**Microsoft Exel Assignment 2**

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

In Excel, a dollar sign can denote a currency format, but it has another common use: indicating absolute cell references in formulas.

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

Switch between relative, absolute, and mixed references

1. Select the cell that contains the formula.
2. In the formula bar. , select the reference that you want to change.
3. Press F4 to switch between the reference types
4. **Explain the order of operations in excel?**

When evaluating a formula, Excel follows a standard math protocol called "order of operations". In general, Excel's order of operation follows the acronym PEMDAS (Parentheses, Exponents, Multiplication, Division, Addition, Subtraction) but with some customization to handle the formula syntax in a spreadsheet.

First, any expressions in parentheses are evaluated. Parentheses essentially override the normal order of operations to ensure certain operations are performed first.

Next, Excel will resolve references. This involves replacing cell references like A1 with the value from the cell, as well as evaluating range references like A1:A5, which become arrays of values. Other range operations like union (comma) and intersection (space) also happen at this time.

Next, Excel will perform exponentiation, negation, and percent conversions (in that order), followed by multiplication and division, addition and subtraction, and concatenation. Finally, Excel will evaluate Logical Operaters, if present.

In summary, Excel solves formulas in the following order:

 Parentheses

 Reference operators

 Exponents

 Negation

 Percent

 Multiplication and Division

 Addition and Subtraction

 Concatenation

 Logical operators

1. **What, according to you, are the top 5 functions in excel and write a basic syntax**

**for any of two?**

Top five useful functions are SUM, VLOOKUP, HLOOKUP, SUMIF and IF.

Basic syntax for

SUM is: = SUM(rangeofCells)

IF is: = IF(condition,valueIfTrue, valueIfFalse)

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

We can calculate for a group using subtotal function, basically works with vertical list

of data. We can perform sum, average, count min and max from the same for any group of related data.

Ex: We have 4 columns, salesperson name, month, year and sales.

If we use subtotal function, and apply filter for salesperson name, we will be able to see the total sales for that particular group (here, salesperson name) upon applying subtotal function for sum as the function argument.

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

Syntax of VLOOKUP function: =VLOOKUP(lookup\_value, table\_array, col\_index\_num) Terms: lookup\_value: The value we want to search in the other sheet. table\_array: Basically the entire dataset of the worksheet we are searching from. col\_index\_num: index of the column we are searching for. (1,2,3 etc.)