

CSE3088

BUSINESS INTELLIGENCE AND ANALYTICS

PROJECT REPORT

MAMAEARTH SALES DATA ANALYSIS

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PRESIDENCY UNIVERSITY

Private University Estd. in Karnataka State by Act No. 41 of 2013

BANGALORE



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Problem Statement:

Mamaearth is a company that sells organic and toxin free products and is a subsidiary company of the Honasa Consumer Group. It has various products which help treat various skin and hair problems. It works on the D2C model which means that the products are delivered at the customer's doorstep.

This company provides various kinds of products categorized as HairCare_Items, MakeUp_items, SkinCare_Items and BabyCare_Items. Additionally Mamaearth is now building its offline presence by opening various stores across the country in high footfall areas.

The customer can either place an order on online or can even come down to the company's store and purchase the products. Payment can be made online using UPI, Net Banking, Cards or COD.

The management of the company needs the report that will indicate the products that are in demand, to optimize their manufacturing processes to produce products that are in demand in larger volumes and discontinue the manufacturing of products which are no longer in demand.

Key Points of Report:

- Sales of the Company
- Quantity Sold
- Lowest Selling Items
- Best Selling Items
- Most Frequent Customers
- No of Orders Processed
- Sales Split by Gender

- Payment Mode Split
- Membership Split
- Quarter Wise Analysis

Tools Used:

- Microsoft Visual Studio
- SSIS
- Microsoft Power BI

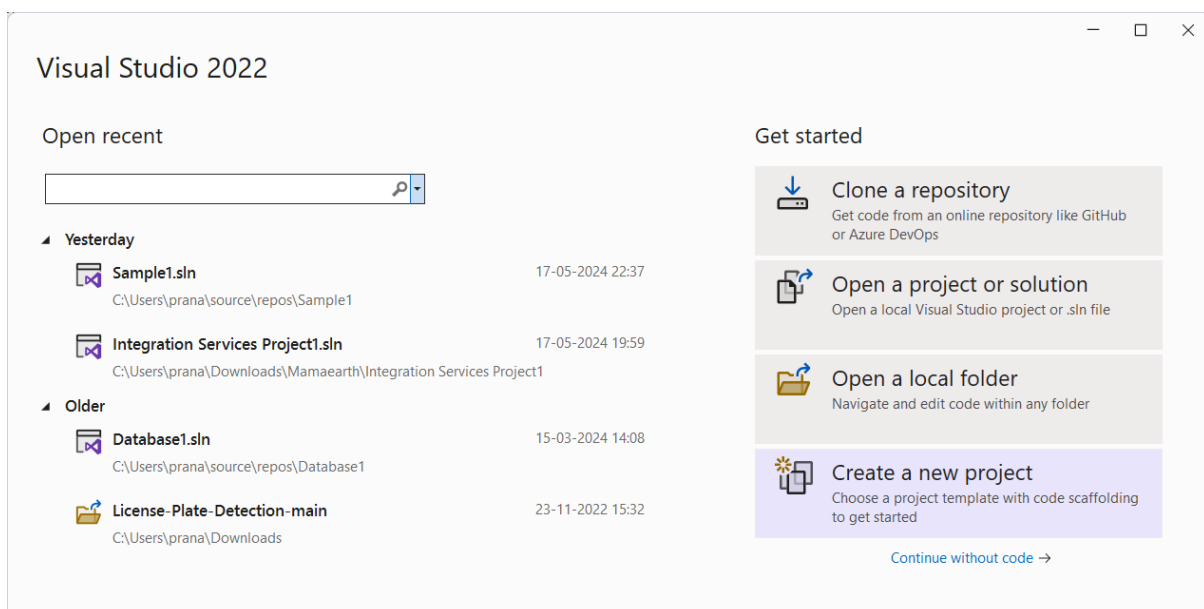
Data Collection:

We have performed analysis on the sales data of the year 2023 and collected data of from the company's annual report.

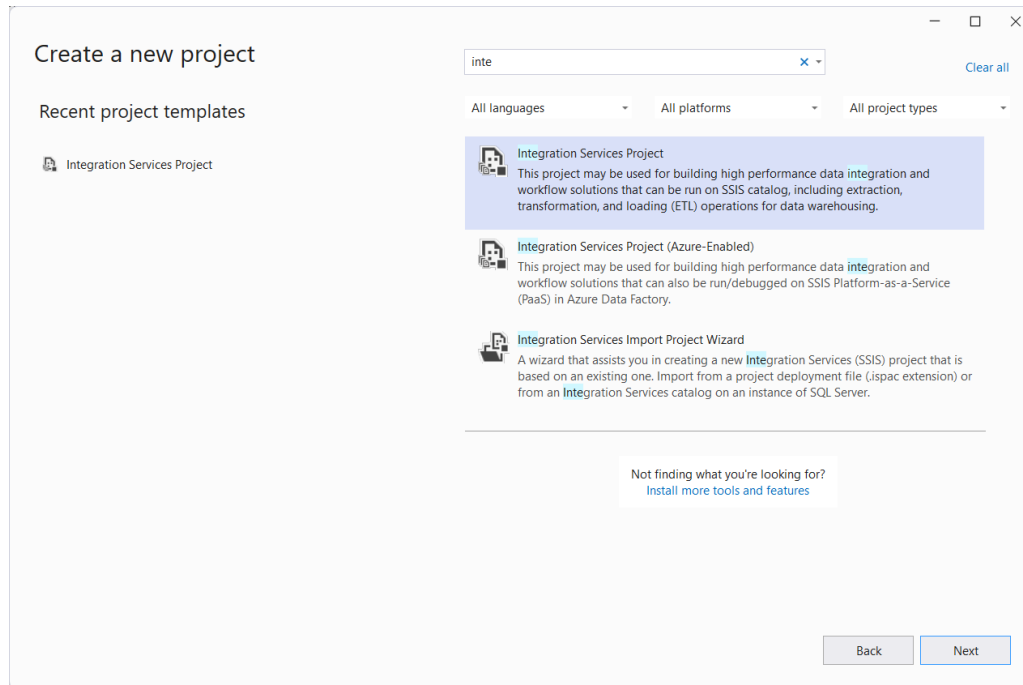
Data Integration:

We have integrated the data that was present in various files using Microsoft SSIS in Microsoft Visual Studio.

