Power query

1. Load Data into Power Query

- Where to find it:
 - O Select the data range.
 - O Go to Data \rightarrow Get & Transform Data \rightarrow From Table/Range.
 - o If prompted, confirm the selection by clicking **OK**.

2. Remove Duplicates

- Where to find it:
 - O In **Power Query**, select the relevant column(s).
 - o Go to Home \rightarrow Remove Duplicates.

3. Handle Missing Data

Replace Missing Values

- Where to find it:
 - o Select the column.
 - o Go to Transform \rightarrow Replace Values.
 - O Enter the value to replace nulls (e.g., replace blanks with "N/A" or 0)

Remove Rows with Null Values

- Where to find it:
 - o Select the column.
 - O Go to Home \rightarrow Remove Rows \rightarrow Remove Blank Rows.

4. Split Columns (For Delimited Data)

- Where to find it:
 - O Select the column (e.g., Full Name).
 - o Go to Transform \rightarrow Split Column \rightarrow By Delimiter.
 - O Choose a delimiter (e.g., space for splitting "John Doe" into First and Last Name).

5. Trim and Clean Text

Trim Extra Spaces

- Where to find it:
 - O Select the column.
 - o Go to Transform \rightarrow Format \rightarrow Trim.

Remove Non-Printable Characters

- Where to find it:
 - O Select the column.
 - o Go to Transform \rightarrow Format \rightarrow Clean.

6. Change Data Types

- Where to find it:
 - O Select the column.
 - o Go to **Transform** → **Data Type** (Choose: Text, Date, Number, etc.).

7. Unpivot Data (For Normalization)

- Where to find it:
 - O Select the columns that need to be transformed into row format.
 - o Go to Transform → Unpivot Columns.

8. Group and Aggregate Data

- Where to find it:
 - O Select the column to group by.
 - O Go to Transform \rightarrow Group By.
 - o Choose an aggregation function like **Sum**, **Count**, **or Average**.

9. Load Cleaned Data Back to Excel

- Where to find it:
 - Once done, click Close & Load → Choose Load to Worksheet/Table.

Date Modification with Power Query

Age Calculation

- Determines the number of days between a specified date and the current date.
- Replaces the current date with a second date column if needed.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Age.
- 3. Transforms date into the Days. Hours: Minutes: Seconds format.

Date Only

• Removes the time portion from the date column.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Date Only.
- 3. Transforms date into Date format (e.g., 12-01-2015).

Year Extraction

• Extracts only the year from the date column.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Year.
- 3. Transforms date into Year format (e.g., 2015).

Month Extraction

- Extracts only the month from the date column.
- Available options: start of the month, end of the month, days in the month, and month name.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Month (e.g., Days in a Month).
- 3. Displays the number of days in a month (e.g., 31/30).

Quarter Extraction

- Extracts the quarter from the date column.
- Options: quarter of the year, start of the quarter, and end of the quarter.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Quarter.
- 3. Displays the quarter (e.g., Q1).

Week Extraction

- Extracts only the week from the date column.
- Options: week of the year, week of the month, start of the week, and end of the week.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Week.
- 3. Displays the week of the year (e.g., Week 3).

Day Extraction

- Extracts only the day from the date column.
- Options: day, day of the week, day of the year, start of the day, end of the day, and name of the day.

Steps:

- 1. Select the date column.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Day (e.g., Name of Day).
- 3. Displays the day name (e.g., Monday).

Parse Date

• Converts a text-formatted date back into a proper date format.

Steps:

1. Convert the date to text.

- 2. Navigate to Add Column \rightarrow Date \rightarrow Parse.
- 3. Transforms text back into date format (e.g., 12-01-2015).

Subtract Days

• Subtracts one date column from another.

Steps:

- 1. Select two date columns.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Subtract Days.
- 3. Displays the difference in days (e.g., -169).

Combine Date and Time

• Merges date and time columns into one.

Steps:

- 1. Select date and time columns.
- 2. Navigate to Add Column \rightarrow Date \rightarrow Combine Date and Time.
- 3. Displays merged result (e.g., 12-01-2015 12:02:12).

Earliest and Latest Days

- Finds the earliest or latest date value.
- Only applicable for **Transform**, not **New Column**.

Creating a Conditional Column

• Creates a new column based on conditions.

Steps:

- 1. Navigate to Add Column → Conditional Column.
- 2. Enter the New Column Name (e.g., Pass/Fail).
- 3. Set conditions:
 - o If Marks > 40, output **Pass**.
 - o If Marks < 40, output Fail.
- 4. Click **OK** to generate the new column.
- 5. The column displays **Pass** for marks ≥ 40 and **Fail** for marks ≤ 40 .

