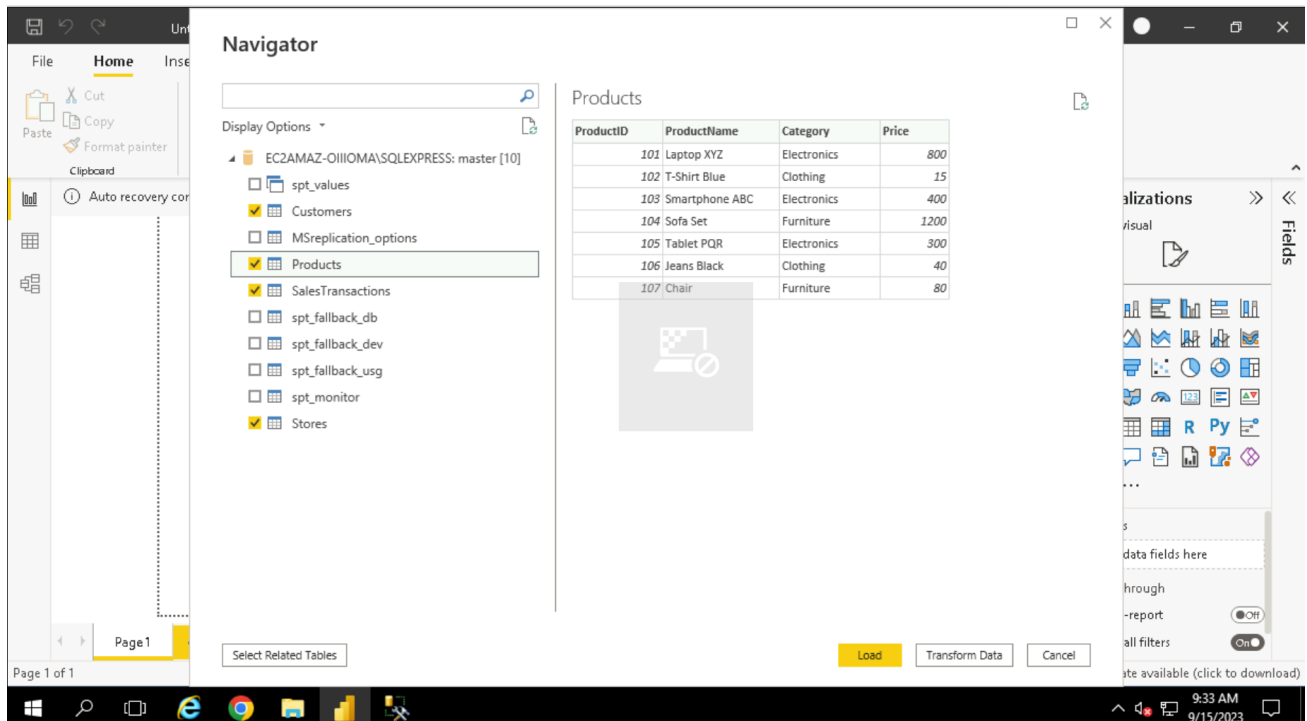
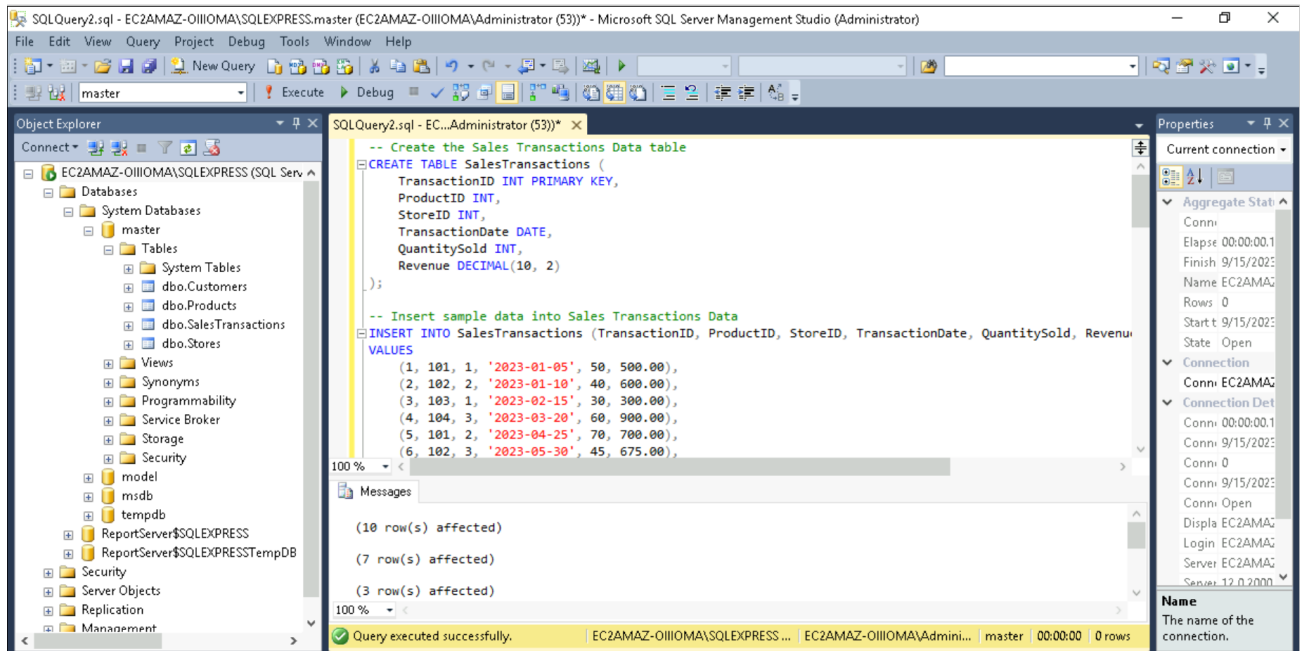
