

Power BI Assignment 1 – Data Transformation & Data Modeling

Import Data:

Import

List of Orders.csv

Order Details.csv

Sales target.csv

The screenshot shows the Power BI Query Editor interface with the following details:

- File Bar:** Home, Transform, Add Column, View, Tools, Help.
- Toolbars:** Close & Apply, New Source, Recent Sources, Data, Data source settings, Manage Parameters, Export query results, Refresh, Properties, Advanced Editor, Choose Columns, Remove Columns, Keep Rows, Remove Rows, Sort, Split Column, Group By, Data Type: Text, Use First Row as Headers, Merge Queries, Append Queries, Combine Files, Replace Values, Transform.
- Queries List:** List of Orders, Sales target, Order Details.
- Table View:** A table with 5 columns and 30 rows. The columns are labeled Column1, Column2, Column3, Column4, and Column5. The data represents order details, such as Order ID, Order Date, Customer Name, State, and City.
- Query Settings Panel:** Shows the query name "List of Orders" and all properties.
- Applied Steps Panel:** Shows a single step named "Changed Type".
- Bottom Status:** 5 COLUMNS, 561 ROWS, Column profiling based on top 1000 rows, PREVIEW DOWNLOADED AT 10:01 PM.

Data Transformation:

Restrict the "List of Orders" table to only the first 500 row

The screenshot shows the Power Query Editor interface with the following details:

- File**, **Home**, **Transform**, **Add Column**, **View**, **Tools**, **Help** menu items.
- Queries [3]** pane on the left listing **List of Orders**, **Sales target**, and **Order Details**.
- Query Settings** pane on the right showing **PROPERTIES** (Name: List of Orders, All Properties) and **APPLIED STEPS** (Source, Changed Type, Promoted Headers, Changed Type1, Kept First Rows).
- Table Preview** pane showing the transformed table with columns: Order ID, Order Date, Customer Name, State, and City. The table contains 500 rows, starting from 1 to 500.
- Applied Steps** pane at the bottom right showing the steps taken: Source, Changed Type, Promoted Headers, Changed Type1, and Kept First Rows.

Table Data Preview:

	Order ID	Order Date	Customer Name	State	City
1	B-25601	01-04-2018	Bharat	Gujarat	Ahmedabad
2	B-25602	01-04-2018	Pearl	Maharashtra	Pune
3	B-25603	03-04-2018	Jahan	Madhya Pradesh	Bhopal
4	B-25604	03-04-2018	Divsha	Rajasthan	Jaipur
5	B-25605	05-04-2018	Kasheen	West Bengal	Kolkata
6	B-25606	06-04-2018	Hazel	Karnataka	Bangalore
7	B-25607	06-04-2018	Sonakshi	Jammu and Kashmir	Kashmir
8	B-25608	08-04-2018	Aarushi	Tamil Nadu	Chennai
9	B-25609	09-04-2018	Jitesh	Uttar Pradesh	Lucknow
10	B-25610	09-04-2018	Yogesh	Bihar	Patna
11	B-25611	11-04-2018	Anita	Kerala	Thiruvananthapuram
12	B-25612	12-04-2018	Shrichand	Punjab	Chandigarh
13	B-25613	12-04-2018	Mukesh	Haryana	Chandigarh
14	B-25614	13-04-2018	Vandana	Himachal Pradesh	Simla
15	B-25615	15-04-2018	Bhavna	Sikkim	Gangtok
16	B-25616	15-04-2018	Kanak	Goa	Goa
17	B-25617	17-04-2018	Sagar	Nagaland	Kohima
18	B-25618	18-04-2018	Manju	Andhra Pradesh	Hyderabad
19	B-25619	18-04-2018	Ramesh	Gujarat	Ahmedabad
20	B-25620	20-04-2018	Sarita	Maharashtra	Pune
21	B-25621	20-04-2018	Deepak	Madhya Pradesh	Bhopal
22	B-25622	22-04-2018	Monisha	Rajasthan	Jaipur
23	B-25623	22-04-2018	Atharv	West Bengal	Kolkata
24	B-25624	22-04-2018	Vini	Karnataka	Bangalore
25	B-25625	23-04-2018	Pinky	Jammu and Kashmir	Kashmir
26	B-25626	23-04-2018	Bhishm	Maharashtra	Mumbai
27	B-25627	23-04-2018	Hitika	Madhya Pradesh	Indore
28	B-25628	24-04-2018	Pooja	Bihar	Patna
29	B-25629	24-04-2018	Hemant	Kerala	Thiruvananthapuram
30	B-25630	24-04-2018	Sahil	Punjab	Chandigarh

