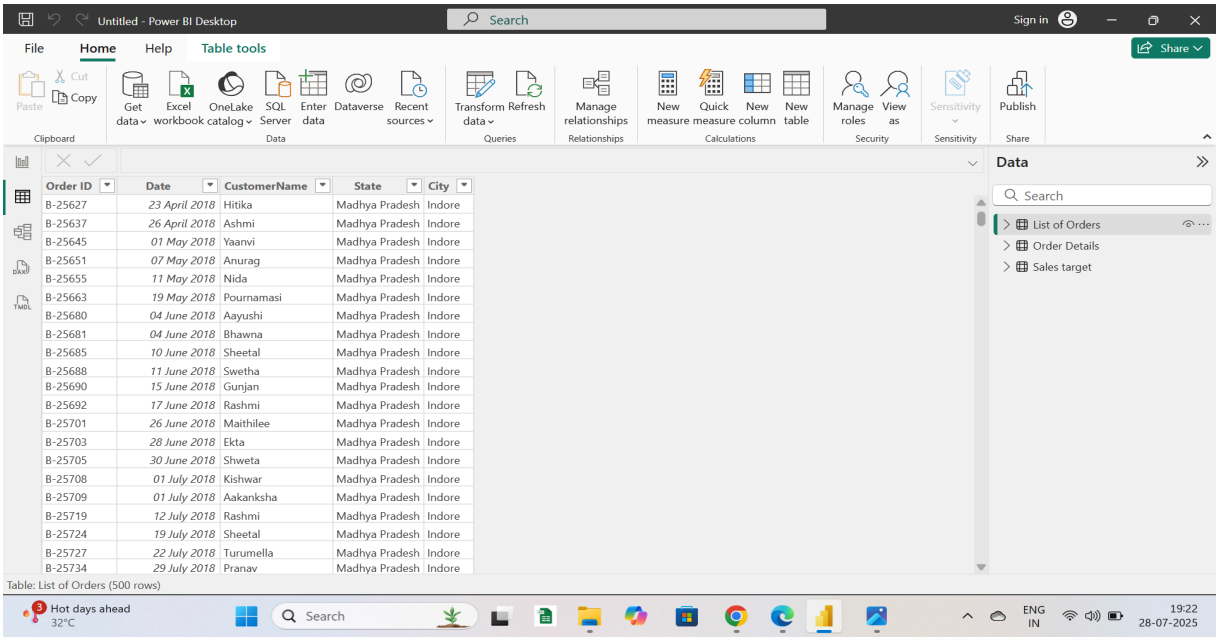
Power BI Assignment :

IMPORT DATA:

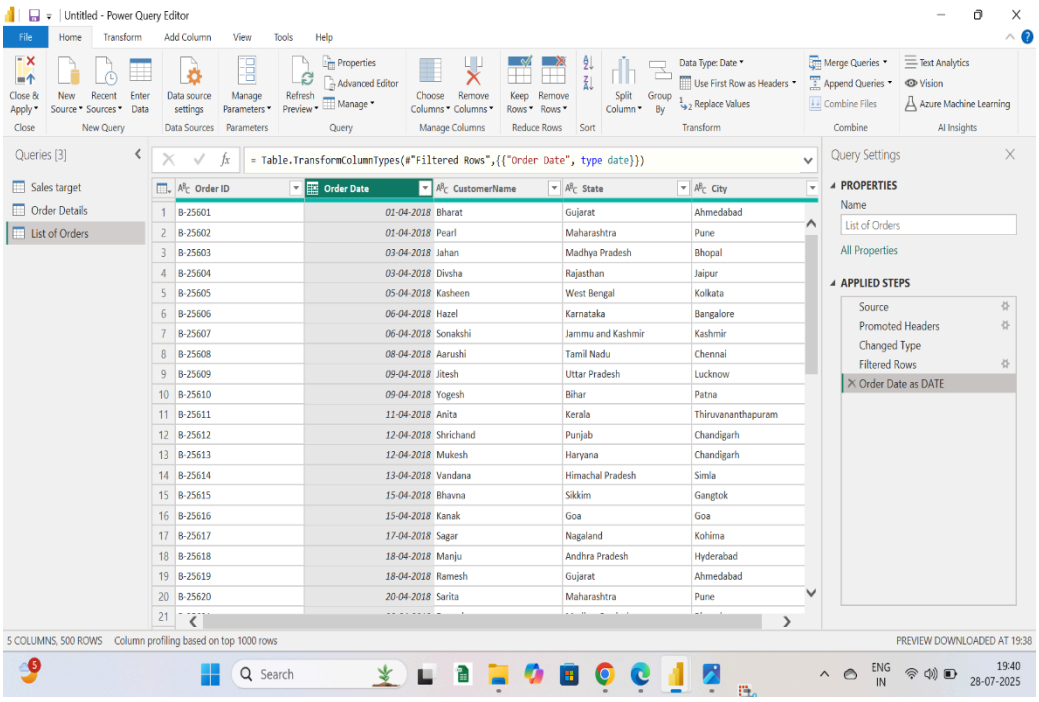
1. 3 Dataset has been loaded in PowerBI
2. 3 Dataset has been transformed to Power Query Editor.



