**Excel Assignment 2**

1. What is macro? Create a macro to store product detail.

A macro is an action or a set of actions that you can run as many times as you want. When you create a macro, you are recording your mouse clicks and keystrokes.

1. Explain Excel formatting.

Formatting in Excel means **a trick that we can use to modify the data's appearance in a worksheet**. We can format the data in various ways, like we can format the font of the cells or the table with the help of the styles and format tab present in the Home tab.

In order to format data in Excel, we'll do the following things:-

* The Font size is **larger.**
* We make the text of the column head **bold**
* **Center aligning** the data
* We will apply the outline border with the help of the shortcut that is (Alt+H+B+T),
* After selecting the full table **(using Ctrl+A),** use the shortcut key **(Alt+H+O+I)** to adjust the column width.
* To alter the background, use the 'Fill Color' command in the 'Font' group on 'Home'.

1. Perform data analysis using Excel. List various functions available to perform data analysis in excel.

Simply **select a cell in a data range > select the Analyze Data button on the Home tab**. Analyze Data in Excel will analyze your data, and return interesting visuals about it in a task pane.

Functions available to perform data analysis in excel are:-

1. CONCATENATE
2. LEN
3. COUNTA
4. DAYS/NETWORKDAYS
5. SUMIFS
6. AVERAGEIFS
7. VLOOKUP
8. FIND/SEARCH
9. List down excel functions and their examples.
10. TEXT function- **TEXT(value, format\_text)** is used to convert a number or a date into a test string in the specified format, where:

* **Value** is a numeric value you want to convert to text.
* **Format\_text** is the desired format.

1. CONCATENATE function- **CONCATENATE(text1, [text2], …)** is designed to join several pieces of text together or combine values from several cells into a single cell. An analogues result can be achieved by using the Excel **&** operator.
2. TRIM function- **TRIM(text)** removes leading, trailing spaces as well as excess spaces between words.
3. SUBSTITUTE function- **SUBSTITUTE(text, old\_text, new\_text, [instance\_num])** replaces one set of characters with another in a specified cell or a text string. The syntax of the SUBSTITUTE function is as follows:

* **Text** - the original text string or reference to a cell where you want to substitute certain characters.
* **Old\_text**- the characters you want to replace.
* **New\_text**- the characters you want to replace the old text with.
* **Nth\_appearance** - an optional parameter that specifies which occurrence of old\_text you want to replace with new\_text. If omitted, then every occurrence of the old text will be replaced with the new text.

1. VALUE function- **VALUE(text)** - converts a text string to a number.
2. EXACT function- **EXACT(text1, text2)** compares two text strings and returns TRUE if both values are exactly the same, including case, FALSE otherwise.
3. Functions to change text's case (UPPER, LOWER, PROPER) –

* **UPPER(text)** - converts all characters in a specified text string to upper case.
* **LOWER(text)** - changes all uppercase letters in a text string to lowercase.
* **Proper(text)** - capitalizes the first letter of each word and converts all other letters to lowercase (more precisely, it capitalizes the letters that follow any character other than a letter).
* In all three functions, the**text** argument can be a text string enclosed in quotation marks, a reference to a cell containing the text or a formula that returns the text.

1. Extract text characters (LEFT, RIGHT, MID)-

* **LEFT(text, [num\_chars])** - returns a specified number of characters from the beginning of a text string.
* **RIGHT(text,[num\_chars])** - returns a specified number of characters from the end of a text string.
* **MID(text, start\_num, num\_chars)** - returns a specific number of characters from a text string, starting at any position that you specify.

1. How to add annotations to a cell in Excel.

Right-click the cell and then click Insert Comment (or press Shift+F2).