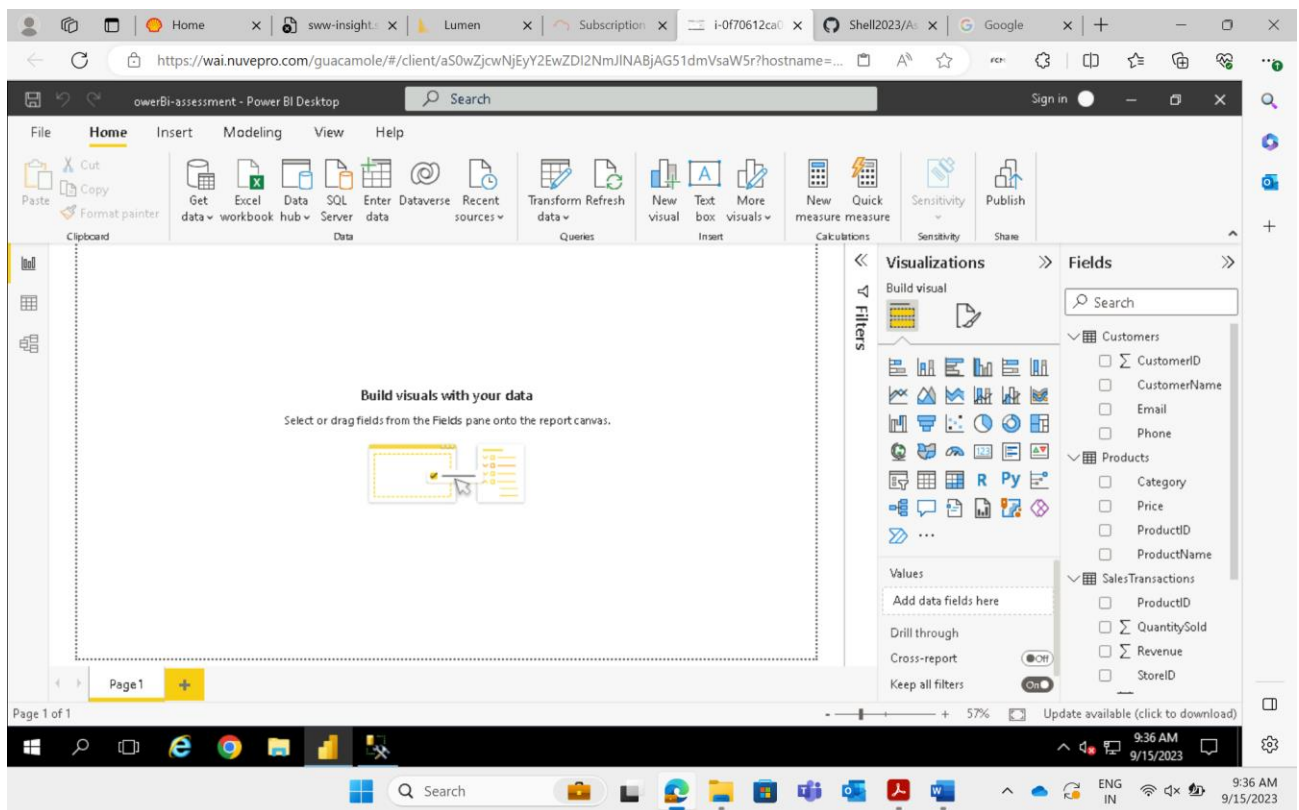
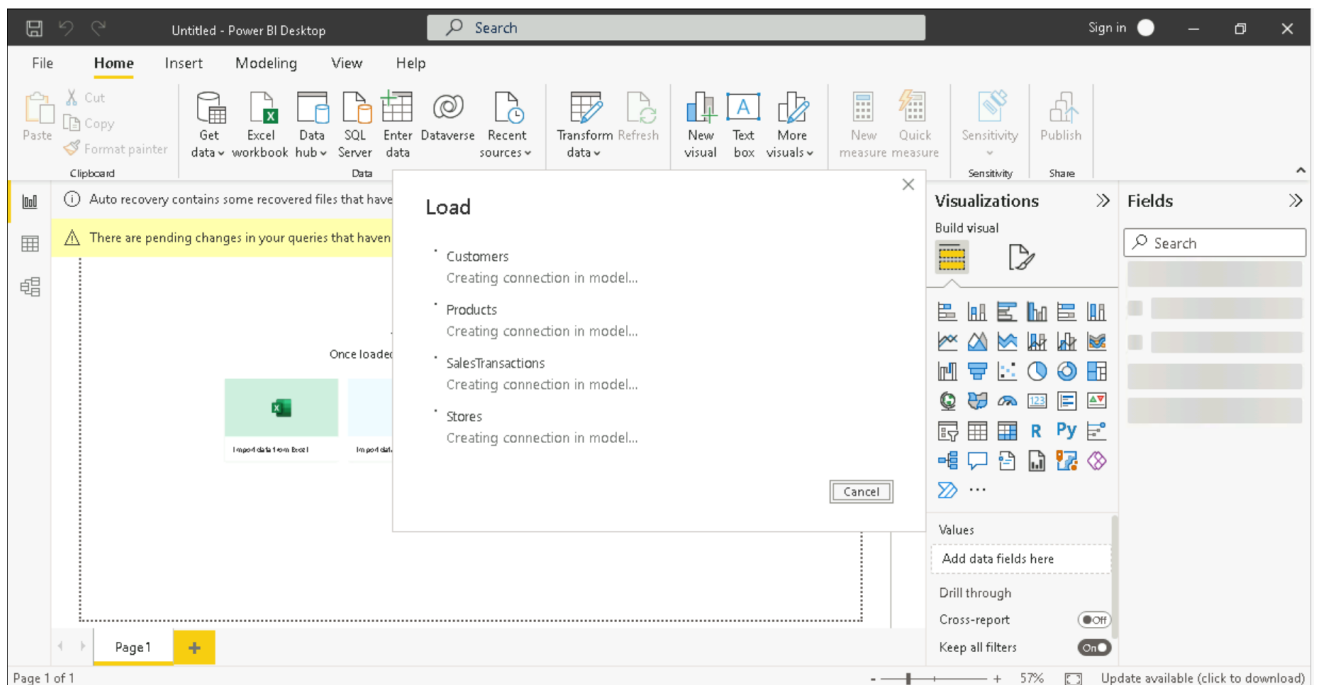