Ensure the “Order Date” column in the “List of Orders” table is set to data type ‘Date’

The screenshot shows the Power Query Editor interface with the following details:

- File Bar:** Home, Transform, Add Column, View, Tools, Help.
- Toolbars:** Transpose, Data Type: Date, Replace Values, Unpivot Columns, Split Column, Format, Extract, Statistics, Standard, Scientific, Trigonometry, Date, Time, Duration, Run R script, Run Python script, Scripts.
- Queries [3]:** List of Orders, Sales target, Order Details.
- Table Preview:** Shows the 'List of Orders' table with columns: Order ID, Order Date, CustomerName, State, City. The 'Order Date' column contains dates like 4/1/2018, 4/2/2018, etc.
- Query Settings Panel:**
 - PROPERTIES:** Name: List of Orders, All Properties.
 - APPLIED STEPS:** Shows the steps applied to the table, including 'Changed Type with Locale'.
- Bottom Status:** 5 COLUMNS, 500 ROWS - Column profiling based on top 1000 rows. PREVIEW DOWNLOADED AT 10:27 PM.

Change the data type of “Amount” and “Target” columns to ‘Fixed Decimal Number’

Screenshot of Power Query Editor showing the transformation of the "Sales target" query.

Transform ribbon:

- Data Type: Fixed decimal number
- Replace Values
- Unpivot Columns
- Pivot Column
- Move
- Convert to List
- Split Column
- Format
- Extract
- Parse
- Text Column
- Number Column
- Statistics
- Standard
- Scientific
- 10²
- Rounding
- Date
- Time
- Duration
- Run R script
- Run Python script
- Scripts

Query Settings:

- Name: Sales target
- All Properties

Applied Steps:

- Source
- Promoted Headers
- Changed Type

Table Preview:

	Month of Order Date	Category	Target
1	4/18/2026	Furniture	10,400.00
2	5/18/2026	Furniture	10,500.00
3	6/18/2026	Furniture	10,600.00
4	7/18/2026	Furniture	10,800.00
5	8/18/2026	Furniture	10,900.00
6	9/18/2026	Furniture	11,000.00
7	10/18/2026	Furniture	11,100.00
8	11/18/2026	Furniture	11,300.00
9	12/18/2026	Furniture	11,400.00
10	1/19/2026	Furniture	11,500.00
11	2/19/2026	Furniture	11,600.00
12	3/19/2026	Furniture	11,800.00
13	4/18/2026	Clothing	12,000.00
14	5/18/2026	Clothing	12,000.00
15	6/18/2026	Clothing	12,000.00
16	7/18/2026	Clothing	14,000.00
17	8/18/2026	Clothing	14,000.00
18	9/18/2026	Clothing	14,000.00
19	10/18/2026	Clothing	16,000.00
20	11/18/2026	Clothing	16,000.00
21	12/18/2026	Clothing	16,000.00
22	1/19/2026	Clothing	16,000.00
23	2/19/2026	Clothing	16,000.00
24	3/19/2026	Clothing	16,000.00
25	4/18/2026	Electronics	9,000.00
26	5/18/2026	Electronics	9,000.00
27	6/18/2026	Electronics	9,000.00
28	7/18/2026	Electronics	9,000.00
29	8/18/2026	Electronics	9,000.00
30	9/18/2026	Electronics	9,000.00

3 COLUMNS, 36 ROWS Column profiling based on top 1000 rows PREVIEW DOWNLOADED AT 10:29 PM

Screenshot of Power Query Editor showing the transformation of the "Order Details" query.