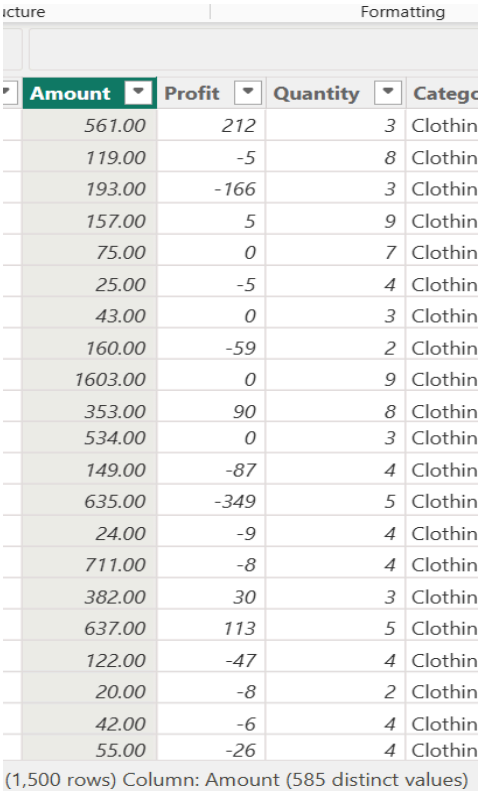
DATA TRANSFORMATION:

1.List of Orders has been restricted to 500 Rows.

2.Order Date Column has been set to Data type ‘DATE’.



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



Amount	Profit	Quantity	Categc
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)

Date	Category	Target
ɔril 2018	Furniture	10400.00
lay 2018	Furniture	10500.00
ıne 2018	Furniture	10600.00
uly 2018	Furniture	10800.00
ust 2018	Furniture	10900.00
ber 2018	Furniture	11000.00
ber 2018	Furniture	11100.00
ber 2018	Furniture	11300.00
ber 2018	Furniture	11400.00
ary 2019	Furniture	11500.00
ary 2019	Furniture	11600.00
rch 2019	Furniture	11800.00
ɔril 2018	Clothing	12000.00
lay 2018	Clothing	12000.00
ıne 2018	Clothing	12000.00
uly 2018	Clothing	14000.00
ust 2018	Clothing	14000.00
ber 2018	Clothing	14000.00
ber 2018	Clothing	16000.00
ber 2018	Clothing	16000.00
ber 2018	Clothing	16000.00