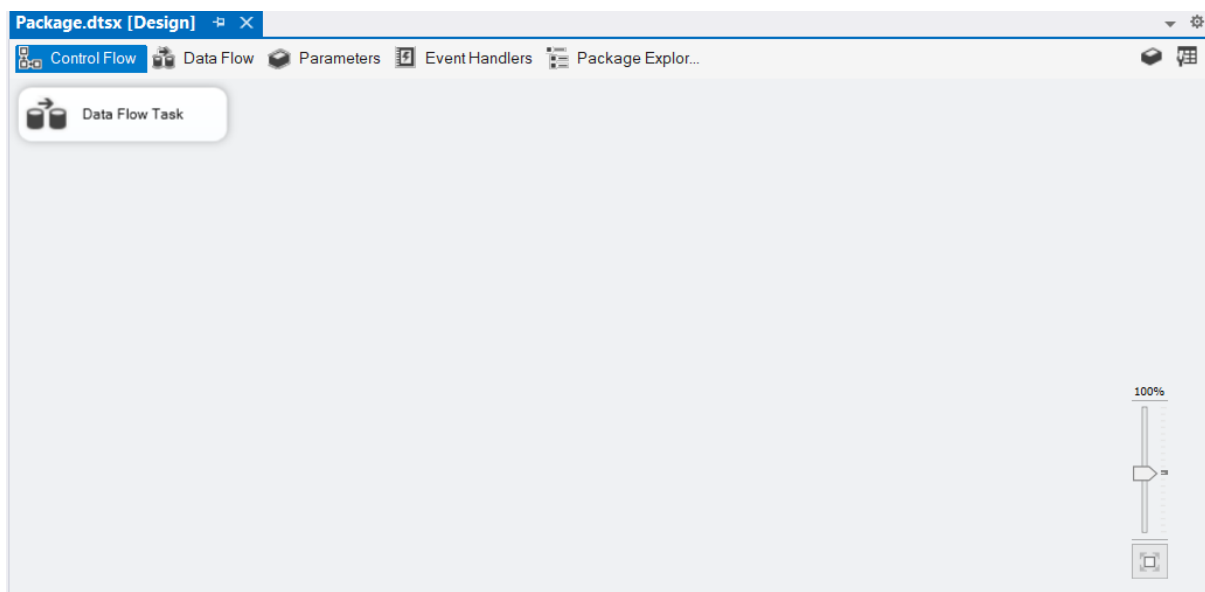
1. Open Microsoft Visual Studio and Create a new Project