Transform ribbon:

- Data Type: Fixed decimal number
- Replace Values
- Unpivot Columns
- Pivot Column
- Move
- Convert to List
- Split Column
- Format
- Extract
- Parse
- Text Column
- Number Column
- Statistics
- Standard
- Scientific
- 10²
- Rounding
- Date
- Time
- Duration
- Run R script
- Run Python script
- Scripts

Query Settings:

- Name: Order Details
- All Properties

Applied Steps:

- Source
- Promoted Headers
- Changed Type

Table Preview:

	Order ID	Amount	Profit	Quantity	Category	Sub-Category
1	B-25601	1,275.00	-1148	7	Furniture	Bookcases
2	B-25601	66.00	-12	5	Clothing	Stole
3	B-25601	8.00	-2	3	Clothing	Hankerchief
4	B-25601	80.00	-56	4	Electronics	Electronic Games
5	B-25602	168.00	-111	2	Electronics	Phones
6	B-25602	424.00	-272	5	Electronics	Phones
7	B-25602	2,617.00	1151	4	Electronics	Phones
8	B-25602	561.00	212	3	Clothing	Saree
9	B-25602	119.00	-5	8	Clothing	Saree
10	B-25603	1,355.00	-60	5	Clothing	Trousers
11	B-25603	24.00	-30	1	Furniture	Chairs
12	B-25603	193.00	-166	3	Clothing	Saree
13	B-25603	180.00	5	3	Clothing	Trousers
14	B-25603	116.00	16	4	Clothing	Stole
15	B-25603	107.00	36	6	Clothing	Stole
16	B-25603	12.00	1	2	Clothing	Hankerchief
17	B-25603	38.00	18	1	Clothing	Kurti
18	B-25604	65.00	17	2	Clothing	T-shirt
19	B-25604	157.00	5	9	Clothing	Saree
20	B-25605	75.00	0	7	Clothing	Saree
21	B-25606	87.00	4	2	Clothing	Shirt
22	B-25607	50.00	15	4	Clothing	Leggings
23	B-25608	1,364.00	-1864	5	Furniture	Tables
24	B-25608	476.00	0	3	Furniture	Chairs
25	B-25608	257.00	23	5	Clothing	Hankerchief
26	B-25608	856.00	385	6	Electronics	Printers
27	B-25609	485.00	29	4	Electronics	Electronic Games
28	B-25609	25.00	-5	4	Clothing	Saree
29	B-25610	1,076.00	-38	4	Electronics	Printers
30	B-25610	107.00	-54	4	Clothing	Stole

6 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows PREVIEW DOWNLOADED AT 10:31 PM

Format the "CustomerName" column into proper case, ensuring consistent capitalization for each word

Untitled - Power Query Editor

File **Home** **Transform** **Add Column** **View** **Tools** **Help**

Queries [3]

List of Orders

Order ID	Order Date	CustomerName	State	City
B-25601	4/1/2018	Bharat	Gujarat	Ahmedabad
B-25602	4/1/2018	Pearl	Maharashtra	Pune
B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal
B-25604	4/3/2018	Divsha	Rajasthan	Jaipur
B-25605	4/5/2018	Kasheen	West Bengal	Kolkata
B-25606	4/6/2018	Hazel	Karnataka	Bangalore
B-25607	4/6/2018	Sonakshi	Jammu and Kashmir	Kashmir
B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai
B-25609	4/9/2018	Jitesh	Uttar Pradesh	Lucknow
B-25610	4/9/2018	Yogesh	Bihar	Patna
B-25611	4/11/2018	Anita	Kerala	Thiruvananthapuram
B-25612	4/12/2018	Shrichand	Punjab	Chandigarh
B-25613	4/12/2018	Mukesh	Haryana	Chandigarh
B-25614	4/13/2018	Vandana	Himachal Pradesh	Simla
B-25615	4/15/2018	Bhavna	Sikkim	Gangtok
B-25616	4/15/2018	Kanak	Goa	Goa
B-25617	4/17/2018	Sagar	Nagaland	Kohima
B-25618	4/18/2018	Manju	Andhra Pradesh	Hyderabad
B-25619	4/18/2018	Ramesh	Gujarat	Ahmedabad
B-25620	4/20/2018	Sarita	Maharashtra	Pune
B-25621	4/20/2018	Deepak	Madhya Pradesh	Bhopal
B-25622	4/22/2018	Monisha	Rajasthan	Jaipur
B-25623	4/22/2018	Atharv	West Bengal	Kolkata
B-25624	4/22/2018	Vini	Karnataka	Bangalore
B-25625	4/23/2018	Pinky	Jammu and Kashmir	Kashmir
B-25626	4/23/2018	Bhishm	Maharashtra	Mumbai
B-25627	4/23/2018	Hilika	Madhya Pradesh	Indore
B-25628	4/24/2018	Pooja	Bihar	Patna
B-25629	4/24/2018	Hemant	Kerala	Thiruvananthapuram
B-25630	4/24/2018	Sahil	Punjab	Chandigarh