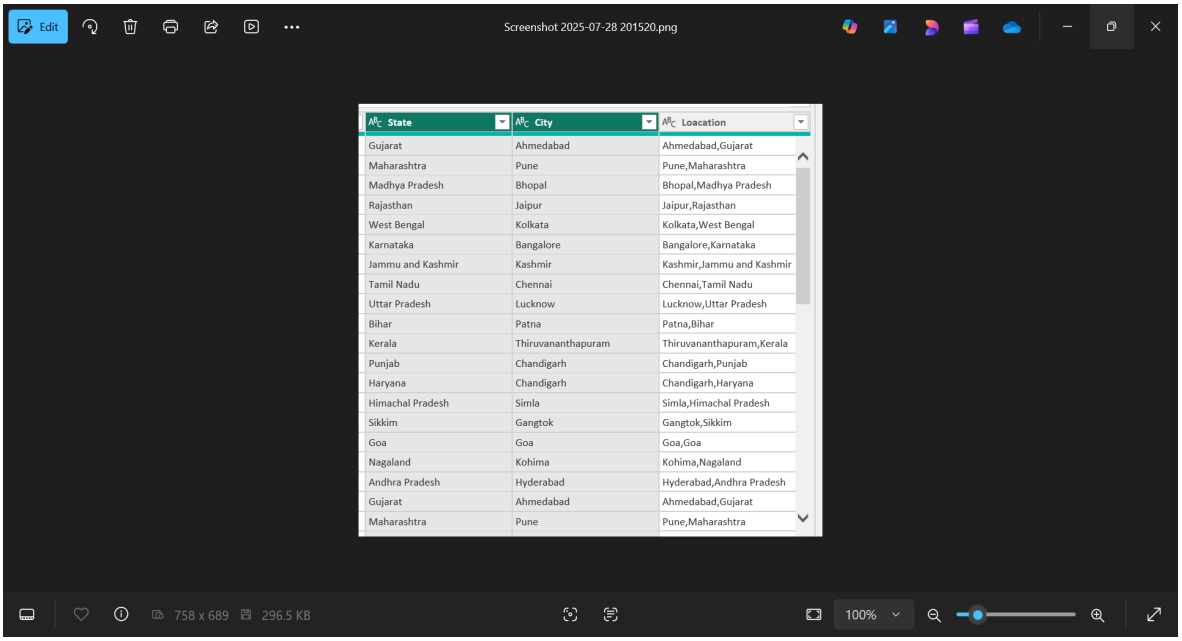
4.Customer Name is in Proper Case.

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.



State	City	Loacation
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

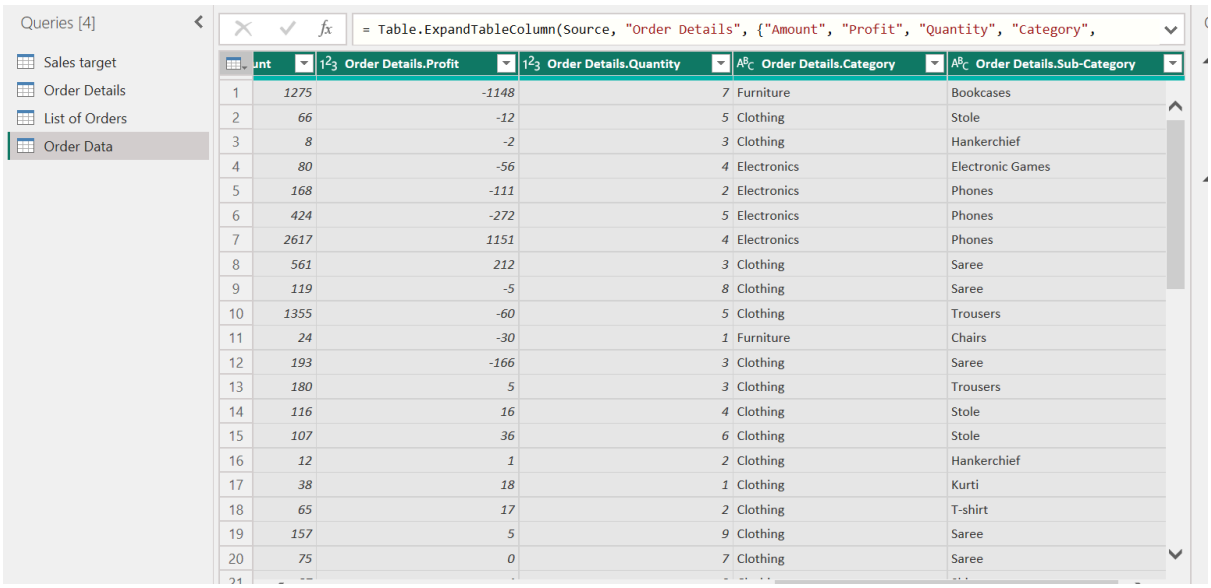
7.A NEW COLUMN has been created as PROFIT STATUS.