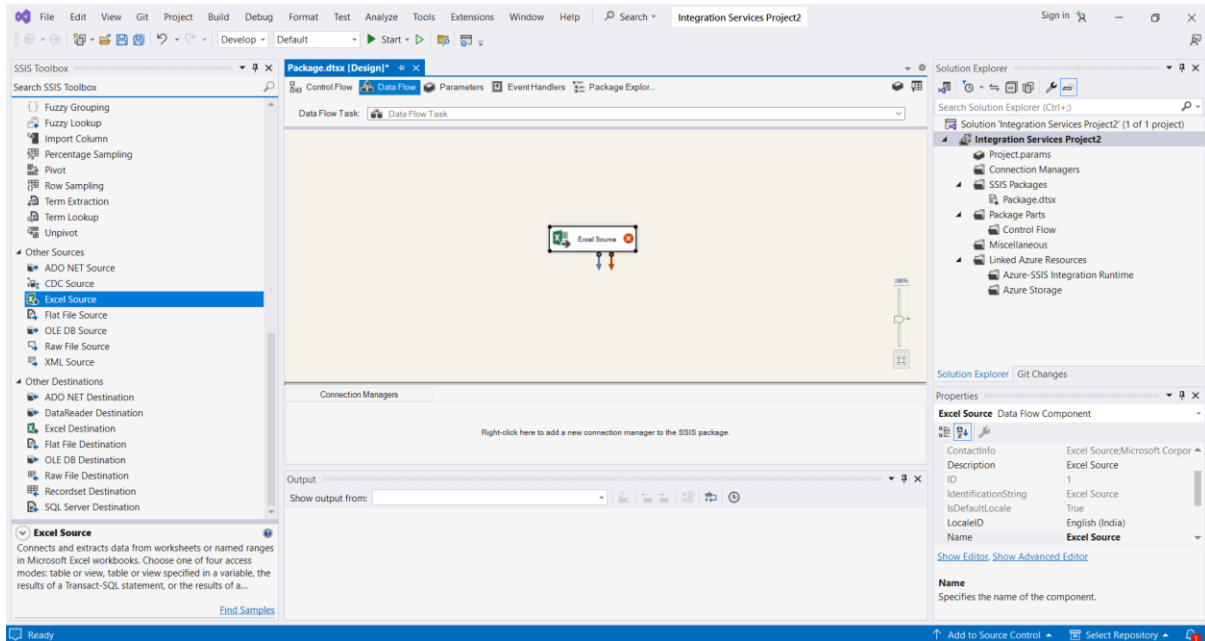
2. Select Integration Services Project



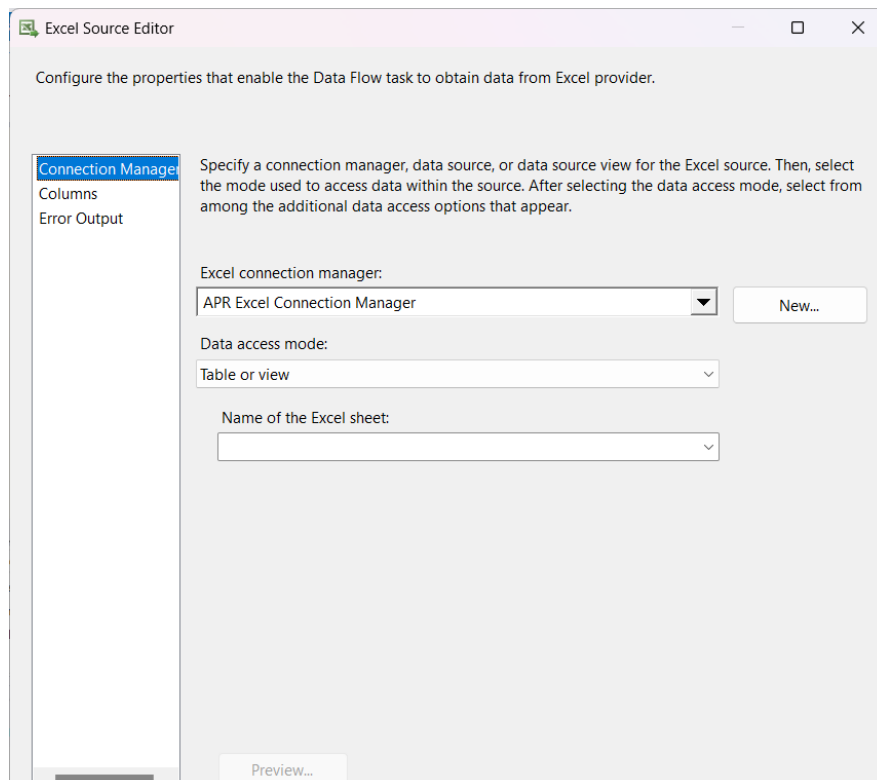
3. Go Data Flow

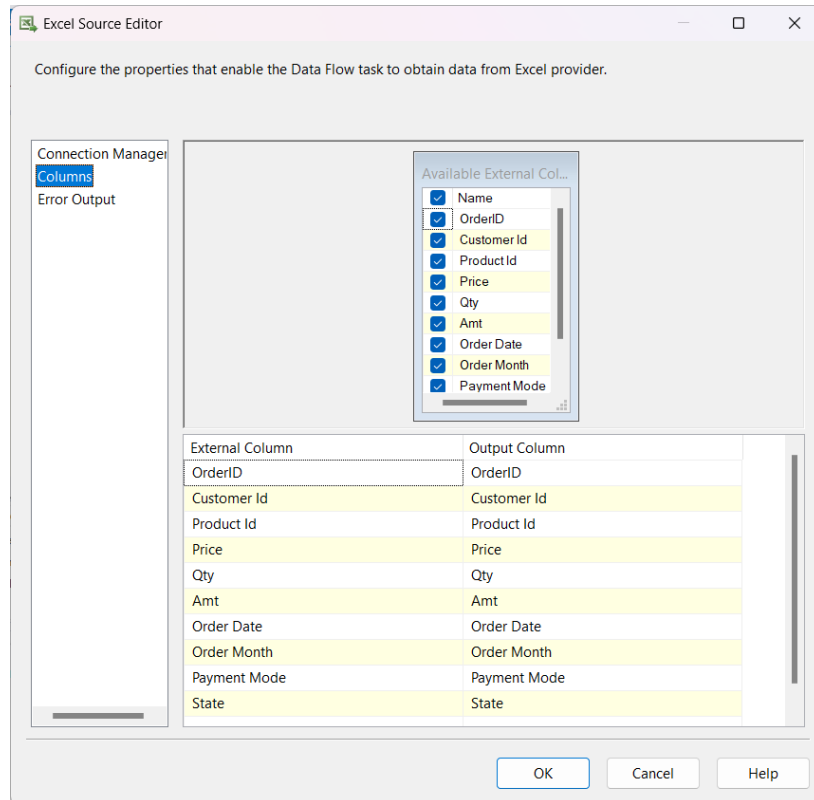


4. Select Excel Source from Sources list

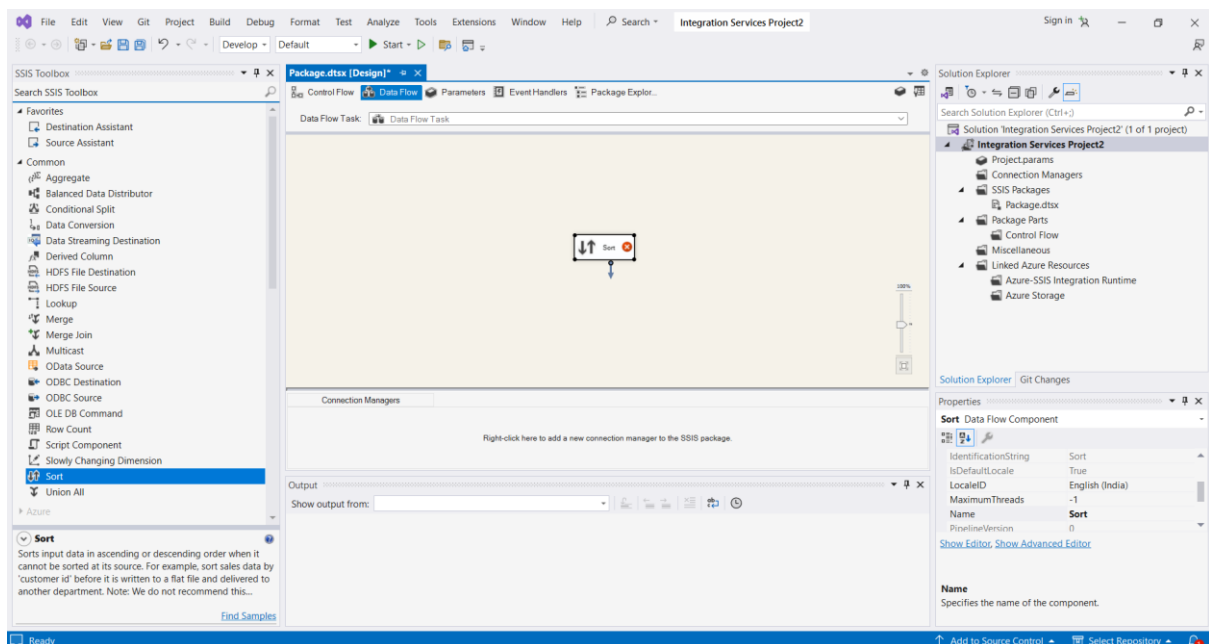


5. Configure the excel source

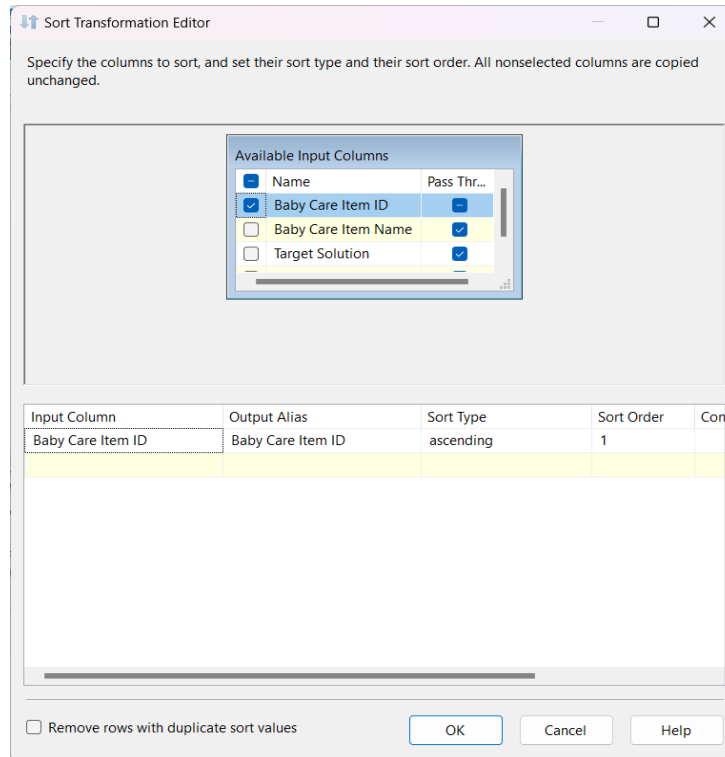




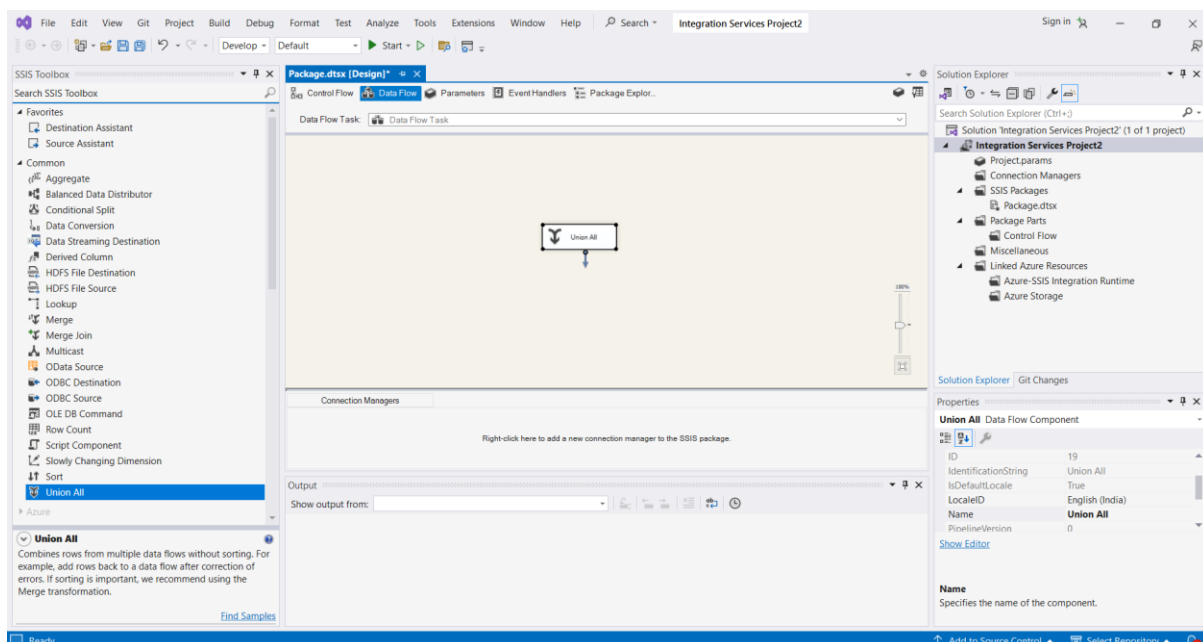
6. Select Sort transformations from the transformations list