Query Settings

PROPERTIES
Name: List of Orders
List of Orders

APPLIED STEPS

- Source
- Changed Type
- Promoted Headers
- Changed Type1
- Kept First Rows
- Changed Type with Locale
- Capitalized Each Word**

5 COLUMNS, 500 ROWS Column profiling based on top 1000 rows

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Merge the "State" and "City" columns to create a new column named "Location" in the format 'City, State'

Screenshot of Power Query Editor showing the transformation process.

Query Settings:

- Properties:** Name: List of Orders
- Applied Steps:**
 - Source
 - Changed Type
 - Promoted Headers
 - Changed Type1
 - Kept First Rows
 - Changed Type with Locale
 - Capitalized Each Word
 - Inserted Merged Column** (highlighted)

Transform ribbon:

- File, Home, Transform, Add Column, View, Tools, Help
- Conditional Column, Merge Columns, Index Column, Extract, Duplicate Column, Format, Parse, From Text, From Number, From Text & Time
- Statistics, Standard, Scientific, Rounding, Trigonometry, Date, Time, Duration

Queries [3]:

	Order ID	Order Date	CustomerName	State	City	Location
1	B-25601	4/1/2018	Bharat	Gujarat	Ahmedabad	Ahmedabad,Gujarat
2	B-25602	4/1/2018	Pearl	Maharashtra	Pune	Pune,Maharashtra
3	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh
4	B-25604	4/3/2018	Divsha	Rajasthan	Jaipur	Jaipur,Rajasthan
5	B-25605	4/5/2018	Kasheen	West Bengal	Kolkata	Kolkata,West Bengal
6	B-25606	4/6/2018	Hazel	Karnataka	Bangalore	Bangalore,Karnataka
7	B-25607	4/6/2018	Sonakshi	Jammu and Kashmir	Kashmir	Kashmir,Jammu and Kashmir
8	B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu
9	B-25609	4/9/2018	Jitesh	Uttar Pradesh	Lucknow	Lucknow,Uttar Pradesh
10	B-25610	4/9/2018	Yogesh	Bihar	Patna	Patna,Bihar
11	B-25611	4/11/2018	Anita	Kerala	Thiruvananthapuram	Thiruvananthapuram,Kerala
12	B-25612	4/12/2018	Shrichand	Punjab	Chandigarh	Chandigarh,Punjab
13	B-25613	4/12/2018	Mukesh	Haryana	Chandigarh	Chandigarh,Haryana
14	B-25614	4/13/2018	Vandana	Himachal Pradesh	Simla	Simla,Himachal Pradesh
15	B-25615	4/15/2018	Bhavna	Sikkim	Gangtok	Gangtok,Sikkim
16	B-25616	4/15/2018	Kanak	Goa	Goa	Goa,Goa
17	B-25617	4/17/2018	Sagar	Nagaland	Kohima	Kohima,Nagaland
18	B-25618	4/18/2018	Manju	Andhra Pradesh	Hyderabad	Hyderabad,Andhra Pradesh
19	B-25619	4/18/2018	Ramesh	Gujarat	Ahmedabad	Ahmedabad,Gujarat
20	B-25620	4/20/2018	Sarita	Maharashtra	Pune	Pune,Maharashtra
21	B-25621	4/20/2018	Deepak	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh
22	B-25622	4/22/2018	Monisha	Rajasthan	Jaipur	Jaipur,Rajasthan
23	B-25623	4/22/2018	Atharv	West Bengal	Kolkata	Kolkata,West Bengal
24	B-25624	4/22/2018	Vini	Karnataka	Bangalore	Bangalore,Karnataka
25	B-25625	4/23/2018	Pinky	Jammu and Kashmir	Kashmir	Kashmir,Jammu and Kashmir
26	B-25626	4/23/2018	Bhishm	Maharashtra	Mumbai	Mumbai,Maharashtra
27	B-25627	4/23/2018	Hitika	Madhya Pradesh	Indore	Indore,Madhya Pradesh
28	B-25628	4/24/2018	Pooja	Bihar	Patna	Patna,Bihar
29	B-25629	4/24/2018	Hemant	Kerala	Thiruvananthapuram	Thiruvananthapuram,Kerala
30	B-25630	4/24/2018	Sahil	Punjab	Chandigarh	Chandigarh,Punjab

