

Project

Task 1

i.

The screenshot shows the Power Query Editor interface. The 'Home' tab is selected, and the 'Transform' ribbon is active. The 'Price' column is highlighted, and the formula bar shows the transformation: `Table.TransformColumns(#'Changed Type',{{"Price", Number.RoundUp, Int64.Type}})`. The table contains 26 rows of product data.

ProductID	Category	Name	Size	Price
P001	Snacks	Product1	Small	68
P002	Drinks	Product2	Large	86
P003	Drinks	Product3	medium	35
P004	Snacks	Product4	Small	44
P005	Chocolates	Product5	medium	66
P006	Jelly	Product6	Small	20
P007	Jelly	Product7	Large	12
P008	Jelly	Product8	Large	65
P009	Snacks	Product9	Small	92
P010	Chocolates	Product10	medium	44
P011	Chocolates	Product11	medium	95
P012	Drinks	Product12	Large	93
P013	Drinks	Product13	Small	72
P014	Snacks	Product14	Large	12
P015	Drinks	Product15	medium	27
P016	Jelly	Product16	Small	95
P017	Snacks	Product17	medium	52
P009	Snacks	Product9	Small	92
P018	Drinks	Product18	Small	10
P019	Drinks	Product19	Large	58
P020	Snacks	Product20	Large	62
P021	Chocolates	Product21	Small	10
P022	Jelly	Product22	medium	19
P023	Jelly	Product23	medium	28
P024	Jelly	Product24	Large	51
P025	Snacks	Product25	Small	17

explain:

Open Power BI Desktop ➡ Home Tab ➡ Transform Data ➡ Transform Data (Now open Power Query Editor)

Power Query Editor > Home Tab > New Source > Choose File Format > File Location (product file) > Upload file > Close & Load data

Power Query Editor > Transform Tab > Select price column > Number column section (Rounding > Round) > back to Home Tab > Close & Apply

ii.

Power Query Editor - Untitled

Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Advanced Editor Properties Choose Columns Remove Columns Keep Rows Remove Rows Split Column Group By Data Type: Text Merge Queries Append Queries Combine Files Text Analytics Vision Azure Machine Learning AI Insights

Queries [2] Product Customer

Table: RenameColumns(#"Removed Columns",{"Customer.1", "FirstName"}, {"Customer.2", "LastName"})

	CustomerID	FirstName	LastName	Gender	Area	profession
1	C0001	Supata	Mohanty	Male	middle	Retired
2	C0002	Suraj	Rajput	Male	east	unemployment
3	C0003	Pramod	Bhavsar	Male	east	profession
4	C0004	Satish	Ojha	Male	west	self-employed
5	C0005	Sintu	Kumar	Male	middle	Retired
6	C0006	Krutika	Shelar	Male	middle	unemployment
7	C0007	Arjun	Shaw	Male	east	profession
8	C0002	Suraj	Rajput	Male	east	unemployment
9	C0008	Shrikant	Badge	Female	west	self-employed
10	C0009	Jitender	Kumar	Male	south	Retired
11	C0010	Dharmendar	Rana	Male	middle	unemployment
12	C0011	Adnan	Soukatt	Female	south	profession
13	C0012	Sheetal	Nishad	Male	middle	self-employed
14	C0013	Monika	Pawar	Female	east	Retired
15	C0014	Meena	Mourya	Male	east	unemployment
16	C0015	Asha	Sharma	Male	west	profession
17	C0016	Harivansh	Gautam	Male	middle	self-employed
18	C0017	Vini	Saini	Female	middle	Retired
19	C0018	Anand	Singh	Male	east	unemployment
20	C0019	Jaishri	Saxena	Male	west	profession
21	C0020	Virender	Sroha	Male	south	self-employed
22	C0021	Shrikant	Badge	Female	middle	Retired
23	C0004	Satish	Ojha	Male	west	self-employed
24	C0022	Harivansh	Gautam	Male	south	unemployment
25	C0023	Sourav	Malty	Male	middle	profession
26	C0024	Abir	Sarkar	Female	east	self-employed

