**Data Analysis Using Excel**

**Week-4**

**Long Descriptive Questions**

**1, How to remove non numeric characters from cells in excel?**

To remove non-numeric characters from cells in Excel, functions such as SUBSTITUTE, LEN, and IF, along with some helper columns. Here's a step-by-step guide:

Suppose you have a column of data in column A (A1, A2, A3, etc.) and you want to remove non-numeric characters from these cells.

**Insert Helper Column:**

* Insert a new column next to your original data (e.g., insert it in column B).
* In cell B1 (or the corresponding cell in the new column), enter the following formula:

**=SUBSTITUTE(A1,CHAR(160),"")**

* This formula uses the SUBSTITUTE function to replace non-breaking spaces (CHAR(160)) with an empty string. You can customize this based on the specific non-numeric characters you want to remove.

**Drag Formula Down**:

* Click on cell B1 to select it.
* Hover over the small square in the bottom-right corner of the selected cell (the fill handle).
* When your cursor turns into a black cross, drag it down to apply the formula to all the cells in column B corresponding to your original data.

**Clean Up:**

* Now, column B contains the values from column A with non-numeric characters removed.
* You can copy and paste these values as needed or use them in your calculations.

Note:

* If you want to remove all non-numeric characters and keep only digits, you can modify the SUBSTITUTE formula to remove any character that is not a digit:

**=SUBSTITUTE(A1,"[^0-9]","")**

This formula uses a regular expression to remove any character that is not a digit (0-9).

* If you want to remove non-numeric characters and decimals, you can use a formula like this:

**=SUBSTITUTE(A1,"[^0-9.]","")**

This formula removes all characters except digits and decimal points

**2, How to extract text from a cell in excel? With an example explain**

To extract text from a cell in Excel, you can use various functions and techniques depending on your specific requirements. Let's go through a common example where you want to extract text from a cell that contains a combination of text and numbers.

Suppose you have the following data in cell A1:

**ABC123**

You want to extract the text "ABC" from this cell.

Here's how you can do it:

**Using LEFT and FIND Functions:**

You can use the **LEFT** function along with the **FIND** function to extract the desired text.

In cell B1 (or any other cell where you want to display the extracted text), enter the following formula:

**=LEFT(A1, FIND(":", A1) - 1)**

This formula finds the position of the colon (":") in cell A1 using the FIND function and then extracts the text to the left of it using the LEFT function.

* A1 refers to the cell containing the original data.
* FIND(":", A1) finds the position of the colon in cell A1.
* LEFT(A1, FIND(":", A1) - 1) extracts the text to the left of the colon, excluding the colon itself.

After entering the formula, cell B1 will display "Product Code" (without the colon).

**Using Text to Columns:**

Another way to extract text is to use Excel's Text to Columns feature:

* Select the cell or range of cells containing the data you want to split (in this case, cell A1).
* Go to the "Data" tab in the Excel ribbon.
* Click on "Text to Columns."
* In the Text to Columns Wizard, choose the "Delimited" option (since you have a delimiter, the colon) and click "Next."
* Select the colon as the delimiter, and click "Next."
* Choose the destination cell where you want the extracted text to appear (e.g., cell B1).
* Click "Finish."

Excel will split the text based on the colon, and "Product Code" will appear in cell B1

**3, How to use Excel DATE function?**

The Excel DATE function is used to create a date value based on the provided year, month, and day values. It's a fundamental function for working with dates in Excel

**DATE(year, month, day)**

* **year**: A positive or negative integer representing the year (e.g., 2023, -1999).
* **month:** A positive integer (1-12) representing the month of the year.
* **day**: A positive integer (1-31) representing the day of the month.

Here's how to use the DATE function in Excel with some examples:

Example **Basic Usage**

Suppose you want to create a date for May 25, 2023. You can use the DATE function as follows:

**=DATE(2023, 5, 25)**

This formula will return the date "5/25/2023."

Example **Using Cell References**

You can also use cell references to provide the year, month, and day values. For example, if cell A1 contains the year (2023), cell A2 contains the month (5), and cell A3 contains the day (25), you can create a date using cell references like this:

**=DATE(A1, A2, A3)**

Example **Calculating Future or Past Dates**

You can use the DATE function to calculate future or past dates by adding or subtracting days. For instance, if you want to find the date that is 30 days from today, you can use a formula like this:

**=DATE(YEAR(TODAY()), MONTH(TODAY()), DAY(TODAY()) + 30)**

Here, the TODAY() function returns the current date, and we add 30 days to it.

Example **Dealing with Leap Years**

The DATE function automatically handles leap years. For example, if you want to find the date that is 1,000 days from January 1, 2020, you can use the formula:

**=DATE(2020, 1, 1) + 1000**

This formula will correctly account for leap years in the calculation.

**4, If excel not recognizing date format then how to convert it for accepting date format?**

If Excel is not recognizing a date format in a cell, you can manually convert it to a recognized date format by following these steps:

* Select the Cell(s) Click on the cell or select the range of cells that contain the date or date-like values.
* Change the Format Using the Format Cells Dialog

1. Right-click on the selected cell(s) and choose "Format Cells..." from the context menu. Alternatively, you can go to the "Home" tab, click the "Number Format" dropdown in the "Number" group, and select "More Number Formats..."
2. In the "Format Cells" dialog box, go to the "Number" tab.

* Select a Date Format In the "Category" list on the left, select "Date."
* Choose a Date Format In the "Type" list on the right, you'll see various date formats. Select the one that matches the format of the date in your cell. You can choose from different date formats, such as "MM/DD/YYYY" or "DD-MM-YYYY," depending on your preference.
* Click "OK" Once you've selected the appropriate date format, click the "OK" button.

Excel will apply the chosen date format to the selected cell(s), and the text in the cell(s) will now be recognized as a date. Excel will also align the date to the right in the cell, indicating that it's a recognized date value.

If Excel still doesn't recognize the date format correctly, you might need to clean up the data in the cell manually. Ensure that there are no extra characters, spaces, or non-numeric characters in the date cell that could be causing Excel to misinterpret the value.