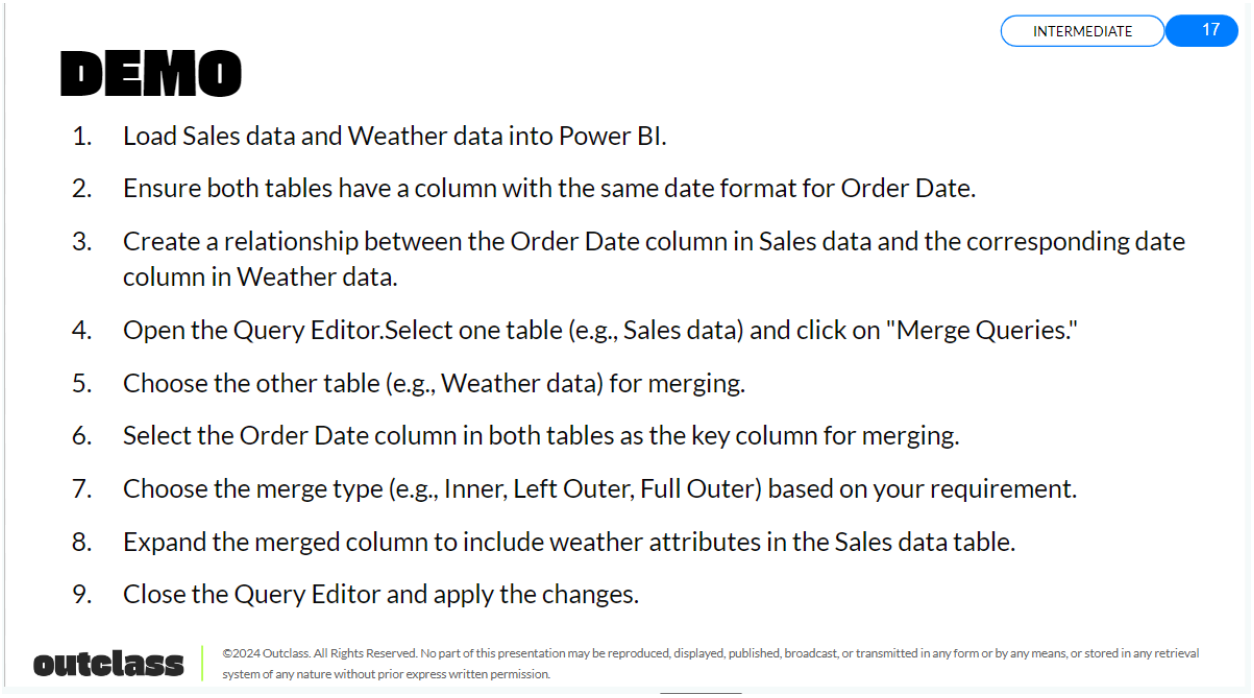
DATA MODELING:

DEMO

1. Load Products,Sales Orders,Orders,Shipping and ,Customers data into Power BI.
2. Ensure the tables properly loaded in the power BI
3. Check the relationship autodetected from the Data View and also play around with the data to create new relationship.
4. Also identify the fact and the dimension tables in the given tables

DATA MERGING:



DATA CLEANING:

DEMO

- Create a new report in Power BI and save the file as "data cleaning".
- Import the "Data Cleaning_1.csv" file into Power BI.
- Click on "Transform Data" to open the Query Editor.
- Make sure the first row is being used as the header for the data.
- Click on "Remove Rows" and select "Remove Duplicates" to remove any duplicate rows.
- Select the "Age" column, go to the Transform menu, and use the fill option to fill null values by "Down-Null values are replaced".
- Select the "Email" column, go to the Transform menu, and use the "Replace Values" option. In the pop-up window, leave the textbox "Value to find" empty and in the textbox "Value to replace" enter "No email".

DEMO

- For the "Name" column, replace the missing values by "NA" following the same steps as above.
- Standardized data type formatting involves ensuring that data types are consistent across columns. For example, ensuring that all numerical values are formatted as numbers, dates are formatted as dates, and text fields are formatted as text.
- Remove the "Subscription Date" column from the dataset.
- Rename the "CustomerID" column to "ID" and the "Email" column to "Contact_Email".

Thats we have learnt about the Data connecting and Data cleaning using Power Query ,next let us learn about Data Transformation

DATA TRANSFORMATION:

DEMO

1. Import the "Employee_SampleData.csv" file into Power BI.
2. Click on "Transform Data" to open the Query Editor.
3. Splitting Columns:
    - Select the 'Full_Name' column.
    - Go to the "Home" tab and click on "Split Column".
    - Choose "By Delimiter" and select the space delimiter.
    - This will split the 'Full_Name' column into two separate columns for 'First_Name' and 'Last_Name'.

DEMO

3. Merging Columns:
    - Select the 'Department' and 'Business_ID' columns.
    - Right-click on one of the selected columns and choose "Merge Columns".
    - Name the new column 'Business_Department_ID'.
    - Choose a delimiter if needed.
4. Transposing Data:
    - Select the 'Full_Name' and 'Salary' columns.
    - Go to the "Transform" tab and click on "Transpose".
    - This will rotate the 'Full_Name' and 'Salary' columns into rows, creating separate columns for each employee's name and salary.

DEMO

6. Filtering Rows:

- Click on the dropdown arrow in the 'Age' column header.
- Choose "Number Filters" and then "Greater Than or Equal To".
- Enter "30" as the value.
- This will remove rows where the 'Age' column is less than 30.

7. Sorting:

- Click on the dropdown arrow in the 'Hire_Date' column header.
- Choose "Sort Ascending".
- This will sort the data based on the 'Hire_Date' column in ascending order.

DEMO

8. Grouping:

- Select the data.
- Go to the "Transform" tab and click on "Group By".
- Choose the 'Department' column as the grouping column.
- Add an aggregation for the 'Salary' column by selecting "Average" from the dropdown menu.
- Name the new column as 'Average_Salary'.