Query Settings

PROPERTIES

Name: Customer

APPLIED STEPS

- Source
- Navigation
- Changed Type
- Promoted Headers
- Changed Type1
- Split Column by Delimiter
- Changed Type2
- Removed Columns
- Renamed Columns

6 COLUMNS, 35 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 21:59

17°C Party cloudy

Search

ENG IN 23:32 20-02-2025

Power Query Editor > Home Tab > New Source > Choose File Format > File Location (customer file) > Upload file > Close & Load data

Power Query Editor > Home tab > Transform section (use first row as headers) > select customer column > transform section (split column > by delimiter > enter delimiter 'space' > select each occurrence of the delimiter > click ok) rename customer1 column is FirstName & customer2 column is LastName & customer3 column is deleted because null value > back to Home Tab > Close & Apply

Task 2

i.

The screenshot shows the Power Query Editor interface. The 'Transform' tab is active, and the 'Format' option is selected for the 'Category' column. The query formula bar shows: `= Table.TransformColumns(#\"Rounded Off\",{[\"Category\", Text.Upper, type text}])`. The data table has columns: ProductID, Category, Name, Size, and Price. The 'Category' column is highlighted, and the 'Format' option is selected in the ribbon.

in power query editor go to product table file, because already uploaded > select category column > transform tab (text section > format > choose UPPERCASE) > back to home tab > close & apply

ii.

The screenshot shows the Power Query Editor interface. The 'Home' tab is active, and the 'Replace Value' option is selected. The query formula bar shows: `= Table.ReplaceValue(#\"Renamed Columns\", \"unemployment\", \"Unemployed\", Replacer.ReplaceText, {\"profession\"})`. The data table has columns: CustomerID, First Name, Last Name, Gender, Area, and profession. The 'profession' column is highlighted, and the 'Replace Value' option is selected in the ribbon.

in power query editor go to customer table file, because already uploaded > select profession column > home tab (transform section > replace value > value to find “unemployment” replace with “Unemployed” > ok) > home tab > close & apply.

Task 3

i.

The screenshot shows the Power Query Editor interface. The 'Home' tab is active, displaying various transformation options. The main area shows a table with 5 columns: SalesID, Date, CustomerID, ProductID, and Quantity. The 'Query Settings' pane on the right shows the 'Properties' section with 'Name' set to 'Sales' and the 'Applied Steps' section with 'Changed Type' selected.

SalesID	Date	CustomerID	ProductID	Quantity
1	29-01-2017	C0010	P005	7
2	31-01-2017	C0008	P010	10
3	05-01-2017	C0032	P011	7
4	30-01-2017	C0022	P021	7
5	16-01-2017	C0001	P026	5
6	15-01-2017	C0030	P027	9
7	11-01-2017	C0008	P002	10
8	16-01-2017	C0031	P003	1
9	16-01-2017	C0011	P012	4
10	08-01-2017	C0024	P013	2
11	26-01-2017	C0015	P015	5
12	12-01-2017	C0018	P018	7
13	26-01-2017	C0020	P019	3
14	16-01-2017	C0016	P028	1
15	28-01-2017	C0005	P029	8
16	04-01-2017	C0027	P006	8
17	07-01-2017	C0023	P007	8
18	07-01-2017	C0025	P008	10
19	17-01-2017	C0028	P016	10
20	06-01-2017	C0004	P022	10
21	30-01-2017	C0007	P023	8
22	15-01-2017	C0026	P024	9
23	22-01-2017	C0017	P001	8
24	06-01-2017	C0012	P004	4
25	15-01-2017	C0013	P009	8
26	18-01-2017	C0019	P014	1

Power Query Editor > Home Tab > New Source > Choose File Format > File Location (sales file) > Upload file > Close & Load data

in power query editor go to sales table file > in date column top of the column icon and choose data format as a date > close & apply. *in product table price column is already as a decimal number. So, no need to change.

ii.

