

AIM

To study and implement the features of Power BI Desktop by preparing & loading data into Power BI, and developing the data model for analysis and visualization.

TOOLS REQUIRED

1. **Power BI Desktop** (latest version).
2. **Dataset** – Sales Data (CSV/Excel from Kaggle).

ALGORITHM

A: Prepare & Load Data

1. Open **Power BI Desktop**.
2. Click **Home** → **Get Data** → **Excel/CSV** and select the dataset file.
3. Preview the dataset in the **Navigator** window.
4. Select the required sheet/table and click **Load** (or **Transform Data** if cleaning is needed).
5. In **Power Query Editor**, perform data preparation:
 - Promote headers.
 - Check and change data types (Date, Number, Text).
 - Remove null or duplicate rows if necessary.
 - Rename columns for clarity.
6. Click **Close & Apply** to load the cleaned data into Power BI.

B: DEVELOPING THE DATA MODEL

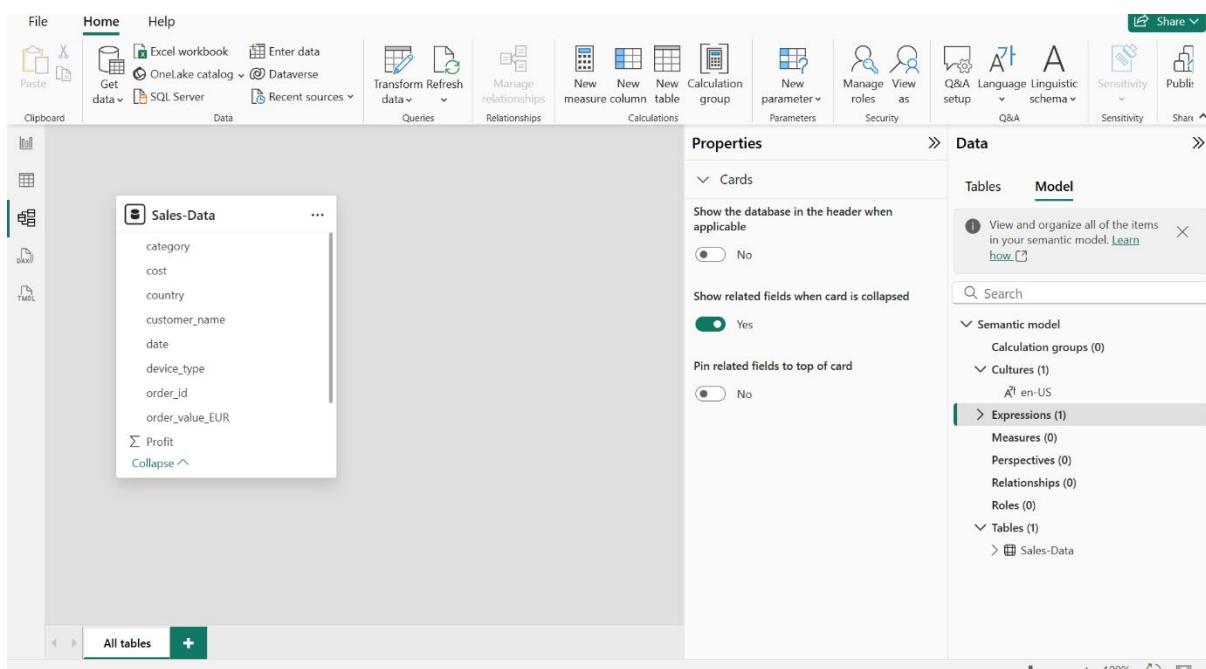
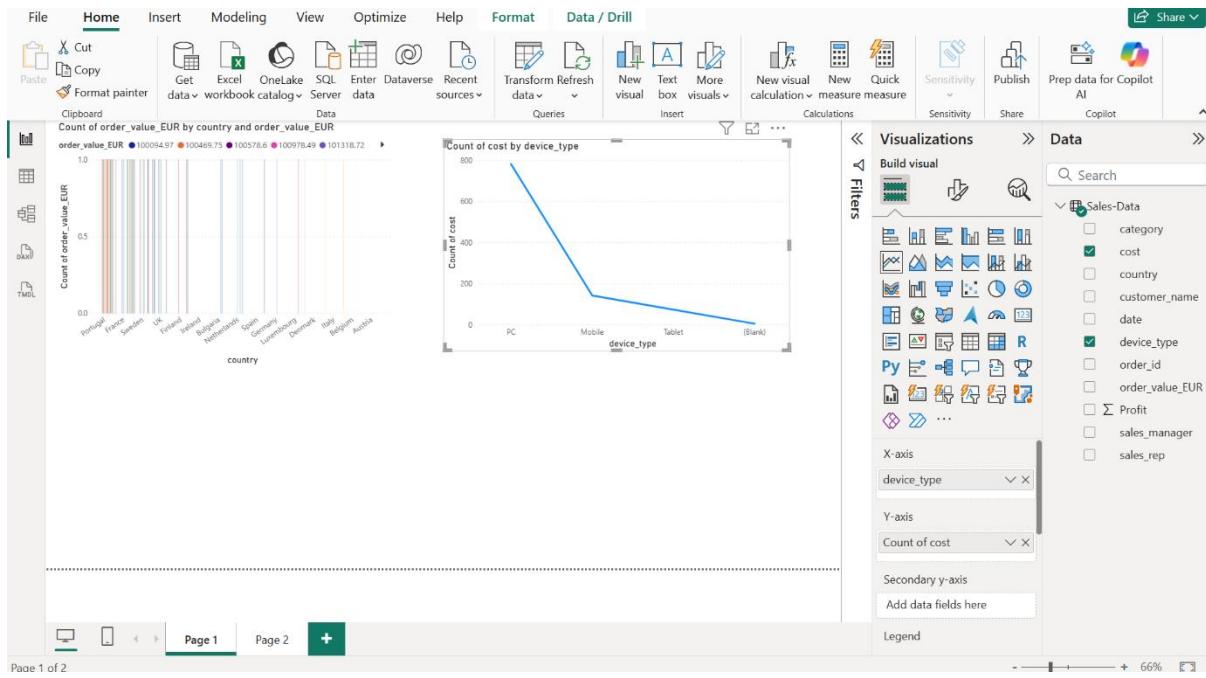
1. Switch to **Model View** in Power BI.
2. Verify that the table(s) are loaded correctly.
3. If multiple tables exist, define **relationships** between them (e.g., Sales ↔ Customers ↔ Products).
4. Ensure data types and relationships are correct to support meaningful analysis.