POWER-BI HANDS-ON ASSESSMENT

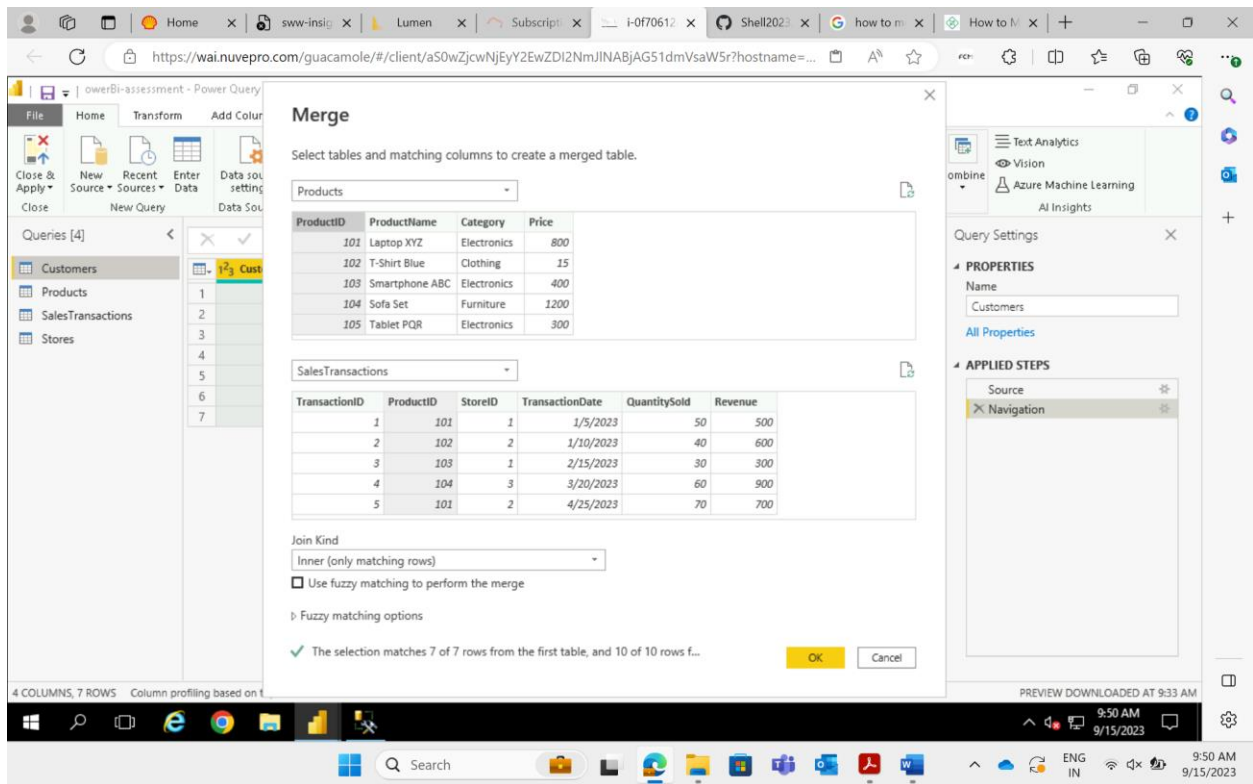
ANUBHAV BAGRI – BATCH-8 (IDA)