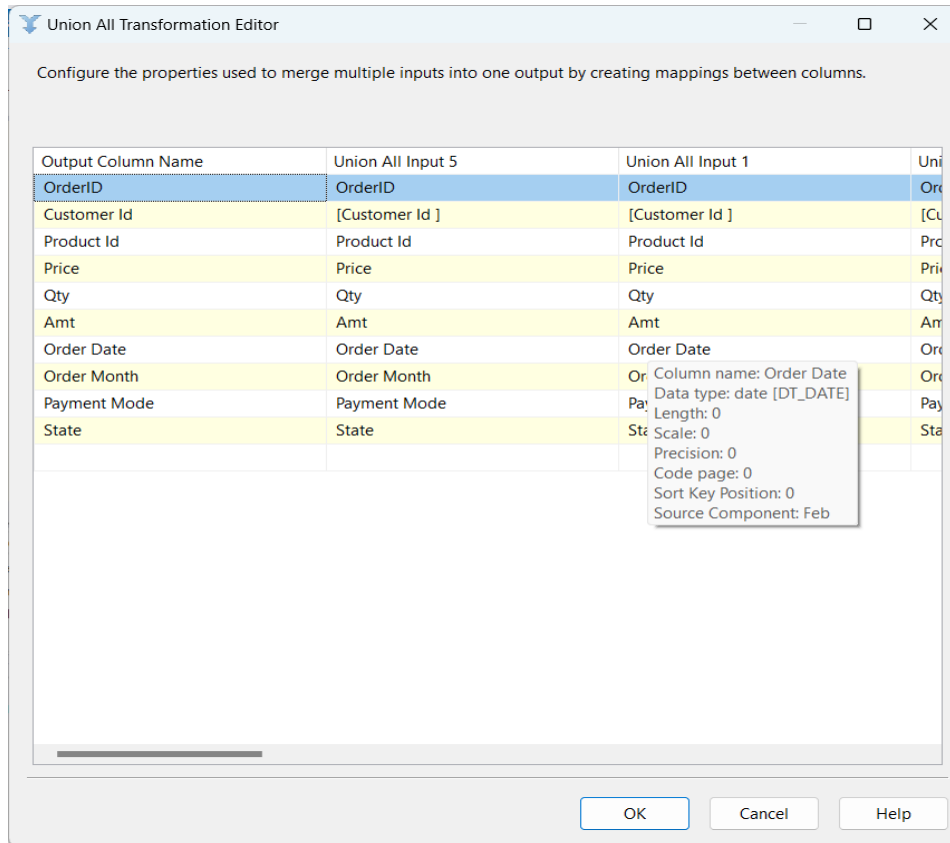
7. Configure the Sort Transformation



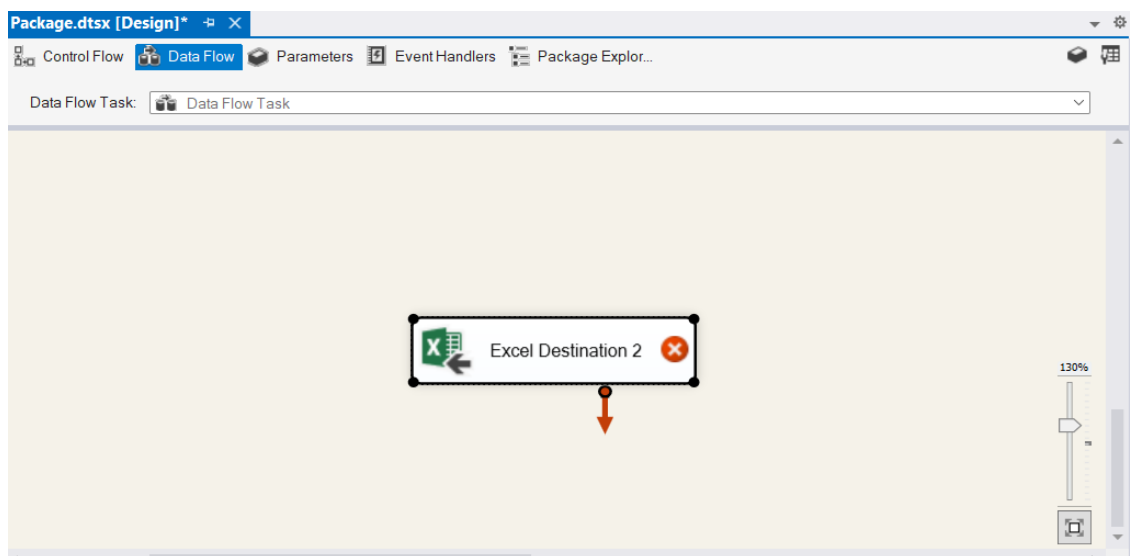
8. Select Union All transformation from the transformations list



9. Configure the Union All Transformation



10. Select Excel Destinations from destinations list



11. Configure the Excel Destination

Excel Destination Editor

Configure the properties that enable the insertion of data via an Excel provider.

Connection Manager
Mappings
Error Output

Specify a connection manager, data source, or data source view for the Excel destination. Then, select the mode used to access data within the destination. After selecting the data access mode, select from among the additional data access options that appear.

Excel connection manager:
Excel Connection Manager 1 New...

Data access mode:
Table or view

Name of the Excel sheet:
'Product Data\$' New...

View Existing

OK Cancel Help

Excel Destination Editor

Configure the properties that enable the insertion of data via an Excel provider.

Connection Manager
Mappings
Error Output

Available Input Columns:

Name
Item ID
Item Name
Target Solution

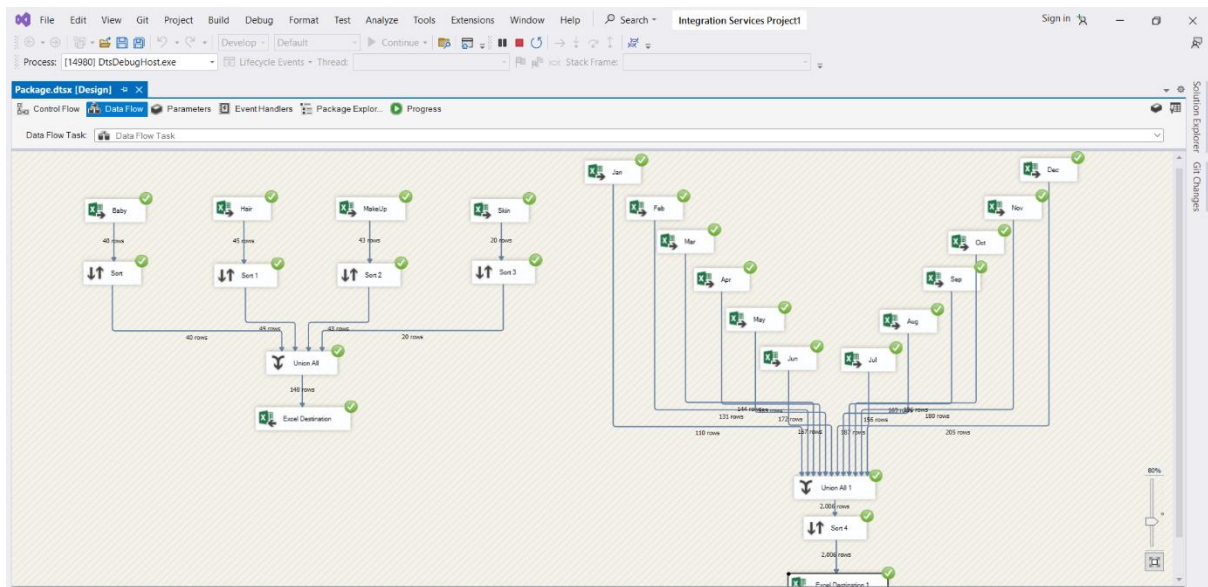
Available Destination Columns:

Name
Item ID
Item Name
Target Solution
Unit Price(Rupees)

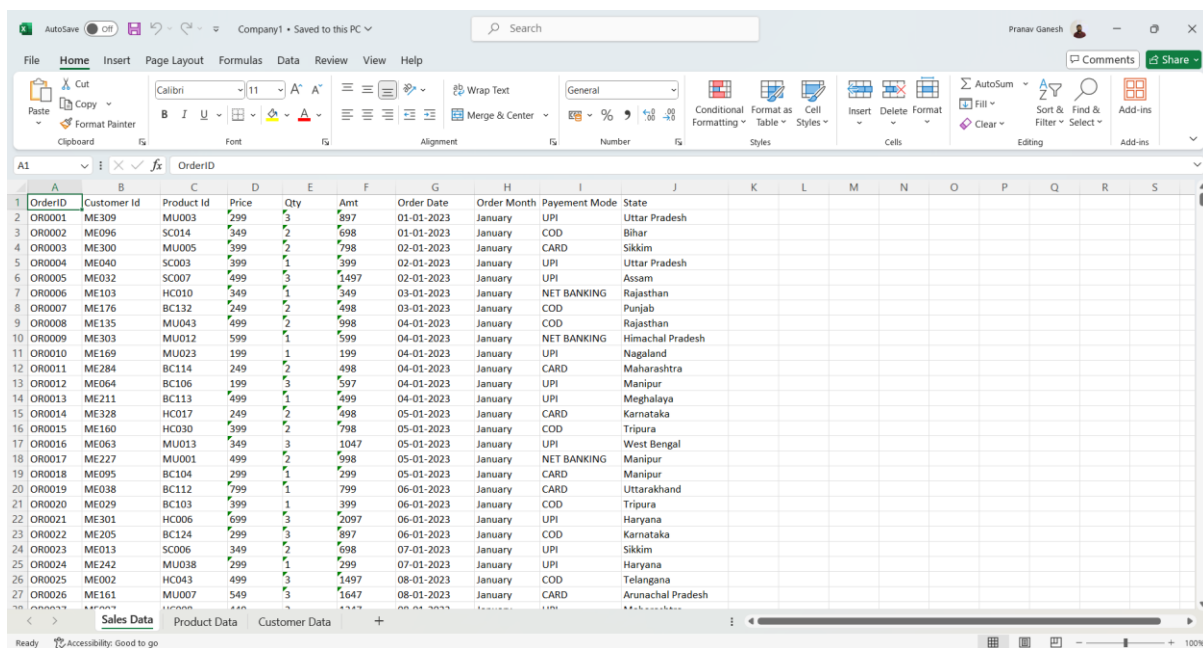
Input Column	Destination Column
Item ID	Item ID
Item Name	Item Name
Target Solution	Target Solution
Unit Price (Rupees)	Unit Price(Rupees)