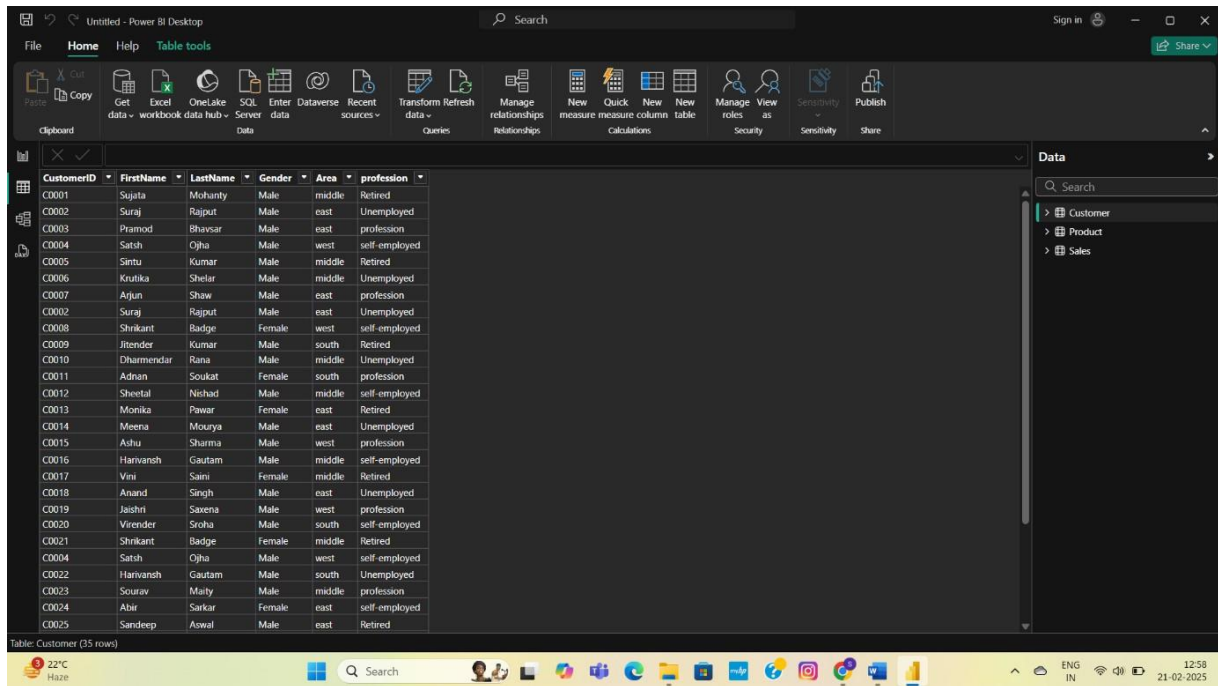
The screenshot shows the Power Query Editor interface with the 'Transform' tab active. The main area shows a table with 5 columns: ProductID, Category, Name, Size, and Price. The 'Query Settings' pane on the right shows the 'Properties' section with 'Name' set to 'Product' and the 'Applied Steps' section with 'Capitalized Each Word' selected.

ProductID	Category	Name	Size	Price
P001	SNACKS	Product1	Small	67
P002	DRINKS	Product2	Large	85
P003	DRINKS	Product3	Medium	35
P004	SNACKS	Product4	Small	44
P005	CHOCOLATES	Product5	Medium	65
P006	JELLY	Product6	Small	20
P007	JELLY	Product7	Large	11
P008	JELLY	Product8	Large	65
P009	SNACKS	Product9	Small	91
P010	CHOCOLATES	Product10	Medium	43
P011	CHOCOLATES	Product11	Medium	95
P012	DRINKS	Product12	Large	92
P013	DRINKS	Product13	Small	72
P014	SNACKS	Product14	Large	22
P015	DRINKS	Product15	Medium	26
P016	JELLY	Product16	Small	94
P017	SNACKS	Product17	Medium	52
P018	DRINKS	Product18	Small	91
P019	DRINKS	Product19	Large	57
P020	SNACKS	Product20	Large	62
P021	CHOCOLATES	Product21	Small	9
P022	JELLY	Product22	Medium	19
P023	JELLY	Product23	Medium	27
P024	JELLY	Product24	Large	51
P025	SNACKS	Product25	Small	17