6 COLUMNS, 500 ROWS Column profiling based on top 1000 rows

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Create a new custom column named "Profit Margin" as the percentage of "Profit" divided by "Amount"

The screenshot shows the Power Query Editor interface with a table containing 30 rows of data. The columns are:

- Amount: \$1,275.00, 66.00, 8.00, 80.00, 168.00, 424.00, 2,617.00, 561.00, 119.00, 1,355.00, 24.00, 193.00, 180.00, 116.00, 107.00, 12.00, 38.00, 65.00, 157.00, 75.00, 87.00, 50.00, 1,364.00, 476.00, 257.00, 856.00, 485.00, 25.00, 1,076.00, 107.00
- Profit: -1148, -12, -2, -56, -111, -272, 1151, 212, -5, -60, -30, -166, 5, 16, 36, 1, 18, 17, 5, 0, 4, 15, -1864, 0, 23, 385, 29, -5, -38
- Quantity: 123
- Category: Furniture, Clothing, Clothing, Electronics, Electronics, Electronics, Electronics, Clothing, Clothing, Clothing, Furniture, Clothing, Furniture, Clothing, Furniture, Clothing, Electronics, Electronics, Clothing, Clothing, Electronics, Printers
- Sub-Category: Bookcases, Stole, Hankerchief, Electronic Games, Phones, Phones, Phones, Saree, Saree, Trouzers, Chairs, Saree, Trouzers, Stole, Stole, Hankerchief, Kurti, T-shirt, Saree, Saree, Shirt, Leggings, Tables, Chairs, Hankerchief, Printers, Electronic Games, Saree, Printers, Clothin
- % Profit Margin: -90.04%, -18.18%, -25.00%, -70.00%, -66.07%, -64.15%, 43.98%, 37.79%, -4.20%, -4.43%, -125.00%, -86.01%, 2.78%, 13.79%, 33.64%, 8.33%, 47.37%, 26.15%, 3.18%, 0.00%, 4.60%, 0.00%, 8.95%, 44.98%, 5.98%, -20.00%, -3.53%

Query Settings pane on the right shows the applied step 'Changed Type1' selected.

7 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

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Add a new conditional column named "Profit Status" based on the values in the "Profit" column. The conditions are as follows: if the profit is less than 0, the label should be "Loss"; if the profit equals 0, the label should be "Break-Even"; and if the profit is greater than 0, the label should be "Profit"

The screenshot shows the Power Query Editor interface with the following details:

- File** tab selected.
- Transform** ribbon tab selected.
- Conditional Column** button is highlighted in the ribbon.
- Queries [3]** pane shows three queries: List of Orders, Sales target, and Order Details (selected).
- Table** pane displays a table with columns: Profit, Quantity, Category, Sub-Category, Profit Margin, and Profile Status.
- Applied Steps** pane shows the following steps:
 - Source
 - Promoted Headers
 - Changed Type
 - Added Custom
 - Changed Type1
 - Added Conditional Column (highlighted)
- Properties** pane shows the name of the selected step is "Order Details".
- Query Settings** pane is visible on the right.
- Code** pane at the bottom shows the M code: `= Table.AddColumn(#"Changed Type1", "Profile Status", each if [Profit] < 0 then "Loss" else if [Profit] = 0 then "Break-Even" else "Profit")`

Merging Data (Joins):

Merge the "List of Orders" and "Order Details" tables into a new single table named "Orders Data" based on the "Order ID" relationship.

The screenshot shows the Microsoft Power Query Editor interface. The ribbon at the top includes File, Home, Transform, Add Column, View, Tools, and Help. The Home tab is selected. The toolbar below has various icons for managing queries, such as Close & Apply, New Source, Refresh, Manage Parameters, Export query results, Properties, Advanced Editor, Choose Columns, Remove Columns, Keep Rows, Remove Rows, Split Column, Group By, Sort, Replace Values, and Combine.

