

# Advance Excel Assignment 2

## What does the dollar (\$) sign do?

\$ sign is used for cell referencing. There are two types of reference, the first is relative references and the second is absolute references. In absolute references, the value in a row or column will remain constant where the \$ sign is being used whereas in relative references the value will change as per the value using which a value (result from the formula) is being obtained using a formula.

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

The reference can be changed from relative to absolute reference if we add a \$ sign in front of the row number or column number (example- \$e\$13) and if we want to change the reference to mixed absolute reference then we need to add the \$ sign in front of row or column (example- \$e13 or e\$13).

## Explain the order of operations in Excel?

Precedence of operators

Operation in Excel is to use the acronym PEMDAS and the explanation is given below:

1. Parentheses (P): Excel evaluates expressions within parentheses first and if there are nested parentheses then in that case excel will first evaluate the innermost parentheses and then will move outward.
2. Exponents (E): Then Excel calculates the exponential operations such as raising a number to a power.
3. Multiplication (M) and Division (D): Operation related to multiplication and division will happen in order from left to right, in the order, they appear in the equation.
4. Addition (A) and Subtraction (S): Operation related to addition and subtractions will happen in order from left to right, in the order, they appear in the equation.

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

Excel's 5 popular and versatile functions are SUM, IF, VLOOKUP, CONCATENATE and COUNT.

The syntax for the functions is given below:

1. Sum function – SUM(NUM1, NUM2)
2. IF function – IF(LOGIC, VALUE\_IF\_TRUE, VALUE\_IF\_FALSE)
3. VLOOKUP – VLOOKUP(LOOKUP\_VALUE, TABLE\_ARRAY, COL\_INDEX\_NUM,[RANGE\_LOOKUP])
4. CONCATENATE – CONCATENATE(TEXT1, TEXT2)
5. COUNT – COUNT(NUM1, NUM2)

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

We can use the subtotal function while finding the subtotal of values categorical wise for example we can use it for finding the sum of only the east region out of different functions. There are different functions present in subtotal like sum, average or etc.

Syntax – SUBTOTAL(FUNCTION\_NUMBER, RANGE)

We can also use the subtotal from the 'data' section in Excel in the toolbar and then in 'Outline' we can find the option of subtotal.

**What is the syntax of the vlookup function? Explain the terms in it?**

Syntax - VLOOKUP(LOOKUP\_VALUE, TABLE\_ARRAY, COL\_INDEX\_NUM, RANGE\_LOOKUP)

LOOKUP\_VALUE – This is the value which you want to search for.

TABLE\_ARRAY – This is the range of cells that contains the data you want to search in.

COL\_INDEX\_NUM – This is the column number in the TABLE\_ARRAY from which you want to retrieve the results.

RANGE\_LOOKUP – This is the optional argument that specifies whether you want to perform an approximate match or an exact match for the LOOKUP\_VALUE.