**Advance Excel Assignment 2**

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

Ans- In Excel, the dollar sign ($) is used to create an absolute cell reference in formulas. Placing it before the column letter and row number (e.g., $A$1) locks the reference, preventing it from changing when you copy or drag the formula to other cells, ensuring fixed cell references.

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

Ans- To change a cell reference from relative to absolute or mixed in Excel, follow these steps:

* 1. Select the cell containing the formula you want to edit.
  2. Click in the formula bar to edit the formula.
  3. Place the cursor within the cell reference you want to change (e.g., A1).
  4. To make it an absolute reference, press the F4 key (or type the dollar signs manually, e.g., $A$1).
  5. To make it a mixed reference (either the column or row is fixed), add a dollar sign to either the column or row part of the reference (e.g., $A1 or A$1).
  6. Press Enter to save the edited formula.

The reference will now be absolute or mixed as per your modification.

Top of Form

1. **Explain the order of operations in excel?**

Ans- The order of operations, known as the "precedence of operators," dictates the sequence in which formulas are evaluated. It follows the acronym PEMDAS:

1. Parentheses: Excel calculates expressions within parentheses first, beginning with the innermost.
2. Exponents: It handles exponentiation using the "^" operator.
3. Multiplication and Division: Excel performs multiplication (\*) and division (/) from left to right.
4. Addition and Subtraction: It carries out addition (+) and subtraction (-) from left to right.
5. What, according to you, are the top 5 functions in excel and write a basic syntax for any of two?

Ans- the top 5 functions are-

**SUM Function:**

Syntax: =SUM(number1, [number2], ...)

Explanation: Adds up a range of numbers. For example, =SUM(A1:A5) calculates the sum of values in cells A1 to A5.

**VLOOKUP Function:**

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

Explanation: Searches for a value in the first column of a table and returns a corresponding value from a specified column. Useful for data retrieval and analysis.

**AVERAGE Function:**

**Syntax: =AVERAGE(number1, [number2], ...)**

Explanation: Calculates the average of a range of numbers. For example, =AVERAGE(B1:B10) finds the average of values in cells B1 to B10.

**IF Function:**

**Syntax: =IF(logical\_test, value\_if\_true, value\_if\_false)**

Explanation: Performs a conditional test and returns one value if the condition is true and another if false. It's handy for creating conditional logic in spreadsheets.

**COUNT Function:**

**Syntax: =COUNT(value1, [value2], ...)**

Explanation: Counts the number of cells containing numerical values. For instance, =COUNT(C1:C20) counts how many cells in C1 to C20 have numbers.

These functions are essential for various tasks in Excel, from basic calculations to complex data analysis and decision-making.

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

Ans- You would use the SUBTOTAL function in Excel when you need to perform calculations (such as sum, average, count, etc.) on a range of data while excluding other subtotal results within that range. This is particularly useful in scenarios where you have a dataset with multiple levels of subtotals, like a financial report with subtotals for each category and a grand total. SUBTOTAL allows you to calculate subtotals for individual sections without including the other subtotals, ensuring accurate and meaningful results in complex datasets.

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

**Ans-**

The syntax of the VLOOKUP function in Excel is as follows:

**Syntax:**

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

Here's an explanation of each term within the syntax:

**lookup\_value**: This is the value you want to find or lookup in the first column of your table\_array. It's the value you are searching for.

**table\_array:** This is the range of cells that contains the data you want to search through. The lookup\_value must be found within the first column of this range. Typically, it's represented as a cell range (e.g., A1:B10).

**col\_index\_num:** This is the column number from which you want to retrieve data. If you found your lookup\_value in the first column of table\_array, col\_index\_num would be the relative position of the column where the data you want to retrieve is located.

**[range\_lookup]:** This is an optional argument, often omitted. If set to TRUE (or omitted), it assumes an approximate match (finding the closest value less than or equal to the lookup\_value). If set to FALSE, it performs an exact match, finding an exact match for the lookup\_value. You can also use 1 for TRUE and 0 for FALSE.

In essence, VLOOKUP searches for a value in the leftmost column of a table, then returns a value from a specified column in the same row based on the criteria you provide.