

# Project-1 Data Leverager

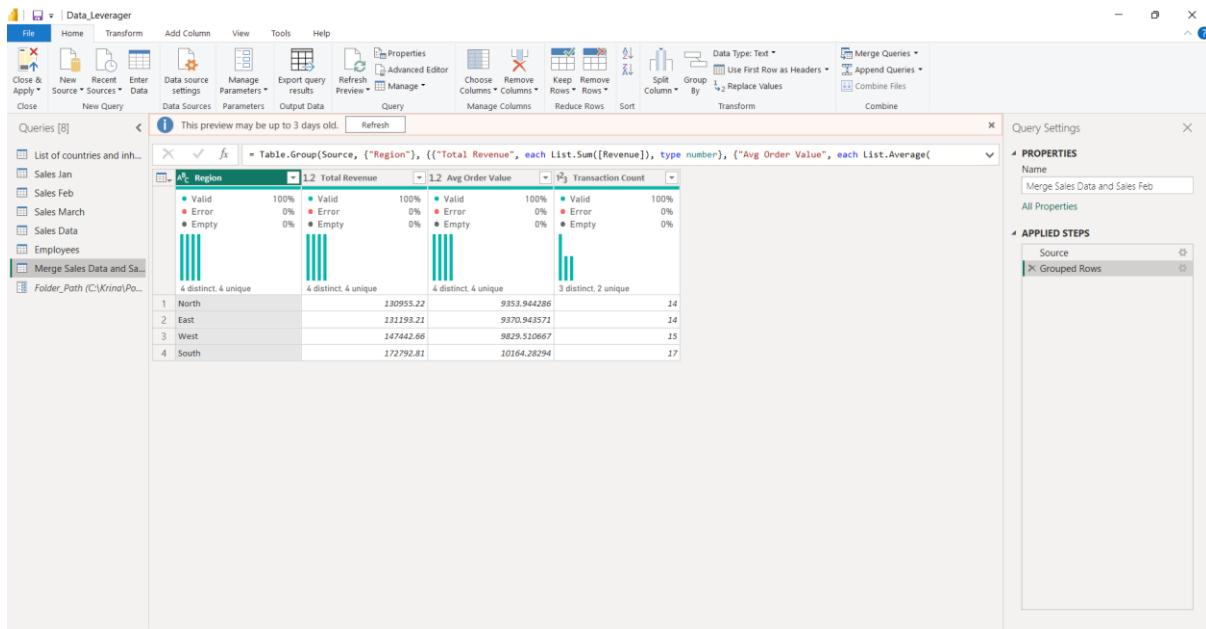
## Sources Used:

- Imported monthly sales data from Excel files stored in a folder (Jan–Apr).
- Loaded Employee Master Data from a separate Excel file.
- Extracted an HTML table from the web as an example of an online data source.

## Transformation applied:

This screenshot shows the Power BI Data Leverager interface. The main area displays a preview of the 'Sales Data' query, which contains 20 rows of sales data. The columns are: Index, OrderID, Order Date, Day, Month Name, Year, Quarter, Customer Name, City, and Quarter. The preview pane also shows column statistics like distinct values and percentages of valid, error, and empty entries. On the right side, there is a 'Properties' pane with sections for 'Query Settings' (Name: Sales Data) and 'APPLIED STEPS' (listing various data cleaning and transformation steps). A status bar at the bottom indicates the preview may be up to 3 days old.

This screenshot shows the Power BI Data Leverager interface. The main area displays a preview of the 'Employees' query, which contains 10 rows of employee data. The columns are: EmployeeID, Name, Department, Region, Join Date, Birthdate, and Age. The preview pane shows column statistics and validation details. On the right side, there is a 'Properties' pane with sections for 'Query Settings' (Name: Employees) and 'APPLIED STEPS' (listing steps like Source, Navigation, Promoted Headers, Changed Type, Lowercased Text, and Added Custom). A status bar at the bottom indicates the preview may be up to 3 days old.



## Challenges Faced:

- Sales files had inconsistent formatting and null values.
- Column headers and data types were not standardized across files.
- Duplicate and blank records existed in the raw data.
- Required combining multiple files without breaking queries.
- Employee age and sales category needed to be derived from existing data.

## How These Challenges Were Solved:

- Cleaned the dataset using Remove Blank Rows, Remove Columns, and Remove Duplicates.
- Promoted headers and renamed columns for consistency.
- Standardized data types using Change Type with Locale.
- Used Append Queries from Folder to dynamically combine monthly files.
- Created calculated fields in Power Query for Profit, Age, and Sales Category.
- Implemented Parameters for dynamic folder path control.
- Verified data quality using Column Profile, Column Quality, and Column Distribution.