

Power BI Assignment :

IMPORT DATA:

1. 3 Dataset has been loaded in PowerBI
2. 3 Dataset has been transformed to Power Query Editor.

The screenshot shows the Power BI Desktop interface with the 'List of Orders' dataset loaded. The Data view displays a table with columns: Order ID, Date, CustomerName, State, and City. The table contains 500 rows of order data. The ribbon at the top has tabs for Home, Help, and Table tools. The Home tab is selected. The ribbon also includes sections for File, Get data, Data, Transform, Manage relationships, Calculations, Manage roles, Sensitivity, and Publish. A search bar is at the top right. The status bar at the bottom right shows the date as 28-07-2025 and the time as 19:22.

DATA TRANSFORMATION:

- 1.List of Orders has been restricted to 500 Rows.
- 2.Order Date Column has been set to Data type 'DATE'.

The screenshot shows the Power Query Editor with the 'List of Orders' query selected. The ribbon at the top includes File, Home, Transform, Add Column, View, Tools, and Help. The Home tab is selected. The ribbon also includes sections for Close & Apply, New Query, Data Sources, Parameters, Query, Manage Columns, Reduce Rows, Sort, and Transform. The Transform tab is selected. The main area shows a table with columns: Order ID, Order Date, CustomerName, State, and City. The 'Order Date' column is highlighted. The 'Transform' ribbon tab shows various options like Data Type: Date, Use First Row as Headers, Keep, Remove, Rows, Split, Group, Replace Values, and Sort. The 'APPLIED STEPS' pane on the right shows the step 'Order Date as DATE'. The status bar at the bottom right shows the date as 28-07-2025 and the time as 19:40.

3.Data type of TARGET and AMOUNT has been changed to FIXED Decimal Number.

The screenshot shows the Power BI Desktop interface with two tables loaded:

- picture** table (left):

	Amount	Profit	Quantity	Category
	561.00	212	3	Clothin
	119.00	-5	8	Clothin
	193.00	-166	3	Clothin
	157.00	5	9	Clothin
	75.00	0	7	Clothin
	25.00	-5	4	Clothin
	43.00	0	3	Clothin
	160.00	-59	2	Clothin
	1603.00	0	9	Clothin
	353.00	90	8	Clothin
	534.00	0	3	Clothin
	149.00	-87	4	Clothin
	635.00	-349	5	Clothin
	24.00	-9	4	Clothin
	711.00	-8	4	Clothin
	382.00	30	3	Clothin
	637.00	113	5	Clothin
	122.00	-47	4	Clothin
	20.00	-8	2	Clothin
	42.00	-6	4	Clothin
	55.00	-26	4	Clothin

(1,500 rows) Column: Amount (585 distinct values)
- Target** table (right):

Date	Category	Target
April 2018	Furniture	10400.00
May 2018	Furniture	10500.00
June 2018	Furniture	10600.00
July 2018	Furniture	10800.00
August 2018	Furniture	10900.00
September 2018	Furniture	11000.00
October 2018	Furniture	11100.00
November 2018	Furniture	11300.00
December 2018	Furniture	11400.00
January 2019	Furniture	11500.00
February 2019	Furniture	11600.00
March 2019	Furniture	11800.00
April 2018	Clothing	12000.00
May 2018	Clothing	12000.00
June 2018	Clothing	12000.00
July 2018	Clothing	14000.00
August 2018	Clothing	14000.00
September 2018	Clothing	14000.00
October 2018	Clothing	16000.00
November 2018	Clothing	16000.00
December 2018	Clothing	16000.00