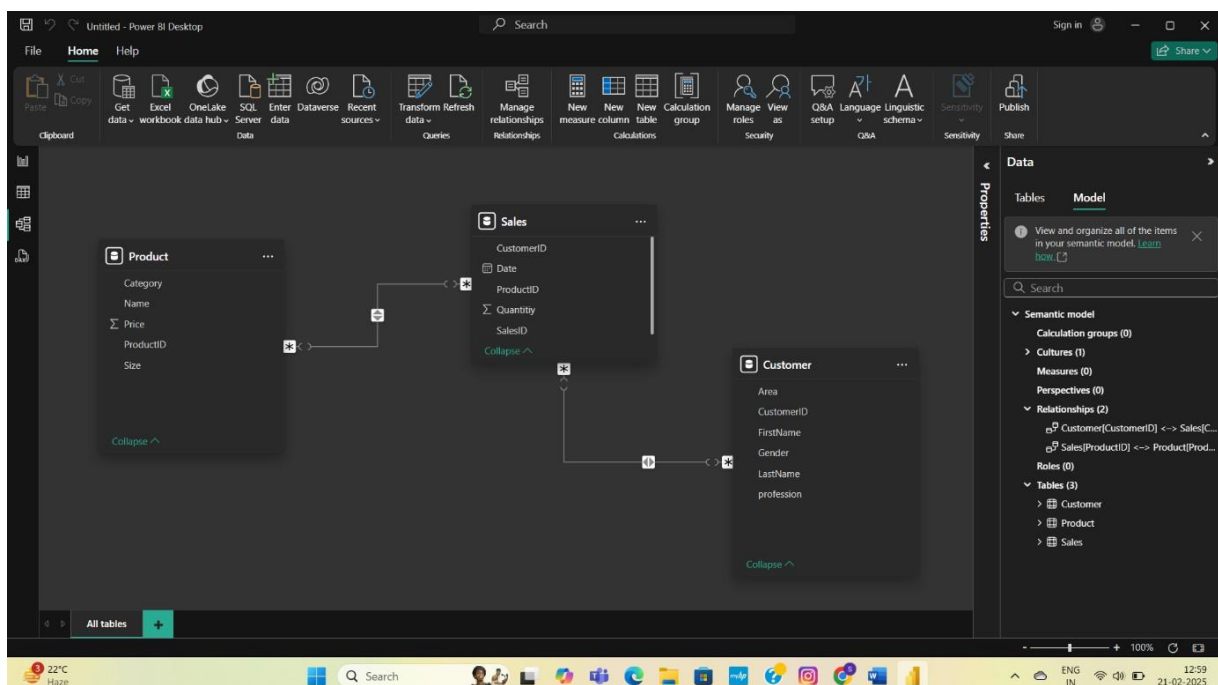
in power query editor go to product table file, because already uploaded > select size column > home tab (transform section > replace value > replace e.g., “medium” with “Medium” > ok)/ transform tab (text column section > format > Capitalize Each Word) > home tab > close & apply.

Task 4

i.