OK Cancel Help

12. After Configuring all the sources, destinations and Transformations, Click On Run

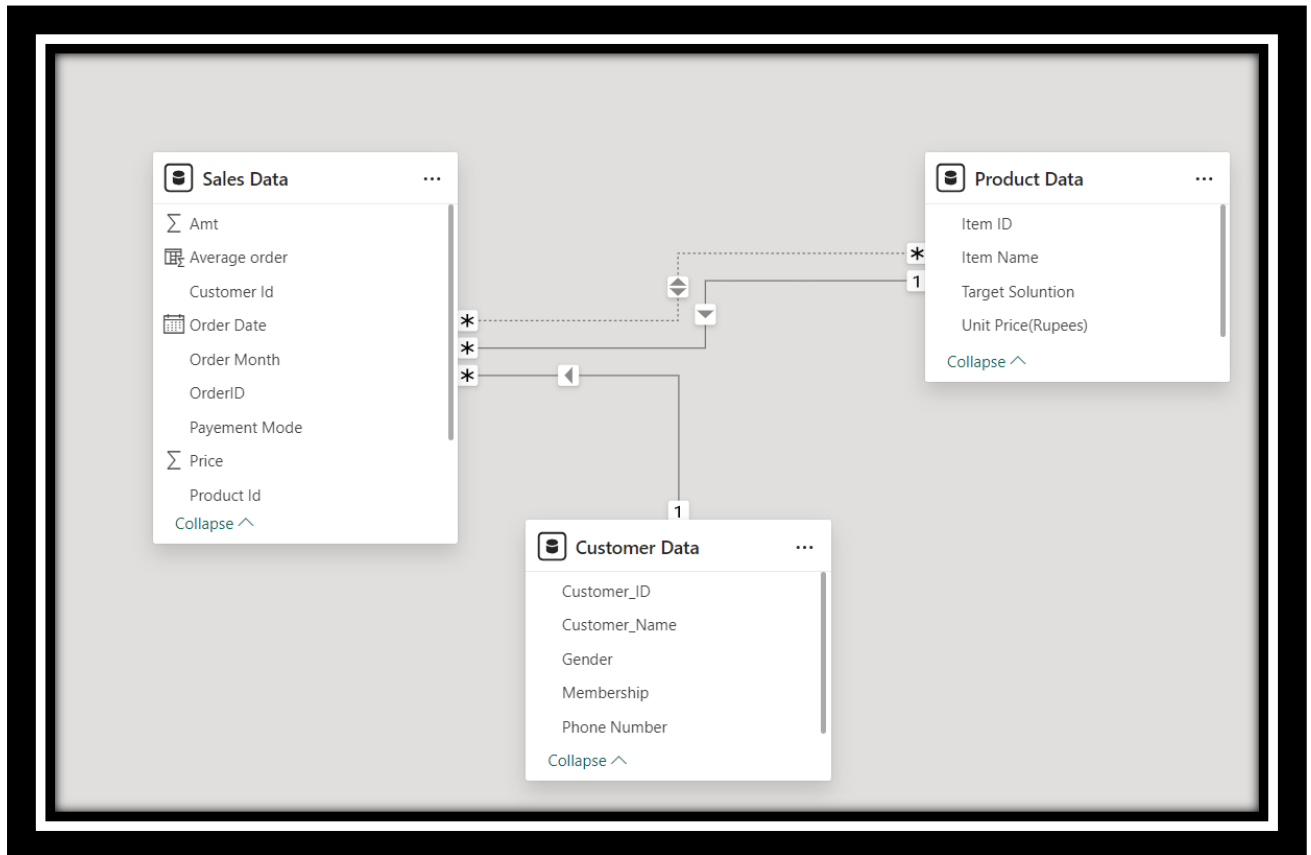


13. Once the execution is completed, we get the resultant data



OrderID	Customer Id	Product Id	Price	Qty	Amt	Order Date	Order Month	Payment Mode	State
OR0001	ME309	MU003	299	3	897	01-01-2023	January	UPI	Uttar Pradesh
OR0002	ME096	SC014	349	2	698	01-01-2023	January	COD	Bihar
OR0003	ME300	MU005	399	2	798	02-01-2023	January	CARD	Sikkim
OR0004	ME040	SC003	399	1	399	02-01-2023	January	UPI	Uttar Pradesh
OR0005	ME032	SC007	499	3	1497	02-01-2023	January	UPI	Assam
OR0006	ME103	HC010	349	1	349	03-01-2023	January	NET BANKING	Rajasthan
OR0007	ME176	BC132	249	2	498	03-01-2023	January	COD	Punjab
OR0008	ME135	MU043	499	2	998	04-01-2023	January	COD	Rajasthan
OR0009	ME303	MU012	599	1	599	04-01-2023	January	NET BANKING	Himachal Pradesh
OR0010	ME169	MU023	199	1	199	04-01-2023	January	UPI	Nagaland
OR0011	ME284	BC114	249	2	498	04-01-2023	January	CARD	Maharashtra
OR0012	ME064	BC106	199	3	597	04-01-2023	January	UPI	Manipur
OR0013	ME211	BC113	499	1	499	04-01-2023	January	UPI	Meghalaya
OR0014	ME328	HC017	249	2	498	05-01-2023	January	CARD	Karnataka
OR0015	ME160	HC030	399	2	798	05-01-2023	January	COD	Tripura
OR0016	ME063	MU013	349	3	1047	05-01-2023	January	UPI	West Bengal
OR0017	ME227	MU001	499	2	998	05-01-2023	January	NET BANKING	Manipur
OR0018	ME095	BC104	299	1	299	05-01-2023	January	CARD	Manipur
OR0019	ME038	BC112	799	1	799	06-01-2023	January	CARD	Uttarakhand
OR0020	ME029	BC103	399	1	399	06-01-2023	January	COD	Tripura
OR0021	ME301	HC006	699	3	2097	06-01-2023	January	UPI	Haryana
OR0022	ME205	BC124	299	3	897	06-01-2023	January	COD	Karnataka
OR0023	ME013	SC006	349	2	698	07-01-2023	January	UPI	Sikkim
OR0024	ME242	MU038	299	1	299	07-01-2023	January	UPI	Haryana
OR0025	ME002	HC043	499	3	1497	08-01-2023	January	COD	Telangana
OR0026	ME161	MU007	549	3	1647	08-01-2023	January	CARD	Arunachal Pradesh

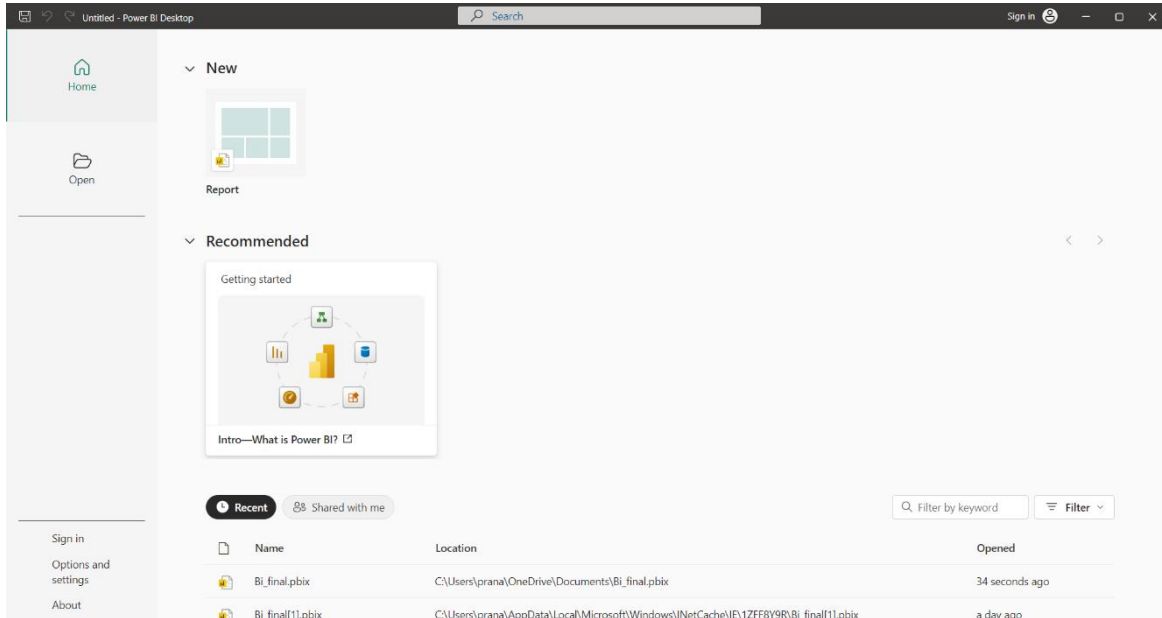
Data Model:



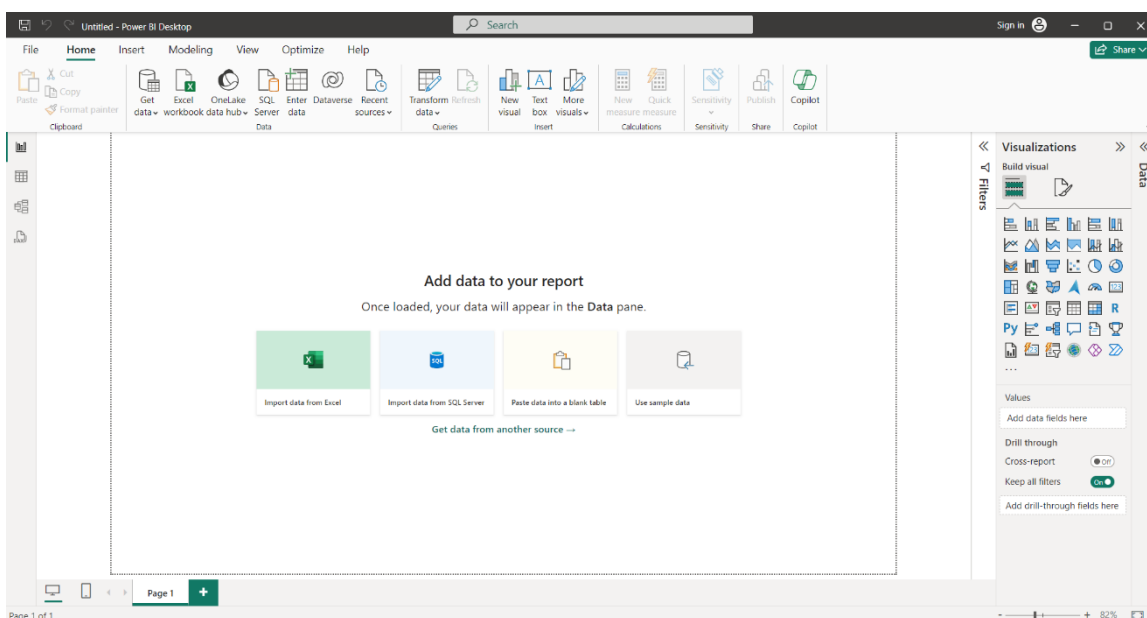
Star Schema

Data Analysis and Visualisation:

1. Open Power BI and click on New Report



2. Select import data from excel option and select the excel file and then select the sheets that you want to import from the excel file.