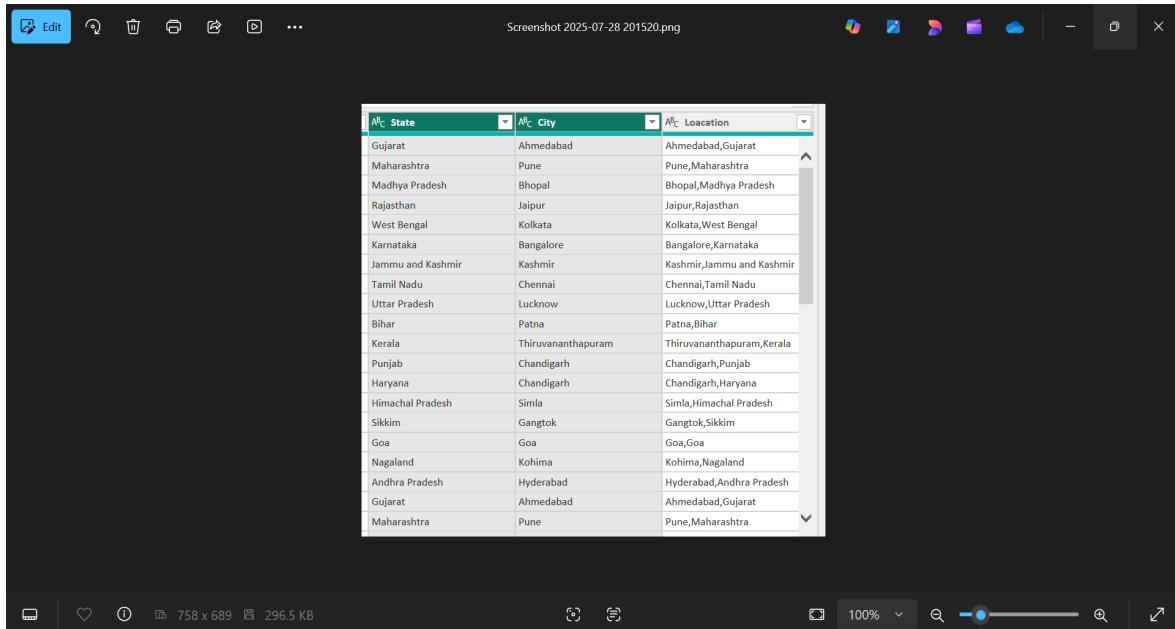
4.Customer Name is in Proper Case.

5.Merge 'STATE and CITY' into LOCATION AS CITY,STATE.

Power BI Assignment :

IMPORT DATA:

1. 3 Dataset has been loaded in PowerBI
2. 3 Dataset has been transformed to Power Query Editor.



The screenshot shows a Microsoft Excel spreadsheet with three columns: State, City, and Location. The data lists various Indian states and their capital cities, along with the state abbreviations. The Location column contains the full names of the cities separated by commas.

A ^{bc} _State	A ^{bc} _City	A ^{bc} _Location
Gujarat	Ahmedabad	Ahmedabad,Gujarat
Maharashtra	Pune	Pune,Maharashtra
Madhya Pradesh	Bhopal	Bhopal,Madhya Pradesh
Rajasthan	Jaipur	Jaipur,Rajasthan
West Bengal	Kolkata	Kolkata,West Bengal
Karnataka	Bangalore	Bangalore,Karnataka
Jammu and Kashmir	Kashmir	Kashmir,Jammu and Kashmir
Tamil Nadu	Chennai	Chennai,Tamil Nadu
Uttar Pradesh	Lucknow	Lucknow,Uttar Pradesh
Bihar	Patna	Patna,Bihar
Kerala	Thiruvananthapuram	Thiruvananthapuram,Kerala
Punjab	Chandigarh	Chandigarh,Punjab
Haryana	Chandigarh	Chandigarh,Haryana
Himachal Pradesh	Simla	Simla,Himachal Pradesh
Sikkim	Gangtok	Gangtok,Sikkim
Goa	Goa	Goa,Goa
Nagaland	Kohima	Kohima,Nagaland
Andhra Pradesh	Hyderabad	Hyderabad,Andhra Pradesh
Gujarat	Ahmedabad	Ahmedabad,Gujarat
Maharashtra	Pune	Pune,Maharashtra

7.A NEW COLUMN has been created as PROFIT STATUS.