CustomerID	FirstName	LastName	Gender	Area	profession
CO001	Sujata	Mohanty	Male	middle	Retired
CO002	Suraj	Rajput	Male	east	Unemployed
CO003	Pramod	Bhavsar	Male	east	profession
CO004	Satish	Ojha	Male	west	self-employed
CO005	Sintu	Kumar	Male	middle	Retired
CO006	Krutika	Shelar	Male	middle	Unemployed
CO007	Ajjun	Shaw	Male	east	profession
CO008	Suraj	Rajput	Male	east	Unemployed
CO008	Shrikant	Badge	Female	west	self-employed
CO009	Jitender	Kumar	Male	south	Retired
CO010	Dharmendar	Rana	Male	middle	Unemployed
CO011	Adnan	Soukat	Female	south	profession
CO012	Sheetal	Nishad	Male	middle	self-employed
CO013	Monika	Pawar	Female	east	Retired
CO014	Meena	Mourya	Male	east	Unemployed
CO015	Ashu	Sharma	Male	west	profession
CO016	Harivansh	Gautam	Male	middle	self-employed
CO017	Vini	Saini	Female	middle	Retired
CO018	Anand	Singh	Male	east	Unemployed
CO019	Jaishri	Saxena	Male	west	profession
CO020	Vicender	Sroha	Male	south	self-employed
CO021	Shrikant	Badge	Female	middle	Retired
CO004	Satish	Ojha	Male	west	self-employed
CO022	Harivansh	Gautam	Male	south	Unemployed
CO023	Sourav	Maiti	Male	middle	profession
CO024	Abir	Sarkar	Female	east	self-employed
CO025	Sandeep	Aswal	Male	east	Retired



Create relationships between customerid and productid both are table view and model view

ii.

Power Query Editor interface showing a table with 26 rows and 5 columns. The table data is as follows:

ProductID	Category	Name	Size	Price
P001	SNACKS	Product1	Small	67
P002	DRINKS	Product2	Large	85
P003	DRINKS	Product3	Medium	35
P004	SNACKS	Product4	Small	44
P005	CHOCOLATES	Product5	Medium	65
P006	JELLY	Product6	Small	20
P007	JELLY	Product7	Large	11
P008	JELLY	Product8	Large	65
P009	SNACKS	Product9	Small	91
P010	CHOCOLATES	Product10	Medium	43
P011	CHOCOLATES	Product11	Medium	95
P012	DRINKS	Product12	Large	92
P013	DRINKS	Product13	Small	72
P014	SNACKS	Product14	Large	12
P015	DRINKS	Product15	Medium	26
P016	JELLY	Product16	Small	94
P017	SNACKS	Product17	Medium	52
P018	DRINKS	Product18	Small	9
P019	DRINKS	Product19	Large	57
P020	SNACKS	Product20	Large	62
P021	CHOCOLATES	Product21	Small	9
P022	JELLY	Product22	Medium	19
P023	JELLY	Product23	Medium	27
P024	JELLY	Product24	Large	51
P025	SNACKS	Product25	Small	17
P026	CHOCOLATES	Product26	Large	85

The 'Query Settings' pane on the right shows the 'Applied Steps' list with 'Removed Duplicates' selected.

Power Query Editor interface showing a table with 26 rows and 6 columns. The table data is as follows:

