# Advance Excel Assignment 2

1. What does the dollar($) sign do?

**Ans.** In Excel, a dollar sign can denote a currency format, but it has another common use The $ sign means a lock in an excel formula. It will lock one character of cell coordinate in front of it. The locked character won't be moved when the formula is copied to other cells.

For example, if you type your formula like this:
=$A1+A$2+$A$3
Then, when this formula is copied, these things will happen:
- The column (A) in A1 will not be moved
- The row (2) in A2 will not be moved
- The column and row (A and 3) in A3 will not be moved

2. How to Change the Reference from Relative to Absolute (or Mixed)?

**Ans.** To change the reference from relative to absolute, you need to add the dollar sign before the column notation and the row number.

For example, A1 is a relative cell reference, and it would become absolute when you make it $A$1.

If you only have a couple of references to change, you may find it easy to change these references manually. So you can go to the formula bar and edit the formula (or select the cell, press F2, and then change it).

However, a faster way to do this is by using the keyboard shortcut – F4.

When you select a cell reference (in the formula bar or in the cell in edit mode) and press F4, it changes the reference.

Suppose you have the reference =A1 in a cell.

Here is what happens when you select the reference and press the F4 key.

Press F4 key once: The cell reference changes from A1 to $A$1 (becomes ‘absolute’ from ‘relative’).
Press F4 key two times: The cell reference changes from A1 to A$1 (changes to mixed reference where the row is locked).
Press F4 key three times: The cell reference changes from A1 to $A1 (changes to mixed reference where the column is locked).
Press F4 key four times: The cell reference becomes A1 again.

3. Explain the order of operations in excel?

**Ans.** Operations are enclosed in parentheses. Exponential calculations (3^2, for example) Multiplication, and division, whichever comes first. Addition and subtraction, whichever comes first.

4. What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?

**Ans.**

- The **SUM** Function:- The sum function is the most used function when it comes to computing data on Excel [SUM(A2:A10) Adds the values in cells A2:10 ]

- The **TEXT** Function:- Text function is a useful tool that helps convert a date (or number) into a text string in a particular format.

- The **VLOOKUP** Function: - Use the VLOOKUP function to look up a value in a table. For example: =VLOOKUP(A2,A10:C20,2,TRUE) =VLOOKUP("Fontana",B2:E7,2,FALSE)

- The **AVERAGE** Function :- returns the average of those numbers [=AVERAGE(A1:A20)]

- The **CONCATENATE** Function :- concatenate two or more values
[ =CONCATENATE("Stream population for ", A2, " ",A3, " is ", A4, "/mile.") ]

5. When would you use the subtotal function?

**Ans.** The **SUBTOTAL** function in Excel allows users to create groups and then perform various other Excel functions such as **SUM, COUNT, AVERAGE, PRODUCT, MAX**, etc. Thus, the **SUBTOTAL** function in Excel helps in analysing the data provided.

6. What is the syntax of the VLOOKUP function? Explain the terms in it?

**Ans.**

**Syntax** = LOOKUP (lookup_value, lookup_vector, [result_vector])

The LOOKUP function vector form syntax has the following arguments:

**lookup_value** :- Required. A value that LOOKUP searches for in the first vector. lookup_value can be a number, text, a logical value, or a name or reference that refers to a value.

**lookup_vector** :- Required. A range that contains only one row or one column. The values in lookup_vector can be text, numbers, or logical values.

**[result_vector]** :- Optional. A range that contains only one row or column. The result_vector argument must be the same size as lookup_vector. It must be the same size.

=VLOOKUP (lookup value, range containing the lookup value, the column number in the range containing the return value, Approximate match (TRUE) or Exact match (FALSE)).