Advance Excel Assignment 2

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

Absolute cell references: In formulas, the "$" symbol before a row or column reference makes the reference absolute, meaning it won't change when the formula is copied or moved. For example, "A1" references cell A1 and will always refer to that cell, even if the formula is copied or moved to a different location.

Currency formatting: The "$" symbol can be used as a symbol for currency in cell formatting. For example, you can format a cell to display a dollar sign before a number, such as "$1,000".

Named ranges: The "$" symbol can be used in named ranges, which are names assigned to a specific cell, range of cells, or formula. For example, you can create a named range called "Sales_Total" that refers to a specific cell or range of cells, and use the named range in formulas instead of the cell reference.

Array formulas: The "$" symbol can be used in array formulas, which are formulas that perform multiple calculations on one or more sets of values, and then return a single result or multiple results.
These are just a few examples of the uses of the "$" symbol in Microsoft Excel. The specific meaning of the "$" symbol depends on the context in which it is used.

2. **How to Change the Reference from Relative to Absolute (or Mixed)?**
 In Microsoft Excel, you can change the reference type of a formula from relative to absolute or mixed by using dollar signs ($).
To make a reference absolute, add a dollar sign before both the column letter and the row number, for example: A1. This means that the reference will not change when you copy or drag the formula to another cell.
To make a reference mixed, add a dollar sign before only one of the column letter or the row number, for example: A$1 or $A1. This means that the reference will remain absolute for one

aspect (column or row) but will change for the other aspect when you copy or drag the formula to another cell.

You can also convert a relative reference to an absolute reference by selecting the cell(s) containing the formula and then pressing the F4 key. Each press of the F4 key cycles through the four reference types (relative, absolute column, absolute row, and absolute).

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

In Microsoft Excel, the order of operations (also known as the "precedence rules") determines the sequence in which calculations are performed in a formula. The order of operations is as follows:

<u>Parentheses:</u> Calculations inside parentheses are performed first.

<u>Exponents:</u> Calculations involving exponents (raised to a power) are performed next.

<u>Multiplication and Division:</u> Calculations involving multiplication and division are performed from left to right.

<u>Addition and Subtraction:</u> Calculations involving addition and subtraction are performed from left to right.

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

<u>1.SUM:</u> calculates the sum of a range of cells. Syntax: SUM(range) Example: SUM(A1:A10)

<u>2.IF:</u> evaluates 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]) Example: IF(A1>10, "Greater than 10", "Less than or equal to 10")

<u>3.AVERAGE:</u> calculates the average (arithmetic mean) of a range of cells. Syntax: AVERAGE(range) Example: AVERAGE(A1:A10)

<u>4.VLOOKUP:</u> searches for a value in the first column of a table and returns a value in the same row from a specified column. Syntax: VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup]) Example: VLOOKUP(A1, B1:C10, 2, TRUE)

<u>5.COUNT:</u> counts the number of cells in a range that contain numbers. Syntax: COUNT(range) Example: COUNT(A1:A10)

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

The Subtotal function in Microsoft Excel is used to perform calculations (such as SUM, AVERAGE, COUNT, etc.) on a filtered list of data while ignoring hidden rows. This is useful when you want to perform a calculation on a portion of a large dataset, and you don't want the hidden data to affect the result.

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

VLOOKUP(lookup_value, table_array, col_index_num, [range_lookup])
Where:
lookup_value is the value you want to look up in the first column of the table_array.
table_array is the range of cells that make up the table you want to search. The first column of the table must contain the values you are searching for (lookup_value).
col_index_num is the column number in the table_array from which you want to retrieve a value.
[range_lookup] is an optional argument that specifies whether you want an exact match (FALSE) or an approximate match (TRUE). If [range_lookup] is omitted or set to TRUE, an approximate match is returned.