re | Formatting | Properties | Sort | Groups | Relationships | Cal

```
1 Profit Status = if('Order Details'[Profit]<0,"Loss",if('Order Details'[Profit]=0,"Break-Even",if('Order Details'[Profit]>0,
  "Profit")))
```

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]

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

```
= Table.ExpandTableColumn(Source, "Order Details", {"Amount", "Profit", "Quantity", "Category",
```

	ınt	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

HANDLING MISSING DATA AND DUPLICATE DATA:

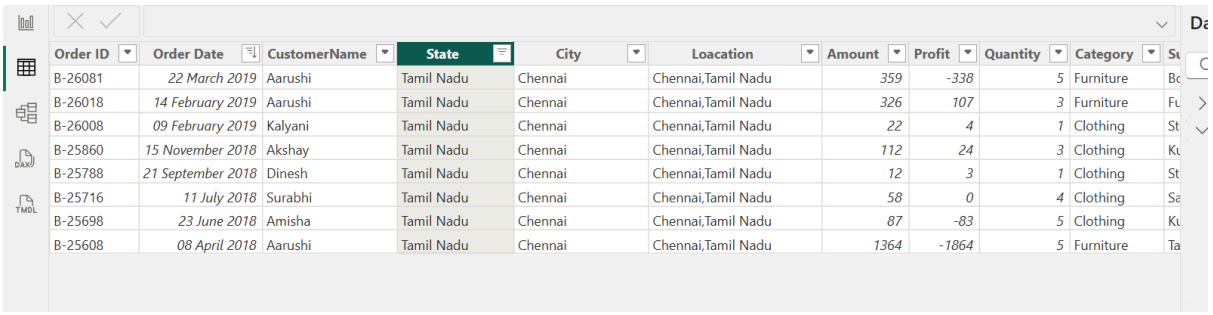
1.NO missing data in 3 DataSet.

2.NO Duplicate data in 3 Dataset.

SORTING AND FILTERING:

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

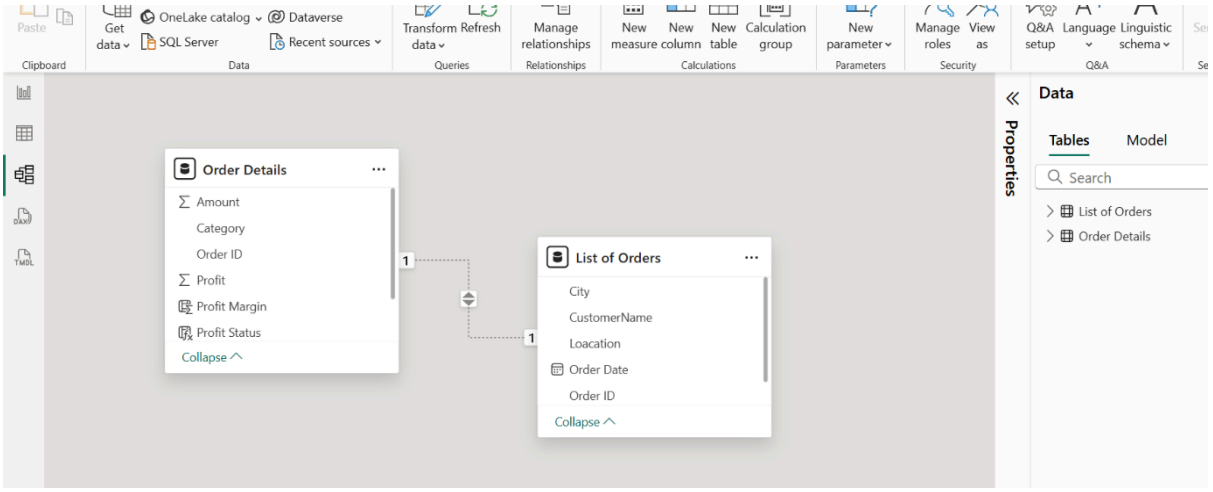
2.FILTERING has been done in STATE (TAMILNADU).