5. The developed data model is now ready for building **visualizations** like charts, cards, and slicers.

OUTPUT

The screenshot shows the Power Query Editor interface with the title "Untitled - Power Query Editor". The ribbon menu includes File, Home, Transform, Add Column, View, Tools, and Help. The "Transform" tab is selected. The "Queries [1]" pane shows a single query named "sales data". The preview area displays a table with columns: "ABC country", "1.2 order_value_EUR", "1.2 cost", and "ABC date". The table contains 20 rows of data. The "Properties" pane on the right shows the name "sales data". The "Applied Steps" pane lists the steps taken: "Source", "Navigation", "Promoted Headers", and "Changed Type". A status bar at the bottom indicates "10 COLUMNS, 999+ ROWS" and "Column profiling based on top 1000 rows".

The screenshot shows the Power Query Editor interface with the title "Untitled - Power Query Editor". The ribbon menu includes File, Home, Transform, Add Column, View, Tools, and Help. The "Transform" tab is selected. The "Queries [1]" pane shows a query named "Sales-Data". The preview area displays a table with columns: "ABC sales_rep", "ABC device_type", "ABC order_id", and "ABC Profit". The table contains 20 rows of data. The "Properties" pane on the right shows the name "Sales-Data". The "Applied Steps" pane lists the steps taken: "Source", "Navigation", "Promoted Headers", and "Added Custom". A dropdown menu for the "Profit" column shows various data types: "1.2 Decimal Number", "\$ Fixed decimal number", "123 Whole Number", "% Percentage", "Date/Time", "Date", "Time", "Duration", "Text", "True/False", "Binary", and "Using Locale...". A status bar at the bottom indicates "11 COLUMNS, 999+ ROWS" and "Column profiling based on top 1000 rows".



RESULT

The sales dataset was successfully prepared, cleaned, and loaded into Power BI Desktop. A simple data model with calculated measures was developed, making the data ready for visualization and analysis.