REQUIREMENT 1 : DATA LOADING





REQUIREMENT 2 : DATA TRANSFORMATION



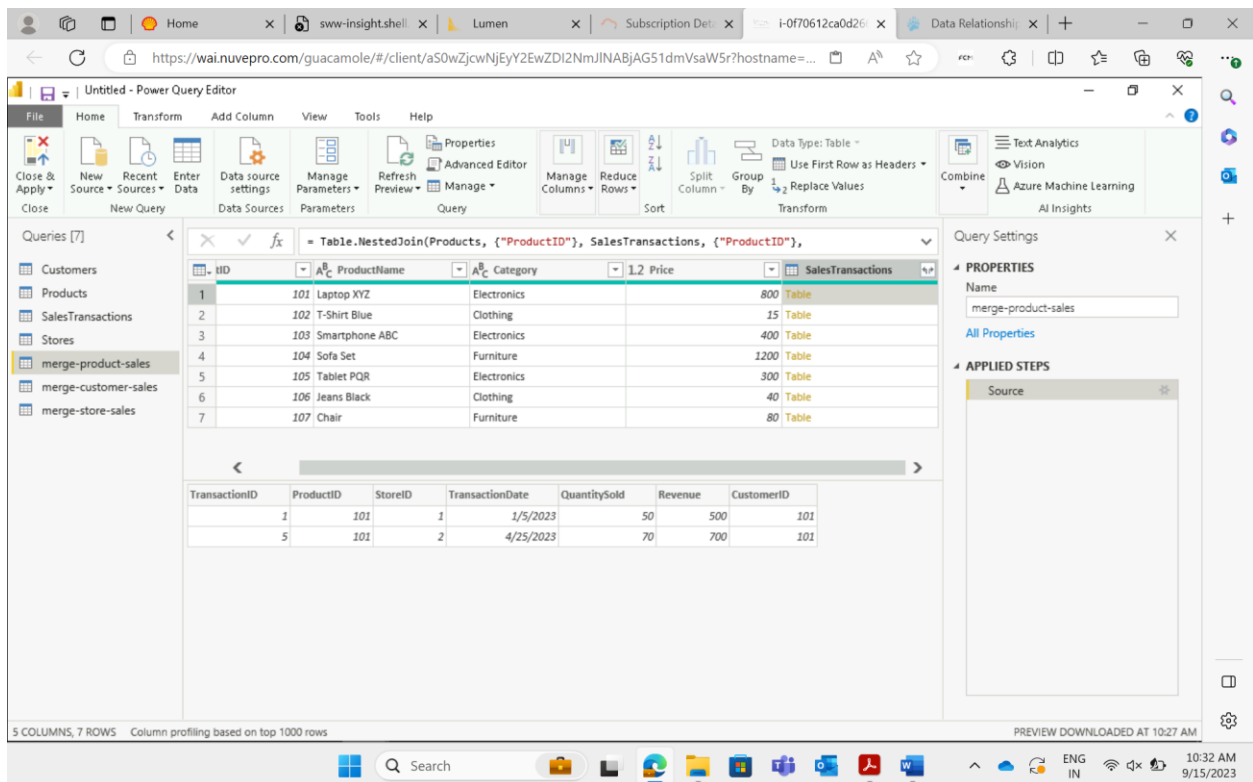
The screenshot shows the Power Query 'Merge' dialog box. The 'Products' table is selected as the first table, and the 'SalesTransactions' table is selected as the second table. The 'Join Kind' is set to 'Inner (only matching rows)'. The 'Use fuzzy matching to perform the merge' checkbox is unchecked. The 'Fuzzy matching options' section is expanded, showing a message: 'The selection matches 7 of 7 rows from the first table, and 10 of 10 rows f...'. The 'OK' button is highlighted.

Products Table:

ProductID	ProductName	Category	Price
101	Laptop XYZ	Electronics	800
102	T-Shirt Blue	Clothing	15
103	Smartphone ABC	Electronics	400
104	Sofa Set	Furniture	1200
105	Tablet PQR	Electronics	300

SalesTransactions Table:

TransactionID	ProductID	StoreID	TransactionDate	QuantitySold	Revenue
1	101	1	1/5/2023	50	500
2	102	2	1/10/2023	40	600
3	103	1	2/15/2023	30	300
4	104	3	3/20/2023	60	900
5	101	2	4/25/2023	70	700



The screenshot shows the Power Query Editor with the merged result. The 'Table.NestedJoin' function is used to join the 'Products' table with the 'SalesTransactions' table. The resulting table has 7 columns: ID, ProductName, Category, Price, SalesTransactions, and CustomerID. The 'SalesTransactions' column is expanded, showing the transaction details for each product.

Merged Table:

ID	ProductName	Category	Price	SalesTransactions	CustomerID
1	101 Laptop XYZ	Electronics	800	Table	101
2	102 T-Shirt Blue	Clothing	15	Table	101
3	103 Smartphone ABC	Electronics	400	Table	101
4	104 Sofa Set	Furniture	1200	Table	101
5	105 Tablet PQR	Electronics	300	Table	101
6	106 Jeans Black	Clothing	40	Table	101
7	107 Chair	Furniture	80	Table	101

Transaction Details Table:

TransactionID	ProductID	StoreID	TransactionDate	QuantitySold	Revenue	CustomerID
1	101	1	1/5/2023	50	500	101
5	101	2	4/25/2023	70	700	101

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Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Invoke Custom Examples Column Function Duplicate Column

General

Queries [7]

- Customers
- Products
- SalesTransactions
- Stores
- merge-product-sales
- merge-store-sales
- merge-customer-sales

Custom Column

Add a column that is computed from the other columns.