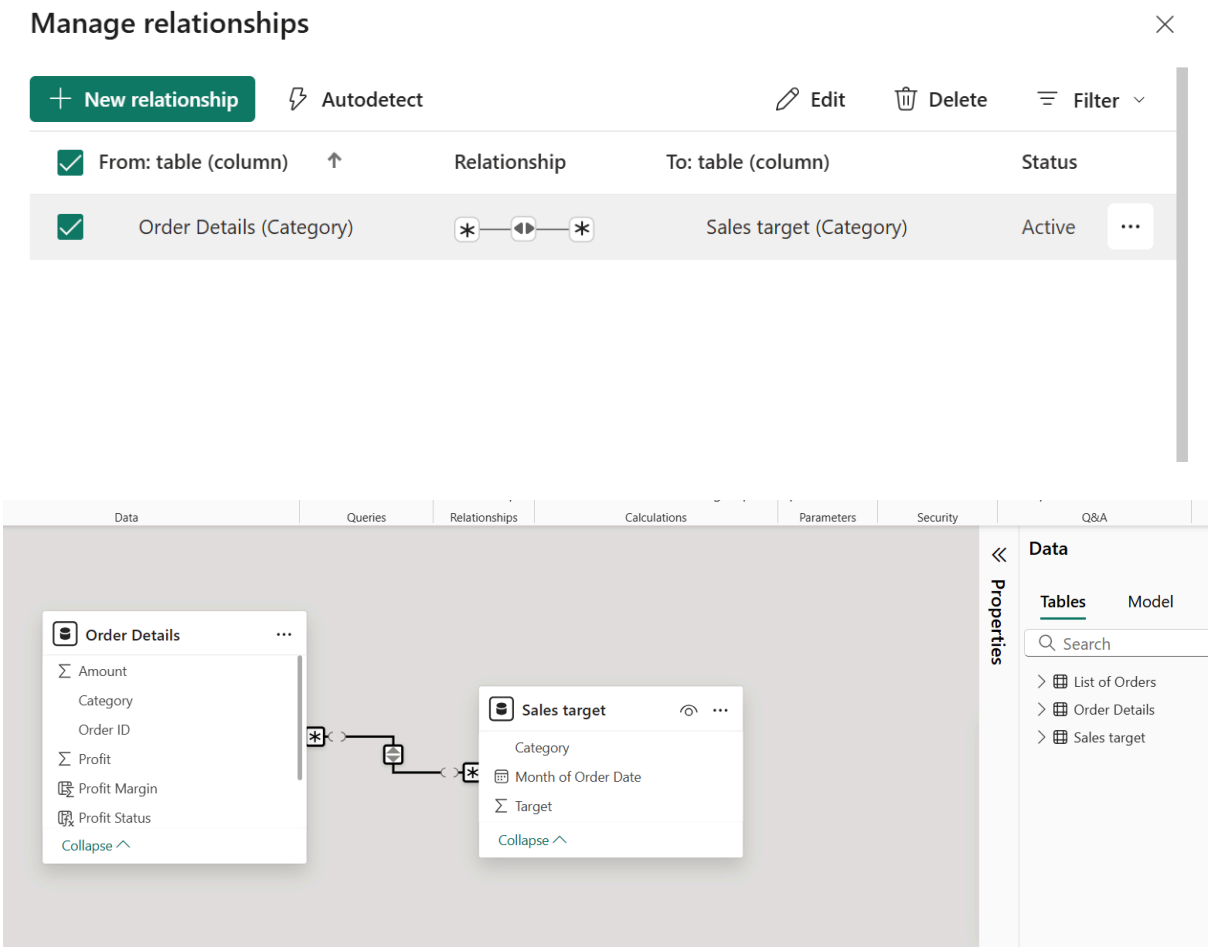
Order ID	Order Date	CustomerName	State	City	Loacation	Amount	Profit	Quantity	Category
B-26081	22 March 2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	359	-338	5	Furniture
B-26018	14 February 2019	Aarushi	Tamil Nadu	Chennai	Chennai,Tamil Nadu	326	107	3	Furniture
B-26008	09 February 2019	Kalyani	Tamil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

