**Day 3:**

**Data Loading and Transformation (Power Query Editor)**

**🔰 Topics Covered:**

* Importing data from Excel/CSV
* Cleaning data: remove columns, rename, fill, split
* Basic transformations: filter, sort, merge

**🟢 1. Importing Data from Excel or CSV**

**Steps to Import Data:**

1. Open Power BI Desktop.
2. Go to **Home > Get Data > Excel** or **Text/CSV**.
3. Select your file (e.g., Sales\_Data.xlsx or Sales\_Data.csv).
4. In the **Navigator** window, preview the data.
5. Click **Transform Data** to open the **Power Query Editor**.

**🟢 2. Cleaning Data Using Power Query Editor**

Power Query Editor helps in cleaning and preparing the data. It has:

* **Query Pane** (left): Lists loaded tables.
* **Data Preview** (middle): Shows the current table.
* **Applied Steps** (right): Tracks every change.

**✨ Common Cleaning Operations:**

|  |  |
| --- | --- |
| **Task** | **How to Do It** |
| **Remove Columns** | Right-click a column > **Remove** |
| **Rename Columns** | Right-click column name > **Rename** |
| **Fill Values** | Select column > **Transform > Fill > Down** or **Up** |
| **Split Column** | Select column > **Split Column > By Delimiter** (e.g., comma, space) |

**🟢 3. Basic Transformations**

**🔹 Filtering Rows**

* Click the filter icon in a column header.
* Select values to include or exclude.

**🔹 Sorting Data**

* Click column header dropdown > Sort Ascending or Descending.

**🟢 4. Apply Changes**

After all cleaning and transformations:

* Click **Home > Close & Apply**.
* The cleaned data is loaded into Power BI for reporting and visuals.

**📌 Summary Table**

|  |  |
| --- | --- |
| **Feature** | **Purpose** |
| **Power Query** | Cleans and transforms data before loading it |
| **Transform Data** | Opens the Power Query Editor |
| **Remove Columns** | Deletes unnecessary columns from data |
| **Split Column** | Breaks one column into two using a delimiter |
| **Close & Apply** | Saves all changes and loads data into Power BI |