The main area displays a table titled "Orders Data" with 13 columns and 999+ rows. The columns are: Order ID, Order Date, CustomerName, State, City, Location, and Order Details. The table contains data from April 2018, showing various locations across India like Ahmedabad, Gujarat; Mumbai, Maharashtra; and Bhopal, Madhya Pradesh.

On the right side, there are three sections: "Query Settings" (with Name set to "Orders Data"), "PROPERTIES" (with Source set to "Expanded Order Details"), and "APPLIED STEPS" (listing the step "Expanded Order Details").

At the bottom left, it says "13 COLUMNS, 999+ ROWS" and "Column profiling based on top 1000 rows". At the bottom right, it says "PREVIEW DOWNLOADED AT 11:04 PM".

	Order ID	Order Date	CustomerName	State	City	Location	Order Details
1	B-25601	4/1/2018	Bharat	Gujarat	Ahmedabad	Ahmedabad,Gujarat	
2	B-25601	4/1/2018	Bharat	Gujarat	Ahmedabad	Ahmedabad,Gujarat	
3	B-25601	4/1/2018	Bharat	Gujarat	Ahmedabad	Ahmedabad,Gujarat	
4	B-25601	4/1/2018	Bharat	Gujarat	Ahmedabad	Ahmedabad,Gujarat	
5	B-25602	4/1/2018	Pearl	Maharashtra	Pune	Pune,Maharashtra	
6	B-25602	4/1/2018	Pearl	Maharashtra	Pune	Pune,Maharashtra	
7	B-25602	4/1/2018	Pearl	Maharashtra	Pune	Pune,Maharashtra	
8	B-25602	4/1/2018	Pearl	Maharashtra	Pune	Pune,Maharashtra	
9	B-25602	4/1/2018	Pearl	Maharashtra	Pune	Pune,Maharashtra	
10	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
11	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
12	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
13	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
14	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
15	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
16	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
17	B-25603	4/3/2018	Jahan	Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh	
18	B-25604	4/3/2018	Divsha	Rajasthan	Jaipur	Jaipur,Rajasthan	
19	B-25604	4/3/2018	Divsha	Rajasthan	Jaipur	Jaipur,Rajasthan	
20	B-25605	4/5/2018	Kasheen	West Bengal	Kolkata	Kolkata,West Bengal	
21	B-25606	4/6/2018	Hazel	Karnataka	Bangalore	Bangalore,Karnataka	
22	B-25607	4/6/2018	Sonakshi	Jammu and Kashmir	Kashmir	Kashmir,Jammu and Kashmir	
23	B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
24	B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
25	B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
26	B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
27	B-25609	4/9/2018	Jitesh	Uttar Pradesh	Lucknow	Lucknow,Uttar Pradesh	
28	B-25609	4/9/2018	Jitesh	Uttar Pradesh	Lucknow	Lucknow,Uttar Pradesh	
29	B-25610	4/9/2018	Yogesh	Bihar	Patna	Patna,Bihar	
30	B-25610	4/9/2018	Yogesh	Bihar	Patna	Patna,Bihar	

Handling Missing Data & Duplicate Data:

Identify missing values in the data and determine a strategy to address them.

Check for duplicate rows and define a strategy to handle duplicates.

(No empty value check by column quality)

The screenshot shows the Microsoft Power Query Editor interface. The ribbon at the top includes File, Home, Transform, Add Column, View, Tools, and Help. The Home tab is selected. The main area displays a table titled "Table.Distinct#" with columns: Order ID, Order Date, CustomerName, State, City, and Location. A status bar at the bottom indicates "6 COLUMNS, 500 ROWS" and "Column profiling based on top 1000 rows".

Query Settings pane on the right shows the query name "List of Orders" and the applied steps:

- Source
- Changed Type
- Promoted Headers
- Changed Type1
- Kept First Rows
- Changed Type with Locale
- Capitalized Each Word
- Inserted Merged Column
- Removed Duplicates** (highlighted)

PREVIEW DOWNLOADED AT 11:11 PM

Sorting and Filtering Data:

In the ‘Orders Data’ table, utilize sorting and filtering techniques on columns like Order Date, State or Category to analyze data based on specific criteria:

- Sort the orders by Order Date in descending order to analyze recent trends.
- Filter the orders to focus only on a specific state (e.g., Tamil Nadu) for regional analysis.