DATA MODELING:

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

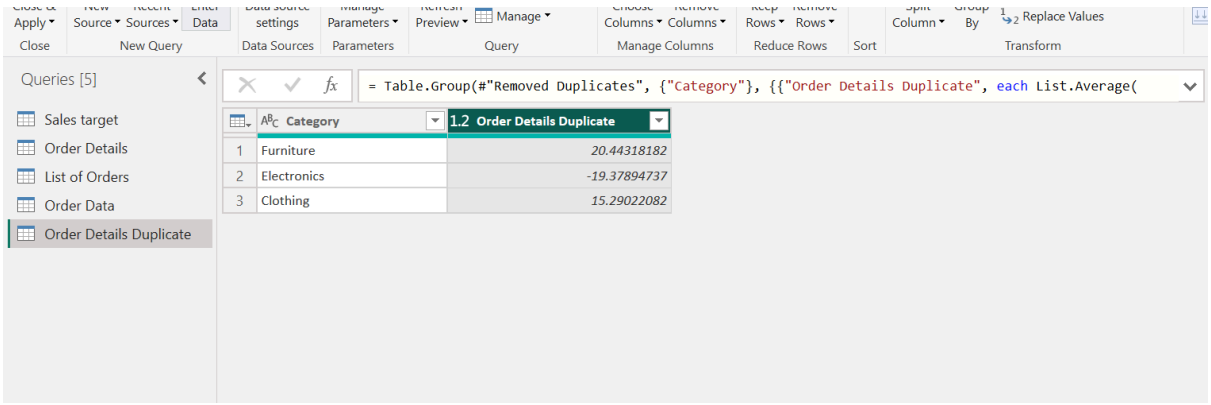


2.MANAGE RELATIONSHIP has been used to build relationship between SALES TARGET and ORDER DETAILS using Category as common column.

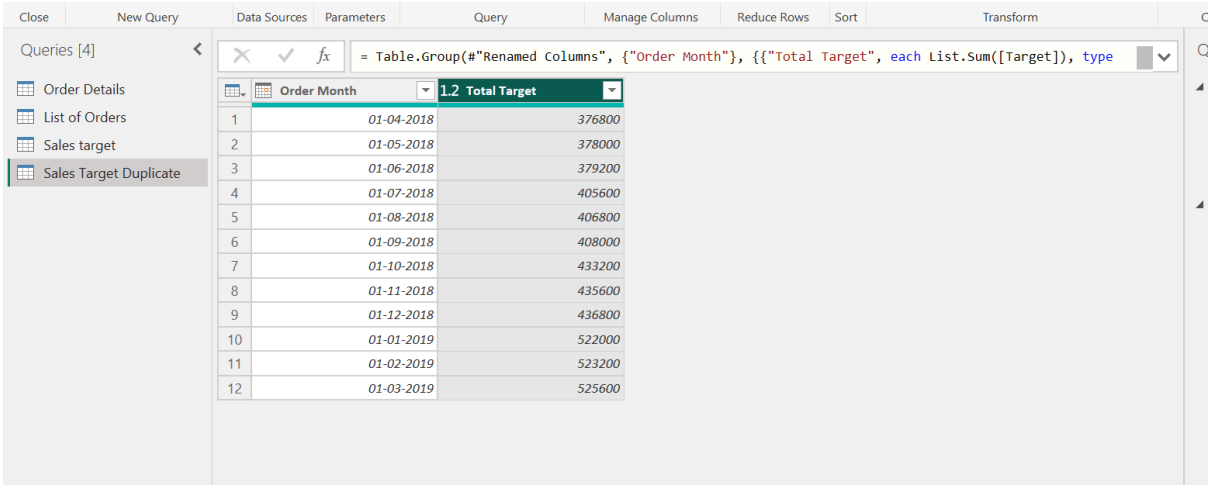


Grouping and Aggregation Data:

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



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



	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
```

mount	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
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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