• Round the 'Price' column in the Product dataset to the nearest integer for simplicity.

STEPS:

- 1. Going to Transform Data > Power Query Editor.
- 2. Selecting the Product table.
- 3. Selecting the Price column \rightarrow Right-click \rightarrow Round \rightarrow Round to nearest.
- Spliting the 'Customer' column in the Customer table into two columns: 'FirstName' and 'LastName'.

- 1. Going to the Customer table.
- 2. Selecting the Customer column.
- 3. Going to the top ribbon \rightarrow Split Column \rightarrow By Delimiter.
- 4. Choosing Space as the delimiter \rightarrow click OK.
- 5. Renaming new columns as FirstName and LastName.

1 ² 3 Price	-
	67
	85
	35
	44
	65
	20
	11
	65
	91
	43
	95
	92
	72
	12
	26
	94
	52
	91

Output 1.1



Output 1.2

• Convert all entries in the 'Category' column in the Product table to uppercase

STEPS:

- I. Go to Product table in Power Query.
- II. Select the Category column.
- III. Use Transform \rightarrow Format \rightarrow UPPERCASE.
- Replace all occurrences of 'unemployment' with 'Unemployed' in the 'Profession' column of the Customer table.

- I. Go to Customer table.
- II. Select Profession column.
- III. Use Transform \rightarrow Replace Values.
- IV. Replace unemployment with Unemployed.





Output 2.1

Output 2.2

• Ensure all columns in the datasets have appropriate data types, e.g., 'Date' column as Date type, 'Price' as Decimal type.

STEPS:

- I. Price \rightarrow Decimal Number
- II. Date in Sales \rightarrow Date
- Identify and replace any inconsistent values in the 'Size' column of the Product dataset to ensure uniformity (e.g., replace "medium" with "Medium").

STEPS:

- I. Go to Product table.
- II. In Size column, look for lowercase variants like "medium".
- III. Use Replace Values:
- IV. Replace "medium" → "Medium"

\$ Price	~
	67.00
	85.00
	35.00
	44.00
	65.00
	20.00
	11.00
	65.00
	91.00
	43.00
	95.00
	92.00
	72.00
	12.00
	26.00
	94.00
	52.00
	91.00

Date	
	29-01-2017
	31-01-2017
	05-01-2017
	30-01-2017
	16-01-2017
	15-01-2017
	11-01-2017
	16-01-2017
	16-01-2017
	05-01-2017
	26-01-2017
	12-01-2017
	26-01-2017
	16-01-2017
	28-01-2017
	04-01-2017
	07-01-2017
	07-01-2017

A ^B C Size	,
Small	
Large	
Medium	
Small	
Medium	
Small	
Large	
Large	
Small	
Medium	
Medium	
Large	
Small	
Large	
Medium	
Small	
Medium	
Small	
Small	
Large	
Large	
Small	
Medium	
Medium	

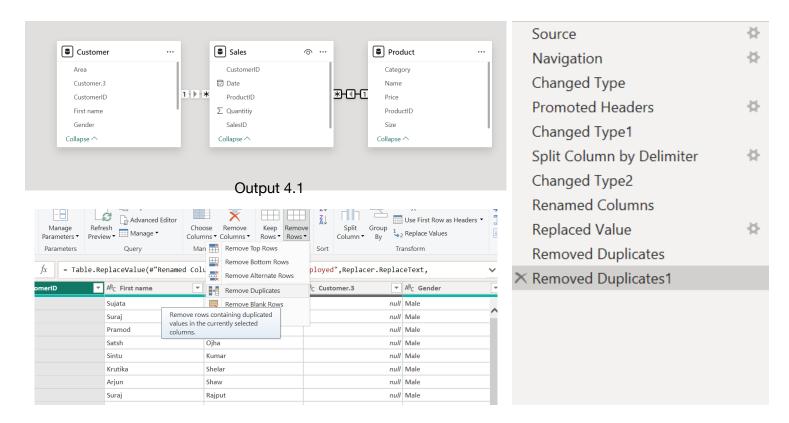
Output 3.1.1 Output 3.1.2 Output 3.2

• Create relationships between the tables using 'CustomerID' and 'ProductID' as keys.

STEPS:

- I. Go back to Power BI main view.
- II. Go to Model View.
- III. Drag CustomerID from Sales to Customer, and ProductID from Sales to Product.
- Clean the data by removing any duplicate entries in the Customer and Product tables.

- I. In Power Query, select the Customer table.
- II. Use Remove Duplicates on all columns or CustomerID.
- III. Do the same for Product table.

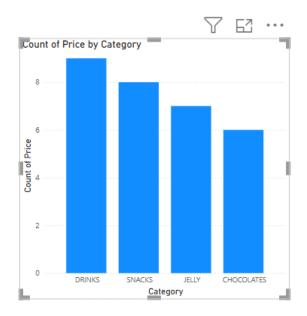


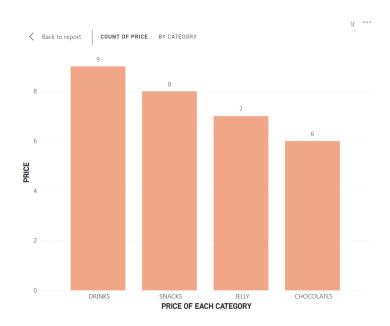
Output 4.2.1

1)Sales by Category:

- Create a chart showing total sales (TotalPrice) by product category.
- Customize colors, refine the title, and add data labels for exact sales amounts.

- I. In Report view, add Chart.
- II. Axis \rightarrow Category from Product table.
- III. Values → Price from Sales.
- IV. Customize:
 - A. Use Data Labels
 - B. Change colors using Format
 - C. Add title.





2)Sales Percentage by Category:

- Create a chart showing the percentage share of sales (Price) for each product category.
- Keep the chart compact and easy to understand.

- 1. Add Donut Chart or Pie Chart.
- 2. Legend \rightarrow Category
- 3. Values \rightarrow Price
- 4. Go to Format Pane \rightarrow turn on Data Labels \rightarrow show percentage.