Navigators

Display Options ▾

Company1.xlsx [3]

☒ Customer Data

☒ Product Data

☒ Sales Data

Sales Data

Preview downloaded on Wednesday

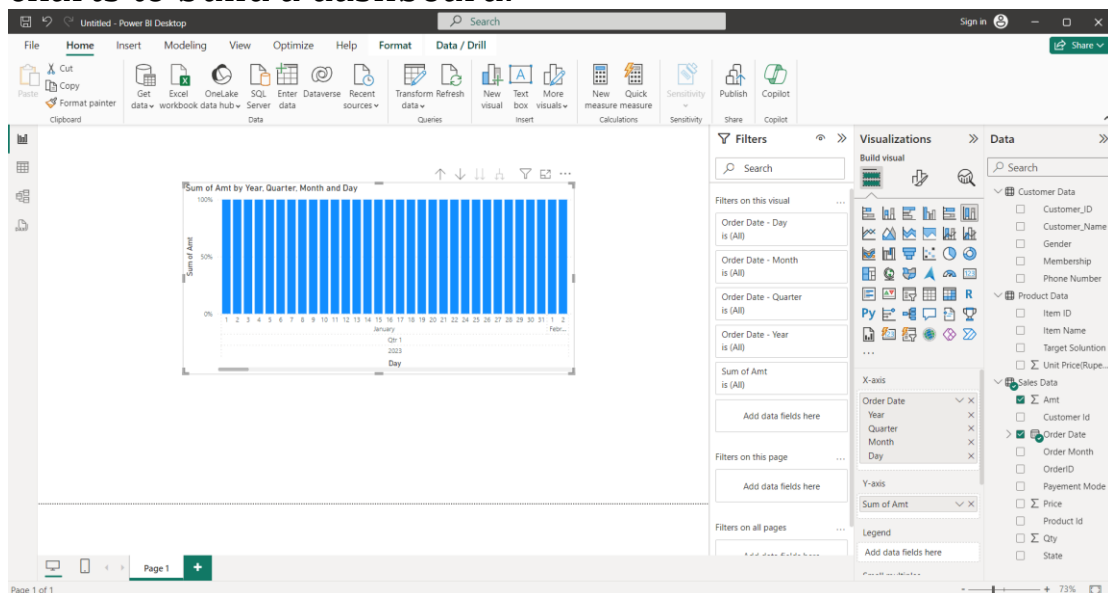
OrderID	Customer Id	Product Id	Price	Qty	Amt	Orde
OR0001	ME309	MU003	299	3	897	
OR0002	ME096	SC014	349	2	698	
OR0003	ME300	MU005	399	2	798	
OR0004	ME040	SC003	399	1	399	
OR0005	ME032	SC007	499	3	1497	
OR0006	ME103	HC010	349	1	349	
OR0007	ME176	BC132	249	2	498	
OR0008	ME135	MU043	499	2	998	
OR0009	ME303	MU012	599	1	599	
OR0010	ME169	MU023	199	1	199	
OR0011	ME284	BC114	249	2	498	
OR0012	ME064	BC106	199	3	597	
OR0013	ME211	BC113	499	1	499	
OR0014	ME328	HC017	249	2	498	
OR0015	ME160	HC030	399	2	798	
OR0016	ME063	MU013	349	3	1047	
OR0017	ME227	MU001	499	2	998	
OR0018	ME095	BC104	299	1	299	
OR0019	ME038	BC112	799	1	799	
OR0020	ME029	BC103	399	1	399	
OR0021	ME301	HC006	699	3	2097	
OR0022	ME205	BC124	299	3	897	