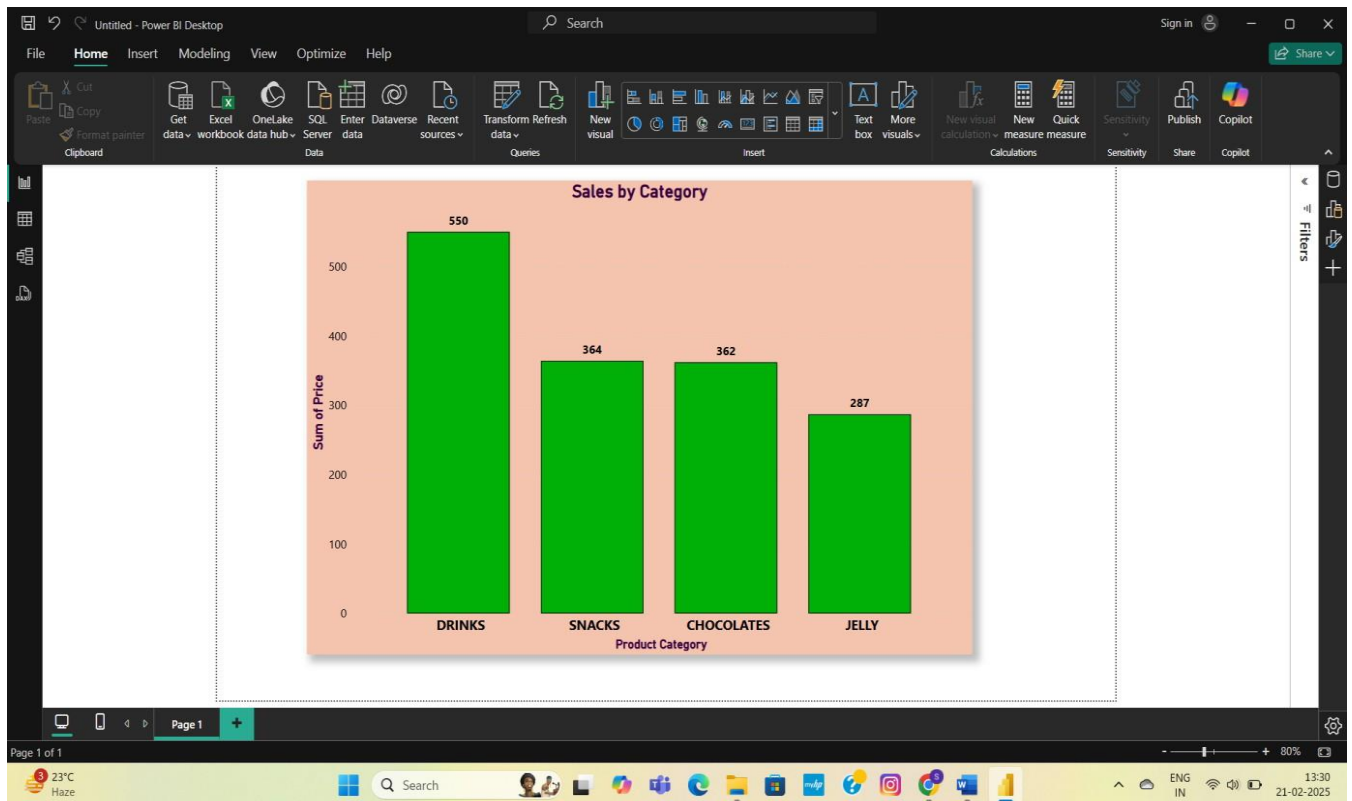
CustomerID	FirstName	LastName	Gender	Area	profession
C0001	Sujata	Mohanty	Male	middle	Retired
C0002	Suraj	Rajput	Male	east	Unemployed
C0003	Pramod	Bhavsar	Male	east	profession
C0004	Satish	Ojha	Male	west	self-employed
C0005	Sintu	Kumar	Male	middle	Retired
C0006	Krutika	Shelar	Male	middle	Unemployed
C0007	Arjun	Shaw	Male	east	profession
C0008	Shrikant	Badge	Female	west	self-employed
C0009	Jitender	Kumar	Male	south	Retired
C0010	Dharmendar	Rana	Male	middle	Unemployed
C0011	Adrian	Soukat	Female	south	profession
C0012	Sheetal	Nishad	Male	middle	self-employed
C0013	Monika	Pawar	Female	east	Retired
C0014	Meena	Mourya	Male	east	Unemployed
C0015	Ashu	Sharma	Male	west	profession
C0016	Harivansh	Gautam	Male	middle	self-employed
C0017	Vini	Saini	Female	middle	Retired
C0018	Anand	Singh	Male	east	Unemployed
C0019	Jaishri	Saxena	Male	west	profession
C0020	Virender	Sroha	Male	south	self-employed
C0021	Shrikant	Badge	Female	middle	Retired
C0022	Harivansh	Gautam	Male	south	Unemployed
C0023	Sourav	Maitly	Male	middle	profession
C0024	Abir	Sarkar	Female	east	self-employed
C0025	Sandeep	Aswal	Male	east	Retired
C0026	Karan	Kapoor	Male	west	Unemployed

