**Advance Excel Assignment 2**

**Q1. What does the dollar ($) sign do?**

Ans: In Excel, the dollar ($) is used to create an absolute cell reference in a formula. An absolute reference is a reference to a specific cell that does not change when the formula is copied or filled to other cells in the worksheet.

**Q2. 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, you can add dollar ($) signs before the column letter, the row number, or both, depending on the type of reference you want to create.

Here are the steps:

1. Select the cell or range of cells that contain the formula.
2. In the formula bar, click on the cell reference.
3. Add a dollar ($) sign before the column letter, the row number, or both, depending on the type of reference. For example:

* To create an absolute column reference, add dollar ($) sign before the column letter (e.g., $A1).
* To create an absolute row reference, add dollar ($) sign before the row number (e.g., A$1).
* To create a mixed reference that is absolute in one direction and relative in the other, add dollar signs before both the column letter and the row number (e.g., $A$1).

1. Press Enter to save the changes to the formula.

**Q3. Explain the order of operations in excel?**

Ans: The order of operations in Excel, also known as the precedence of operators, determines the sequence in which Excel performs calculations in a formula. The order of operations is important because it ensures that formulas are calculated correctly and consistently.

The order of operations in Excel is as follows:

1. Brackets: Excel calculates expressions inside brackets first. If a formula contains more than one set of brackets, Excel will calculate the innermost set first and then work outward.
2. Exponents: Excel calculates any exponentiation (raising a number to a power) next.
3. Multiplication and Division: Excel performs multiplication and division operations next, from left to right.
4. Addition and Subtraction: Excel performs addition and subtraction operations last, from left to right.

**Q4. 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 which commonly used functions in Excel are:

1. SUM: adds up a range of cells.

Syntax: =SUM (number1, [number2], …)

1. AVERAGE: calculates the averages of a range of cells.

Syntax: =AVERAGE (number1, [number2], …)

1. IF: performs a logical test and returns one value if the test is true and another value if the test is false.

Syntax: IF (logical\_test, [value\_if\_true], [value\_if\_false])

1. VLOOKUP: looks up a value in a table and returns a corresponding value from a specified column.

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

1. CONCATENATE: combines two or more text strings into one

Syntax: =CONCATENATE (text1, [text2], …)

**Q5. When would you use the subtotal function?**

Ans: The SUBTOTAL function in Excel is used to calculate a subtotal for a range of cells or a table, while ignoring other subtotals within that range or table. It is commonly used in situations where you want to calculate a subtotal for a certain category or group with a larger dataset. The subtotal function is particularly useful in situations where you need to perform calculation on a large dataset that contains multiple subcategories or groups.

**Q6. 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:

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

Explanation of each of the terms in the VLOOKUP function syntax:

1. lookup\_value: This is the value that you want to look up in the first column of the table\_array.
2. Table\_array: This is the range of cells that contains the table of data that you want to search. The table\_array must contain the lookup\_value in its leftmost column.
3. col\_index\_num: This is the column number in the table\_array that contains the data that you want to return. The first column in the table\_array is column 1, the second column is column 2, and so on.
4. range\_lookup: This is an optional argument that specifies whether you want an exact match or an approximate match for the lookup\_value. If range\_lookup is omitted or set to TRUE, Excel will find an approximate match for the lookup\_value. If range\_lookup is set to FALSE, Excel will find an exact match for the lookup\_value.