereas the **Goal Seek** tool tells you the underlying factors that must change to achieve a desired result.

For example, let’s say your goal is to increase customer satisfaction. You can use **Goal Seek** analysis to determine which factors would be most likely to increase customer satisfaction, and decide whether those changes are cost-effective.

When the tool finishes its analysis, it creates two new columns in the source data table. These columns show the *likelihood* that the targeted outcome can be achieved, and the recommended change, if any.

The tool can analyze a set of data and make predictions for the entire set, or you can create the analysis and then test scenarios one at a time.

S**cenario Manager** is a built-in Excel tool that allows users to deal with changing up to 32 variables (cells) simultaneously. It can be accessed from the 'Data' tab on the Ribbon and is located using the 'What-If Analysis' icon in the 'Data Tools' section: Locating **Scenario Manager**.