The 'Query Settings' pane on the right shows the 'Applied Steps' list with 'Removed Duplicates1' selected.

in power query editor go to product or customer table file, because already uploaded > home tab (reduce column section > remove rows > remove duplicate) > home tab > close & apply.

Task 05

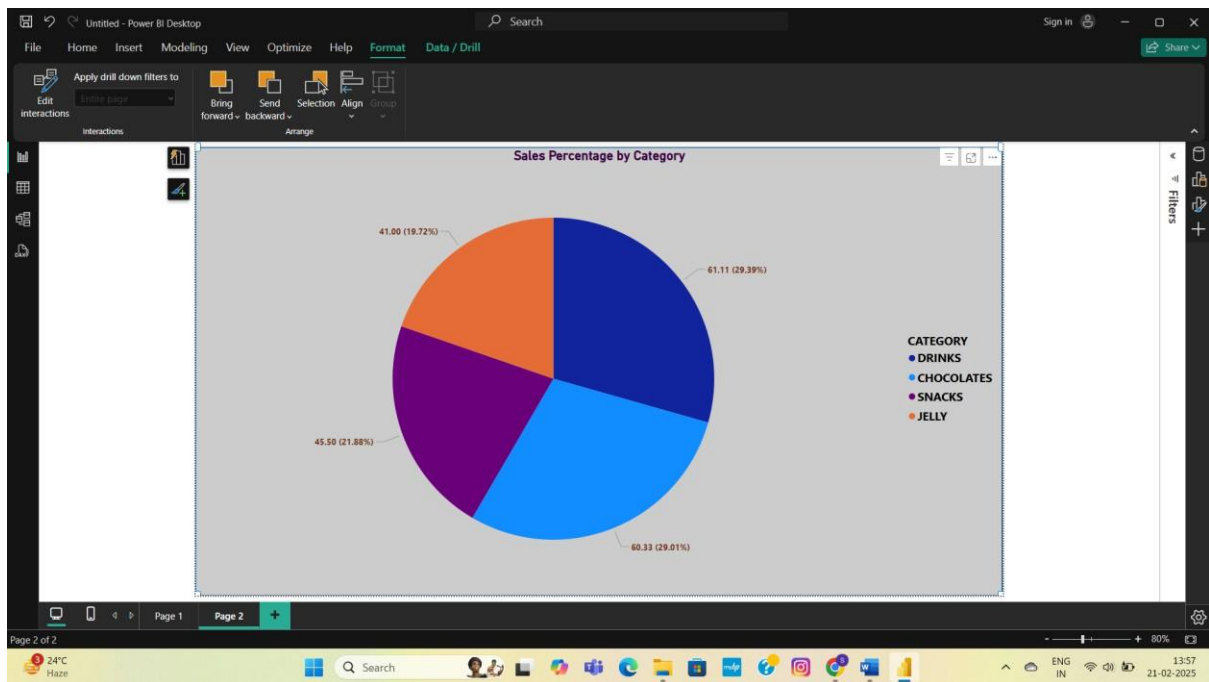
i. Sales by Category:



In power bi desktop choose a stacked column chart and field x-axis are product category and y-axis is price as a sum of price.

Sum customization (Data label on, title heading, colour, background colour, total sum data pane, etc.)

ii. Sales Percentage by Category:



In power bi desktop choose a pie chart and field x-axis are product category and y-axis is price as an average of price.

Sum customization (Data label on, title heading, colour, background colour, total percentage of sales, etc.)