New column name: TotalSales

Custom column formula: = [SalesTransactions.QuantitySold]*[Price]

Available columns:

- ProductName
- Category
- Price
- SalesTransactions.TransactionID
- SalesTransactions.Transaction...
- SalesTransactions.QuantitySold
- SalesTransactions.Revenue

Learn about Power Query formulas

No syntax errors have been detected.

OK Cancel

Query Settings

PROPERTIES

Name: merge-product-sales

APPLIED STEPS

- Source
- Expanded SalesTransactions
- Removed Columns

8 COLUMNS, 10 ROWS Column profiling based on top 1000 rows

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Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Custom Invoke Custom Examples Column Function Duplicate Column

General

Queries [7]

- Customers
- Products
- SalesTransactions
- Stores
- merge-product-sales
- merge-store-sales
- merge-customer-sales

Table.AddColumn(#"Removed Columns", "TotalSales", each [SalesTransactions.QuantitySold]*[Price])

transactions.QuantitySold	1.2 SalesTransactions.Revenue	1.2 SalesTransactions.CustomerID	1.2 TotalSales
50	500	101	40000
40	600	102	600
30	300	103	12000
60	900	104	72000
70	700	101	56000
45	675	102	675
55	550	105	16500
38	570	106	1520
42	630	107	3360
68	680	105	20400

Query Settings

PROPERTIES

Name: merge-product-sales

APPLIED STEPS

- Source
- Expanded SalesTransactions
- Removed Columns
- Added Custom

9 COLUMNS, 10 ROWS Column profiling based on top 1000 rows

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Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview

Queries [7]

- Customers
- Products
- SalesTransactions
- Stores
- merge-product-sales
- merge-store-sales
- merge-customer-sales

Table.AddColumn(#SalesTransactions, "TotalSales", ...)

1 50
2 40
3 30
4 60
5 70
6 45
7 55
8 38
9 42
10 68

Choose Columns

Choose the columns to keep

Search Columns

- (Select All Columns)
- Product Name
- Category
- Price
- SalesTransactions.TransactionID
- SalesTransactions.TransactionDate
- SalesTransactions.QuantitySold
- SalesTransactions.Revenue
- SalesTransactions.CustomerID
- TotalSales

OK Cancel

ms.QuantitySold]*

ABC 123 TotalSales

40000
600
12000
72000
56000
675
16500
1520
3360
20400

Query Settings

PROPERTIES

Name

merge-product-sales

APPLIED STEPS

- Source
- Expanded SalesTransactions
- Removed Columns
- Added Custom

9 COLUMNS, 10 ROWS Column profiling based on top 1000 rows

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Search

11:14 AM 9/15/2023

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Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview

Queries [7]

- Customers
- Products
- SalesTransactions
- Stores
- merge-product-sales
- merge-store-sales
- merge-customer-sales

Table.SelectColumns(#"Added Custom", {"Product Name", "Category", "Price", "SalesTransactions.QuantitySold", "SalesTransactions.Revenue", "TotalSales"})

1 Laptop XYZ Electronics 800 50 500 40000
2 T-Shirt Blue Clothing 15 40 600 600
3 Smartphone ABC Electronics 400 30 300 12000
4 Sofa Set Furniture 1200 60 900 72000
5 Laptop XYZ Electronics 800 70 700 56000
6 T-Shirt Blue Clothing 15 45 675 675
7 Tablet PQR Electronics 300 55 550 16500
8 Jeans Black Clothing 40 38 570 1520
9 Chair Furniture 80 42 630 3360
10 Tablet PQR Electronics 300 68 680 20400

