**ASSIGNMENT 2**

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

Ans) $ sign can be used in excel as:

* It can be used as currency
* It can be used as Absolute cell reference: if we move or copy the formula from one cell to other the cell reference in the formulae does not change, it remains same as in the original cell.
* It can be used to change one cell reference (relative) to other cell reference (absolute or mixed).

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

Ans) Relative cell reference can be changed into Absolute cell reference or Mixed cell reference:

* By pressing F4 after typing the formula and cell reference
* If we press F4 once – A1 changes to $A$1
* If we press F4 twice – A1 changes to A$1
* If we press F4 three times – A1 changes to $A1
* If we press F4 four times – A1 changes back to A1
* By using $ sign. When using $ sign the following is done:
* Relative to Absolute: add $ sign to column name and row number (A1 → $A$1)
* Relative to Mixed: add $sign to either column name or row number accordingly (A1 → $A1/A$1)

**3) Explain the order of operations in excel?**

Ans) The operations in the excel follows PEMDAS

* Parenthesis
* Exponential
* Multiplication
* Division
* Addition
* Subtraction

But, with customized operation according to excel syntax, the order goes as the following:

* Parenthesis
* Reference operators (:)
* Negation
* Percent
* Exponent
* Multiplication and Division
* Addition and Subtraction

In the case of the same priority operators, evaluation takes place from left to right.

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

Ans) The top 5 functions in excel are:

* SUM: it is used to add numbers in a defined set of cells.

Syntax: =SUM (number1, number2…)

* VLOOKUP: used to find a particular date in a large table.

Syntax: = VLOOKUP (lookup\_value, table\_array, col\_index\_num, [range\_lookup])

* AVERAGE: used to find the average of a particular range of cells

Syntax: =AVERAGE (number1, number2...)

* FREQUENCY: used to find the frequency of values occurring in a range of values.

Syntax: =FREQUENCY (data\_array, bins\_array)

* MAX & MIN: it gives the maximum and minimum values of a given column.

Syntax: =MAX (number1, number2...), =MIN (number1, number2...)

**5) When would you use the subtotal function?**

Ans) Subtotal function is used when we need to group ad summarize the given data. First, it groups the data and performs various functions like SUM, AVERAGE, MIN, MAX, COUNT, etc only on the columns and ignores rows.

Syntax: = SUBTOTAL (function\_num, ref1,..)

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

Ans) The syntax of VLOOKUP is =VLOOKUP (lookup\_value,table\_array,col\_index\_num,[range\_lookup])

Lookup\_value: it means the value that you are looking for.

Table\_array: it means where you want to look for that value [range of the data]

Col\_index\_num: the column number in the range containing the value

Lastly, it displays whether it is approximate (TRUE) or exact (FALSE)