Amount	Profit	Quantity	Category	Sub-Category	Profit Margin	Profit Status
561.00	21200%	3	Clothing	Saree	37.7896613190731	Profit
119.00	-500%	8	Clothing	Saree	-4.20168067226891	Loss
193.00	-16600%	3	Clothing	Saree	-86.0103626943005	Loss
157.00	500%	9	Clothing	Saree	3.18471337579618	Profit
75.00	0%	7	Clothing	Saree	0	Break-Even
25.00	-500%	4	Clothing	Saree	-20	Loss
43.00	0%	3	Clothing	Saree	0	Break-Even
160.00	-5900%	2	Clothing	Saree	-36.875	Loss
1603.00	0%	9	Clothing	Saree	0	Break-Even
353.00	9000%	8	Clothing	Saree	25.4957507082153	Profit
534.00	0%	3	Clothing	Saree	0	Break-Even
149.00	-8700%	4	Clothing	Saree	-58.3892617449664	Loss
635.00	-34900%	5	Clothing	Saree	-54.9606299212598	Loss
24.00	-900%	4	Clothing	Saree	-37.5	Loss
711.00	-800%	4	Clothing	Saree	-1.12517580872011	Loss
382.00	3000%	3	Clothing	Saree	7.85340314136126	Profit
637.00	11300%	5	Clothing	Saree	17.7394034536892	Profit
122.00	-4700%	4	Clothing	Saree	-38.5245901639344	Loss
20.00	-800%	2	Clothing	Saree	-40	Loss
42.00	-600%	4	Clothing	Saree	-14.2857142857143	Loss

1.LIST OF ORDERS and ORDER DETAILS has been Merged and created as new Single table as ORDER DATA

Queries [4]

	Count	Order Details.Profit	Order Details.Quantity	Order Details.Category	Order Details.Sub-Category
1	1275	-1148		7 Furniture	Bookcases
2	66	-12		5 Clothing	Stole
3	8	-2		3 Clothing	Hankerchief
4	80	-56		4 Electronics	Electronic Games
5	168	-111		2 Electronics	Phones
6	424	-272		5 Electronics	Phones
7	2617	1151		4 Electronics	Phones
8	561	212		3 Clothing	Saree
9	119	-5		8 Clothing	Saree
10	1355	-60		5 Clothing	Trousers
11	24	-30		1 Furniture	Chairs
12	193	-166		3 Clothing	Saree
13	180	5		3 Clothing	Trousers
14	116	16		4 Clothing	Stole
15	107	36		6 Clothing	Stole
16	12	1		2 Clothing	Hankerchief
17	38	18		1 Clothing	Kurti
18	65	17		2 Clothing	T-shirt
19	157	5		9 Clothing	Saree
20	75	0		7 Clothing	Saree
21	--	--	--	--	--

HANDLING MISSING DATA AND DUPLICATE DATA:

- 1.NO missing data in 3 DataSet.
- 2.NO Duplicate data in 3 Dataset.

SORTING AND FILTERING:

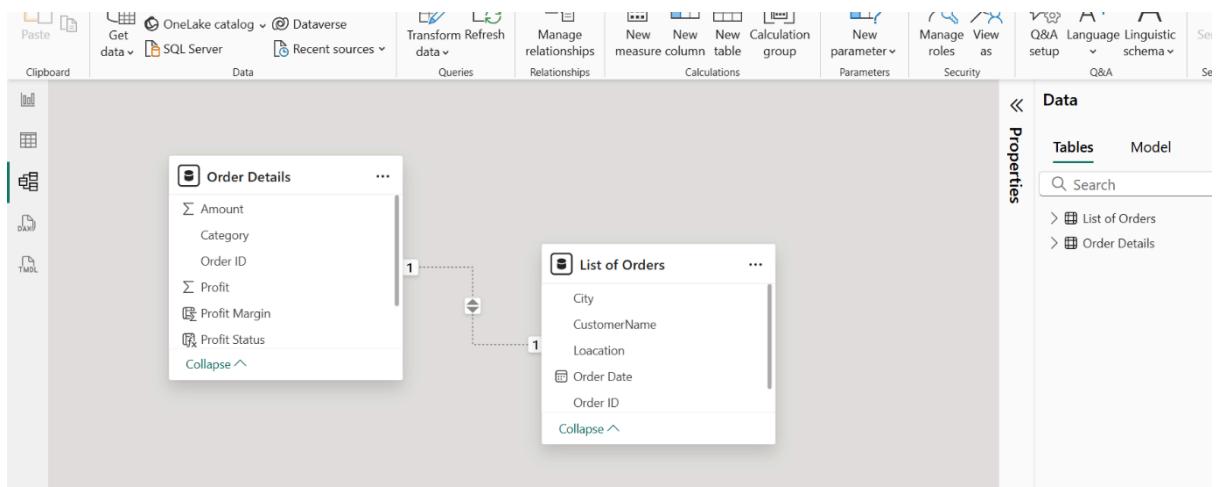
1.SORTING from descending to Ascending has been done in ORDER DATE

2.FILTERING has been done in STATE (TAMILNADU).

Order ID	Order Date	CustomerName	State	City	Location	Amount	Profit	Quantity	Category	Status
B-26081	22 March 2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	359	-338	5	Furniture	Booked
B-26018	14 February 2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	326	107	3	Furniture	For Review
B-26008	09 February 2019	Kalyani	Tamil Nadu	Chennai	Chennai,Tamil Nadu	22	4	1	Clothing	Stocked
B-25860	15 November 2018	Akshay	Tamil Nadu	Chennai	Chennai,Tamil Nadu	112	24	3	Clothing	Kept
B-25788	21 September 2018	Dinesh	Tamil Nadu	Chennai	Chennai,Tamil Nadu	12	3	1	Clothing	Stocked
B-25716	11 July 2018	Surabhi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	58	0	4	Clothing	Safe
B-25698	23 June 2018	Amisha	Tamil Nadu	Chennai	Chennai,Tamil Nadu	87	-83	5	Clothing	Kept
B-25608	08 April 2018	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	1364	-1864	5	Furniture	Safe

DATA MODELING:

1.ORDER ID is used as common column for relationship between LIST Of ORDERS and ORDER DETAILS.



2.MANAGE RELATIONSHIP has been used to build relationship between SALES TARGET and ORDER DETAILS using Category as common column.

Manage relationships

The screenshot shows the 'Relationships' tab in the Power BI ribbon. A relationship is defined between 'Order Details (Category)' and 'Sales target (Category)'. The 'From' table is 'Order Details' and the 'To' table is 'Sales target'. Both columns are marked as 'Category'. The relationship type is a many-to-many relationship (M2M), indicated by the asterisks (*). The status is 'Active'.

From: table (column) Relationship To: table (column) Status

Order Details (Category) *—* Sales target (Category) Active

Grouping and Aggregation Data:

1. Duplicate the Order Details table and calculate the count of each order ID, Average profit by Category.

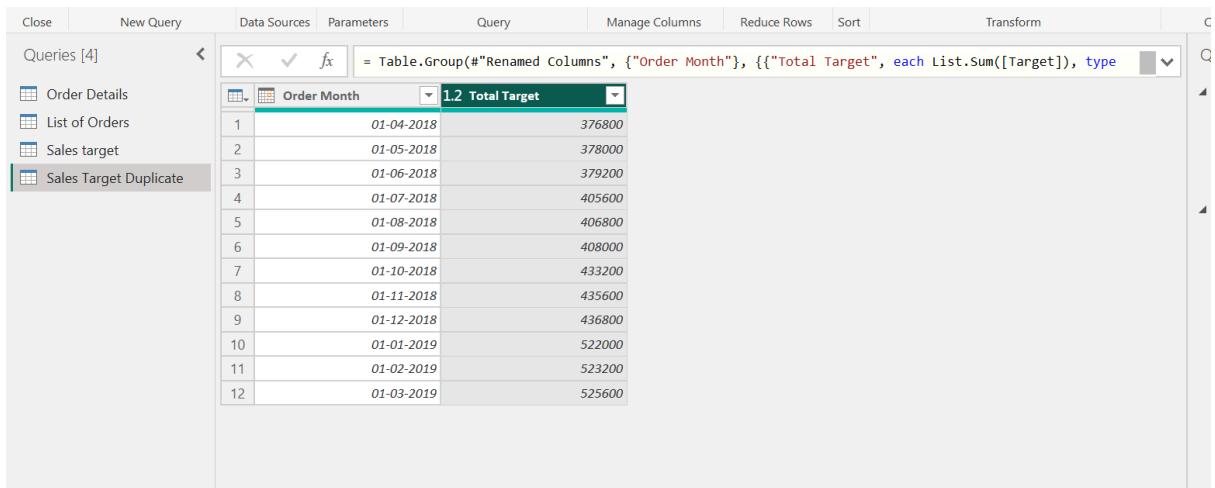
The screenshot shows the Power BI Query Editor with the following query:

```
= Table.Group(#"Removed Duplicates", {"Category"}, {"Order Details Duplicate", each List.Average(
```

The resulting table has three rows:

Category	1.2 Order Details Duplicate
Furniture	20.44318182
Electronics	-19.37894737
Clothing	15.29022082

2. Duplicate the SALES TARGET and Aggregate the total target amount by month of order date.



The screenshot shows the Power BI Query Editor interface. The top navigation bar includes Close, New Query, Data Sources, Parameters, Query, Manage Columns, Reduce Rows, Sort, Transform, and a search bar. Below the navigation bar, the 'Queries [4]' pane lists four queries: Order Details, List of Orders, Sales target, and Sales Target Duplicate. The Sales Target Duplicate query is currently selected. The main workspace displays a table with two columns: 'Order Month' and '1.2 Total Target'. The table contains 12 rows, each representing a month from April 2018 to March 2019, with the corresponding total target value. The formula bar at the top of the table shows the M code used to generate the table.

	Order Month	1.2 Total Target
1	01-04-2018	376800
2	01-05-2018	378000
3	01-06-2018	379200
4	01-07-2018	405600
5	01-08-2018	406800
6	01-09-2018	408000
7	01-10-2018	433200
8	01-11-2018	435600
9	01-12-2018	436800
10	01-01-2019	522000
11	01-02-2019	523200
12	01-03-2019	525600

6. New Column has been Created as Profit Margin.

Profit Margin = DIVIDE([PROFIT],[Amount])*100

Amount	Profit	Quantity	Category	Sub-Category	Profit Margin
561.00	21200%	3	Clothing	Saree	37.7896613190731
119.00	-500%	8	Clothing	Saree	-4.20168067226891
193.00	-16600%	3	Clothing	Saree	-86.0103626943005
157.00	500%	9	Clothing	Saree	3.18471337579618
75.00	0%	7	Clothing	Saree	0
25.00	-500%	4	Clothing	Saree	-20
43.00	0%	3	Clothing	Saree	0
160.00	-5900%	2	Clothing	Saree	-36.875
1603.00	0%	9	Clothing	Saree	0
353.00	9000%	8	Clothing	Saree	25.4957507082153
534.00	0%	3	Clothing	Saree	0
149.00	-8700%	4	Clothing	Saree	-58.3892617449664
635.00	-34900%	5	Clothing	Saree	-54.9606299212598
24.00	-900%	4	Clothing	Saree	-37.5
711.00	-800%	4	Clothing	Saree	-1.12517580872011
382.00	3000%	3	Clothing	Saree	7.85340314136126
637.00	11300%	5	Clothing	Saree	17.7394034536892
122.00	-4700%	4	Clothing	Saree	-38.5245901639344
20.00	-800%	2	Clothing	Saree	-40
42.00	-600%	4	Clothing	Saree	-14.2857142857143
55.00	-2600%	4	Clothing	Saree	-47.2727272727273