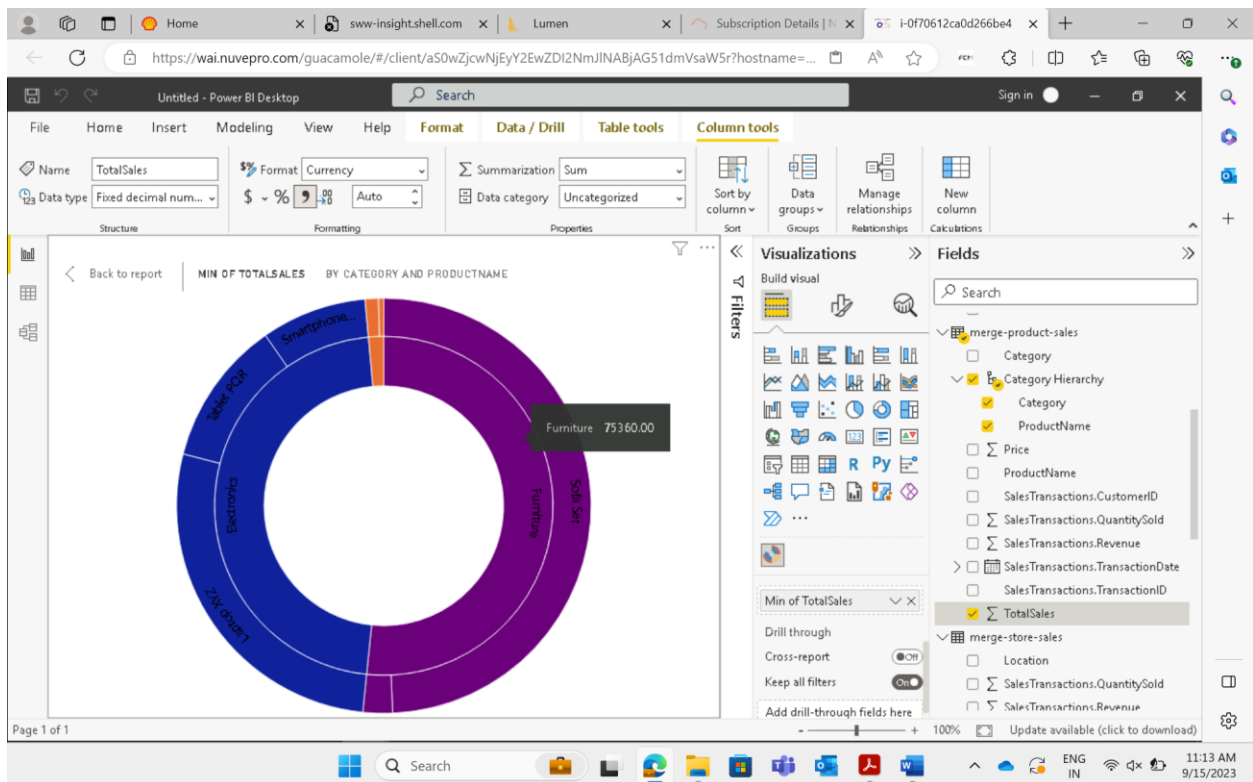
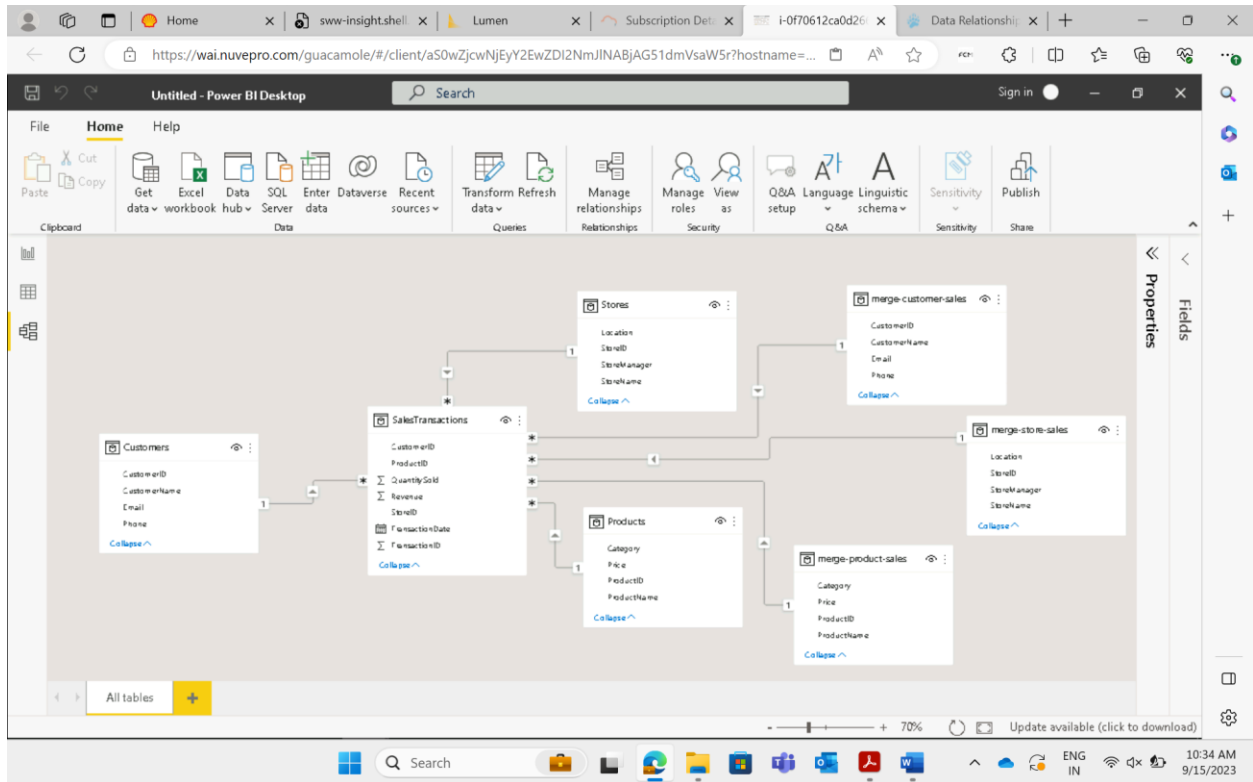
6 COLUMNS, 10 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 11:15 AM