The screenshot shows the Microsoft Power Query Editor interface. On the left, the 'Queries [4]' pane lists four queries: 'List of Orders', 'Sales target', 'Order Details', and 'Orders Data'. The 'Orders Data' query is selected. The main area displays a table with 13 columns and 25 rows. The columns are labeled: Order ID, Order Date, CustomerName, State, City, Location, and Order Detail. A formula bar at the top shows the query formula: = Table.SelectRows(#"Sorted Rows", each ([State] = "Tamil Nadu")). To the right of the table is a 'Query Settings' pane. Under 'PROPERTIES', the 'Name' is set to 'Orders Data'. Under 'APPLIED STEPS', there are steps for 'Source', 'Expanded Order Details', 'Removed Duplicates', 'Sorted Rows', and 'Filtered Rows'. The 'Filtered Rows' step is currently selected. At the bottom of the editor, it says '13 COLUMNS, 25 ROWS' and 'Column profiling based on top 1000 rows'.

Order ID	Order Date	CustomerName	State	City	Location	Order Detail
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26081	3/22/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26018	2/14/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26018	2/14/2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26008	2/9/2019	Kalyani	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26008	2/9/2019	Kalyani	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26008	2/9/2019	Kalyani	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26008	2/9/2019	Kalyani	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-26008	2/9/2019	Kalyani	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25860	11/15/2018	Akshay	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25788	9/21/2018	Dinesh	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25716	7/11/2018	Surabhi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	6/23/2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	6/23/2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	6/23/2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	6/23/2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	6/23/2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	6/23/2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25698	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	
B-25608	4/8/2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	

Grouping and Aggregating Data:

Duplicate the “Order Details” table and calculate the count of each Order ID, average profit by Category or total amount by Sub-Category.

Duplicate the “Sales Target” table and aggregate the total target amount by Month of Order Date.

The screenshot shows the Power Query Editor interface with the following details:

- Query Settings:** Name is set to "Order Details Grouping".
- Applied Steps:** Shows steps like "Promoted Headers", "Changed Type", and "Grouped Rows".
- Table Data:** A grouped table with 17 rows. The columns are "Sub-Category", "Order Count", "1.2 Avg By Category", and "1.2 Tot Amt By Sub-Category".

Sub-Category	Order Count	1.2 Avg By Category	1.2 Tot Amt By Sub-Category
Bookcases	79	61.87341772	56861
Ston	192	13.328125	18546
Hankiechief	198	10.5959596	14608
Electronic Games	79	-15.64556962	39168
Phones	83	26.59036145	46119
Saree	210	1.676190476	53511
Trousers	39	73	30039
Chairs	74	7.797297297	34222
Kurti	47	3.85106383	3361
T-shirt	77	19.48051948	7382
Shirt	69	16.39130435	7555
Leggings	53	4.905660377	2106
Tables	17	-235.9411765	22614
Printers	74	80.59459459	58252
Accessories	72	49.43055556	21728
Furnishings	73	11.56164384	13484
Skirt	64	3.671875	1946

The screenshot shows the Power Query Editor interface with the following details:

- Query Settings:** Name is set to "Sales target Grouping".
- Applied Steps:** Shows steps like "Promoted Headers", "Changed Type", and "Grouped Rows".
- Table Data:** A grouped table with 12 rows. The columns are "Month of Order Date" and "1.2 Target Amt".

Month of Order Date	1.2 Target Amt
4/18/2026	31400
5/18/2026	31500
6/18/2026	31600
7/18/2026	33800
8/18/2026	33900
9/18/2026	34000
10/18/2026	36100
11/18/2026	36300
12/18/2026	36400
1/19/2026	43500
2/19/2026	43600
3/19/2026	43800

Data



Search

- > List of Orders
- > Order Details
- > Order Details Grouping
- > Orders Data
- > Sales target
- > Sales target Grouping

Data Modeling:

Establish a relationship between the “List of Orders” and “Order Details” tables using the ‘Order ID’ column.

Build a relationship between the “Order Details” and “Sales Target” tables based on the ‘Category’ column. Click "Manage relationships" and ensure this relationship is active.