Search

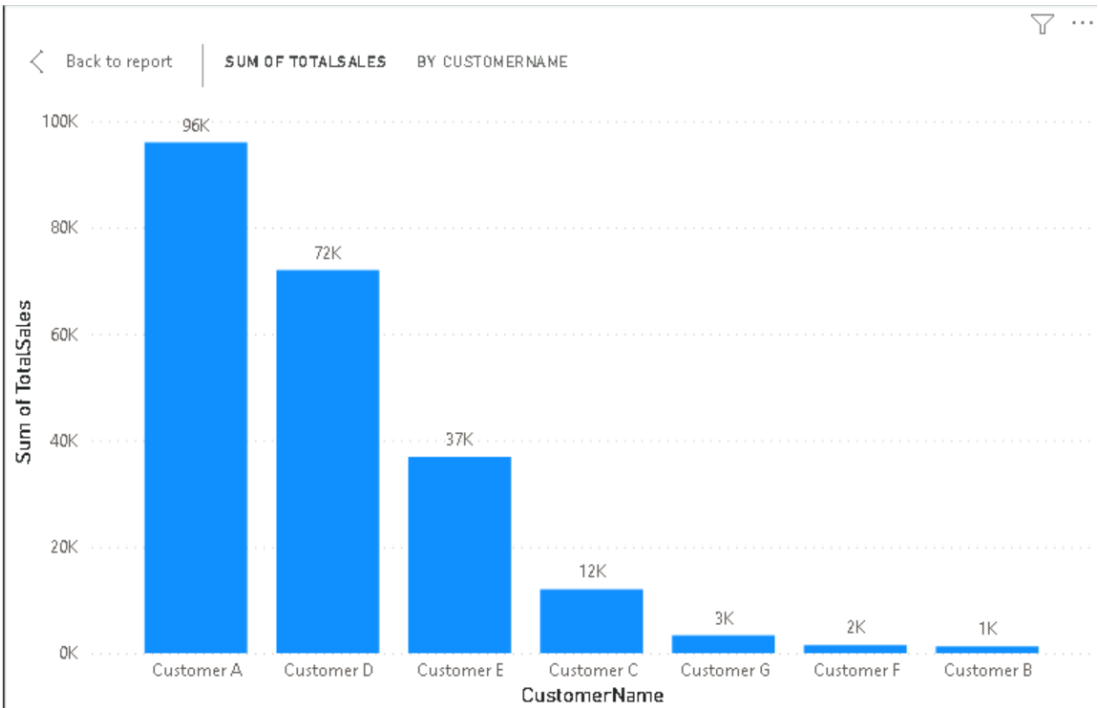
11:15 AM 9/15/2023

REQUIREMENT 3 : DATA MODELLING

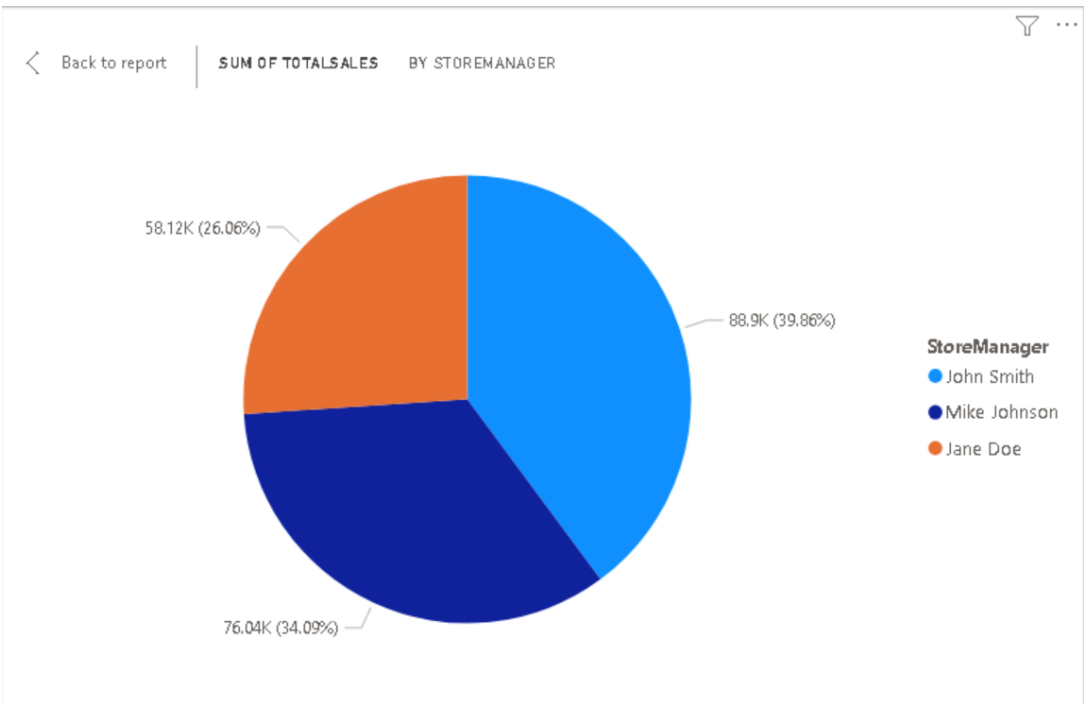


REQUIREMENT 4 : BUSINESS QUERIES AND ANALYSIS

Who are the top-spending customers based on their total purchase amount?



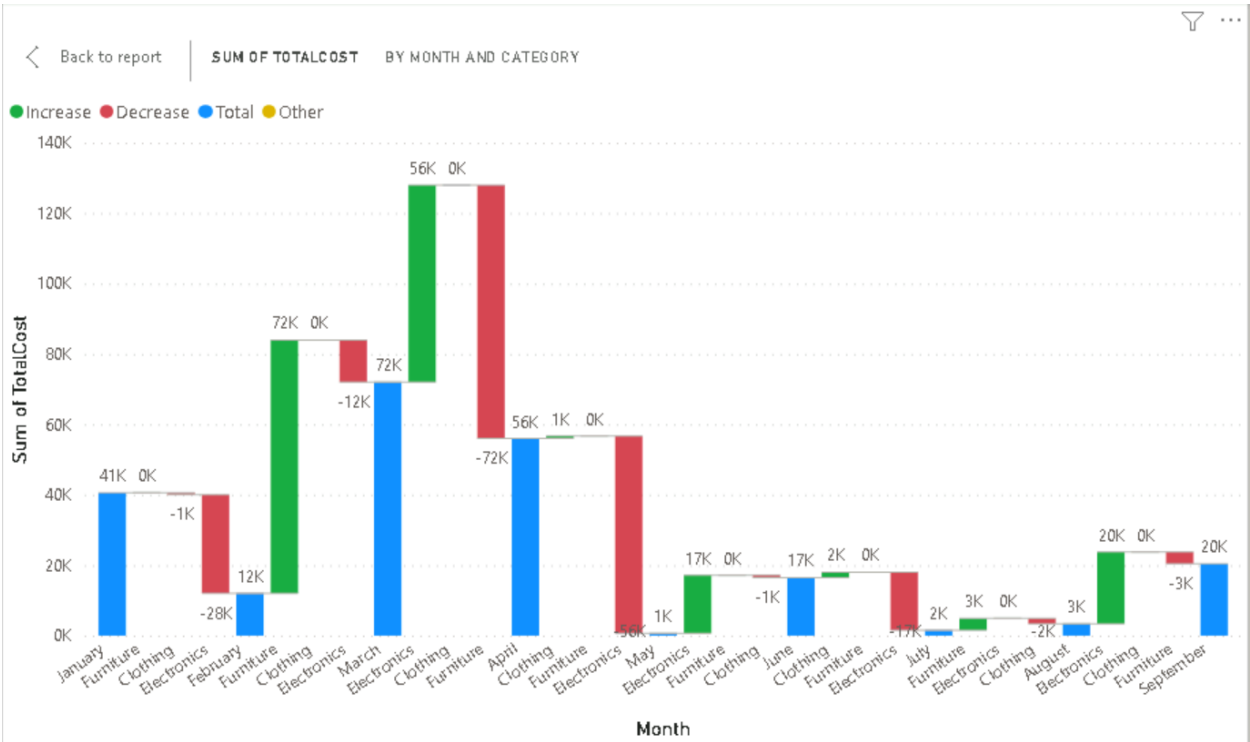
How is sales revenue distributed among different store managers?



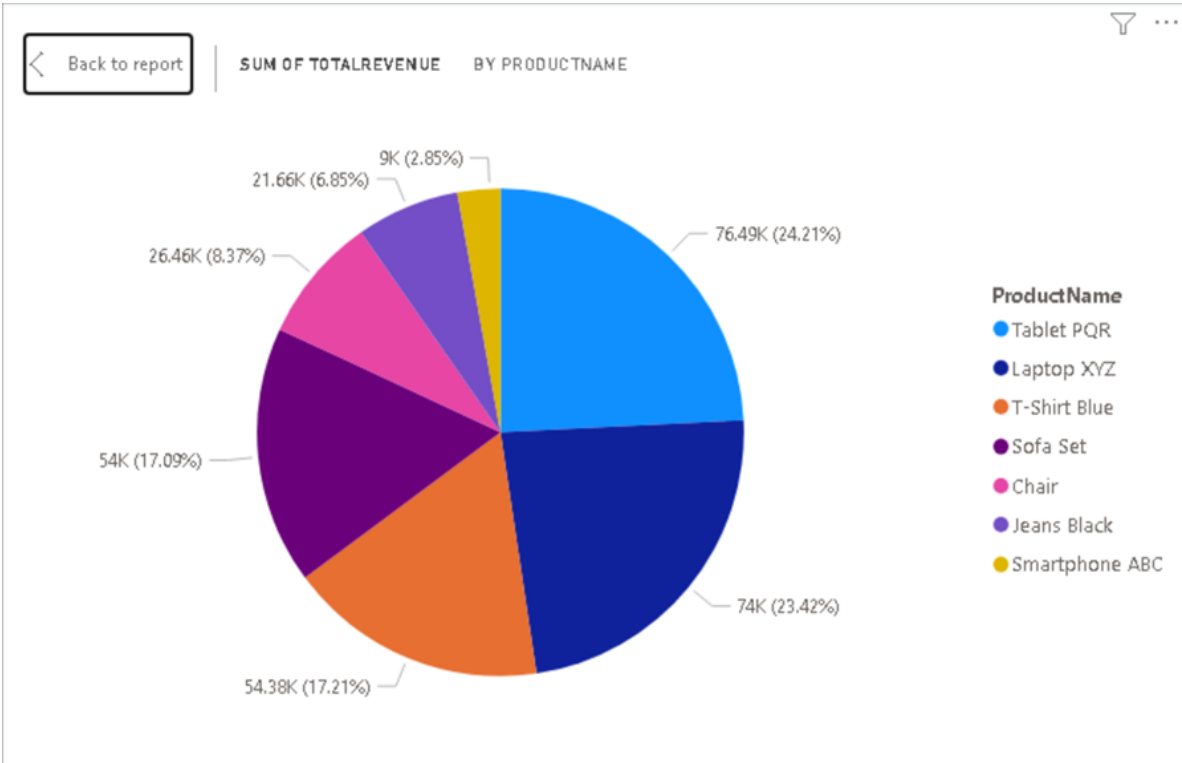
What is the average price of products in each category?



How do sales trends vary by product category on a monthly basis?



What percentage of products account for 80% of total sales revenue?



Which product categories perform best at each store location?