Load

Transform Data

Cancel

3. Select the charts you want one by one and configure the charts to build a dashboard.



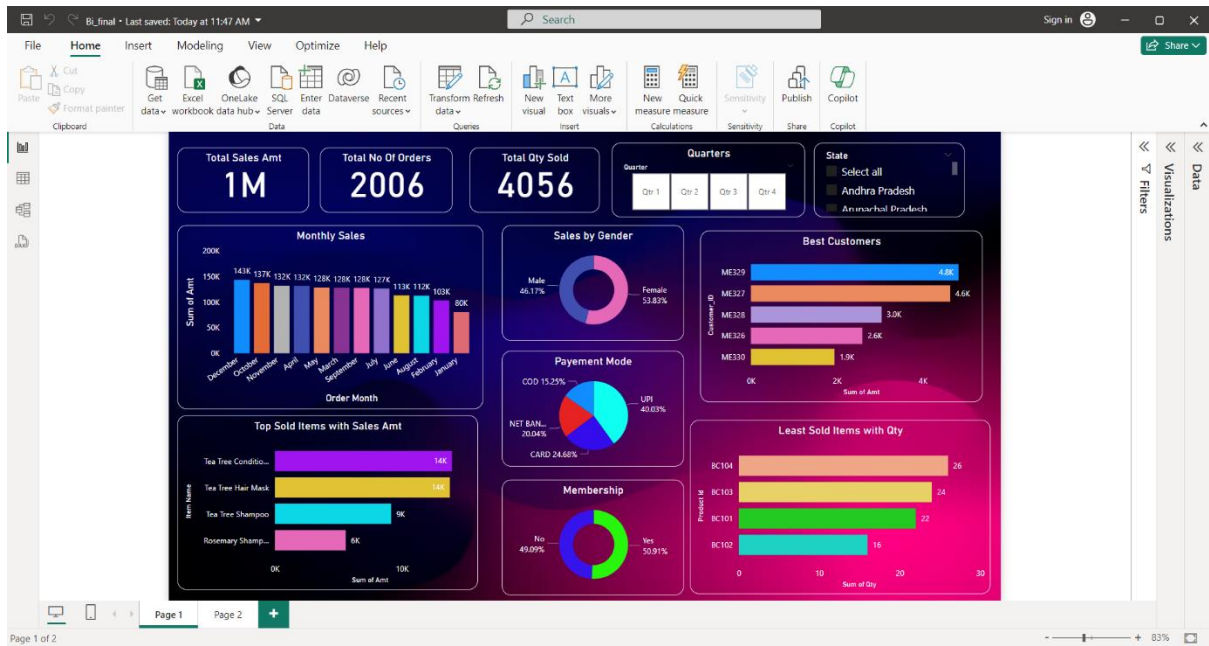


Fig. Dashboard of Complete Year Sales

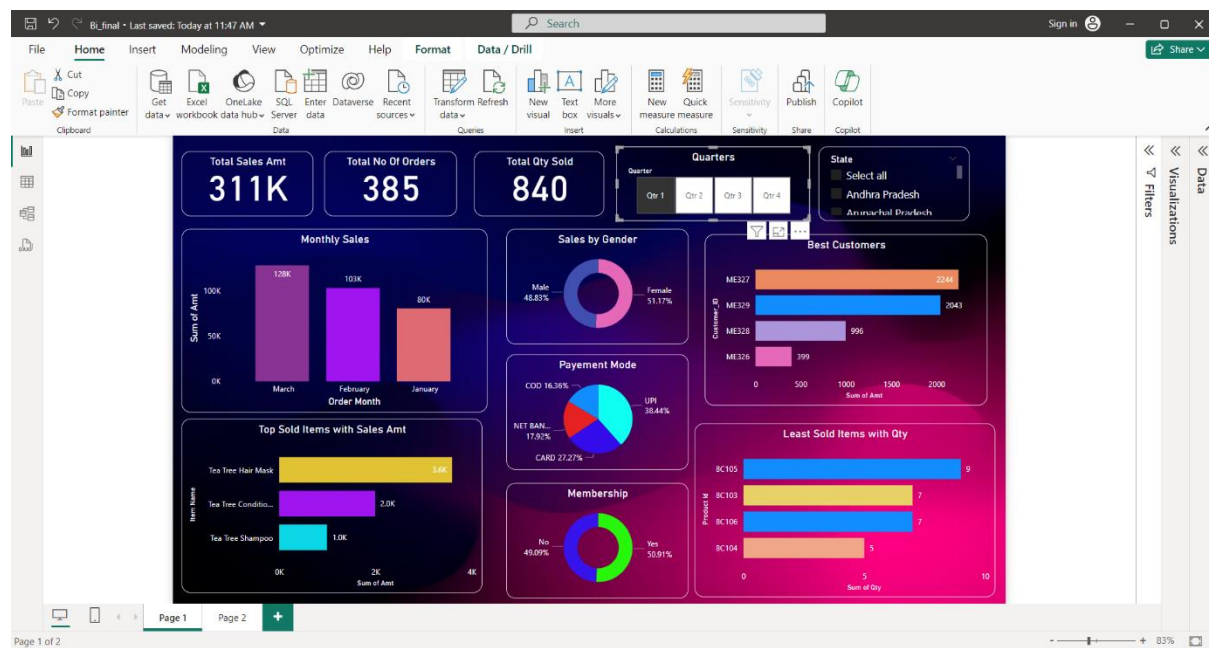


Fig. Dashboard of First Quarter Sales

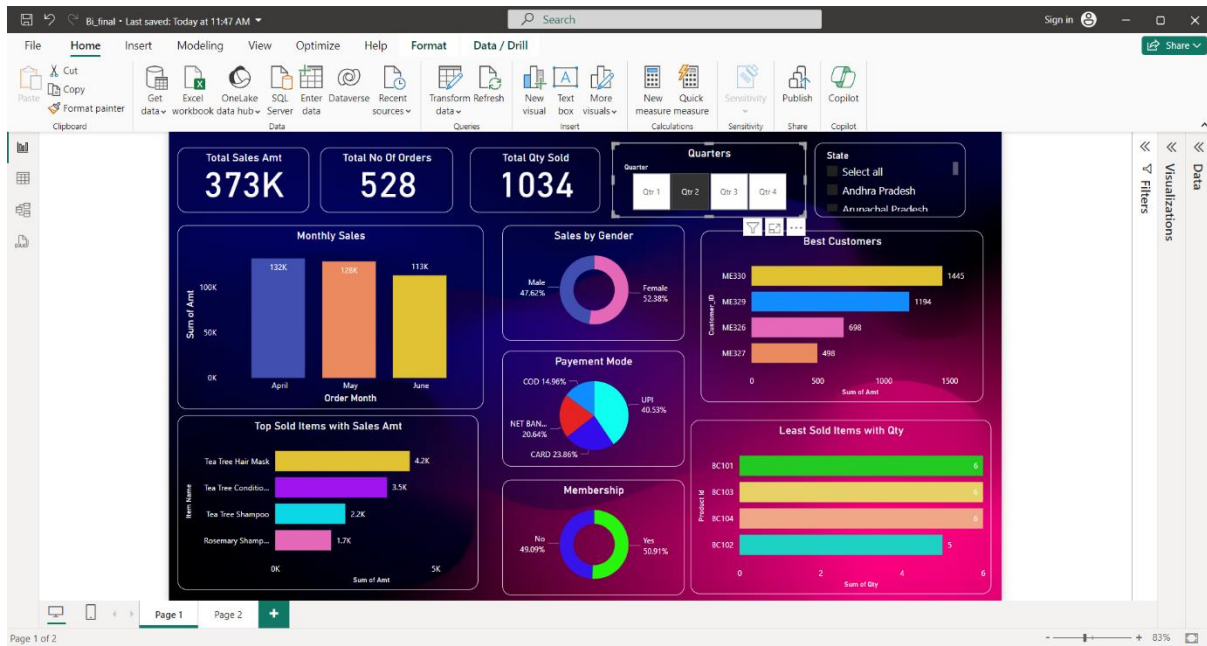


Fig. Dashboard of Second Quarter Sales



Fig. Dashboard of Third Quarter Sales

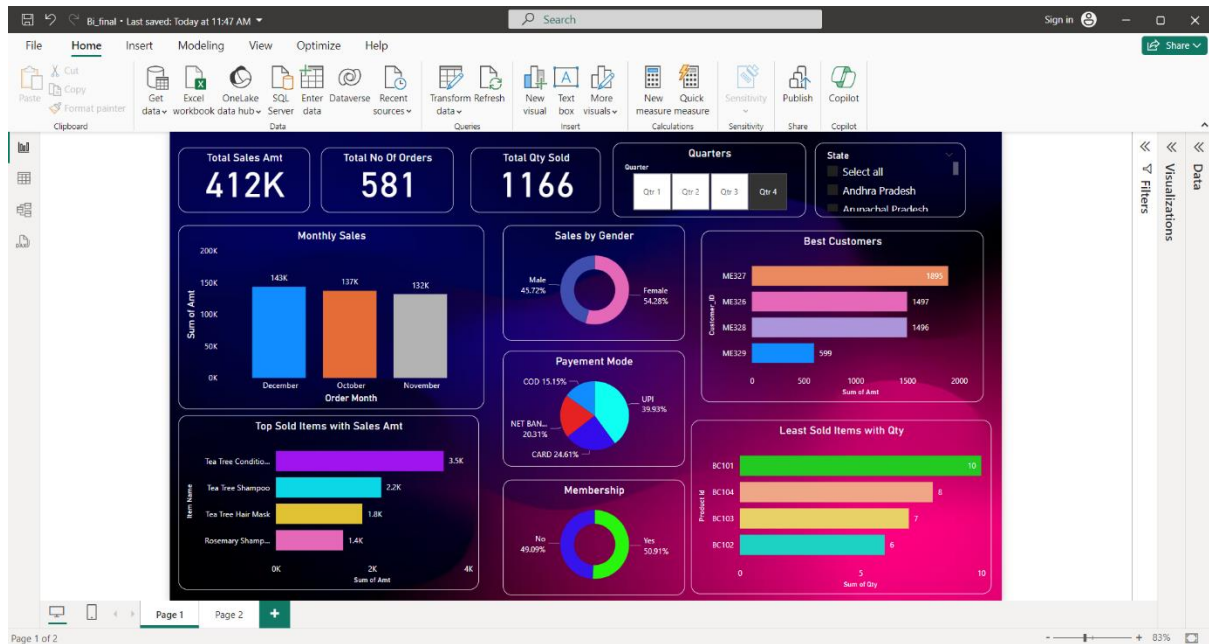


Fig. Dashboard of Fourth Quarter Sales

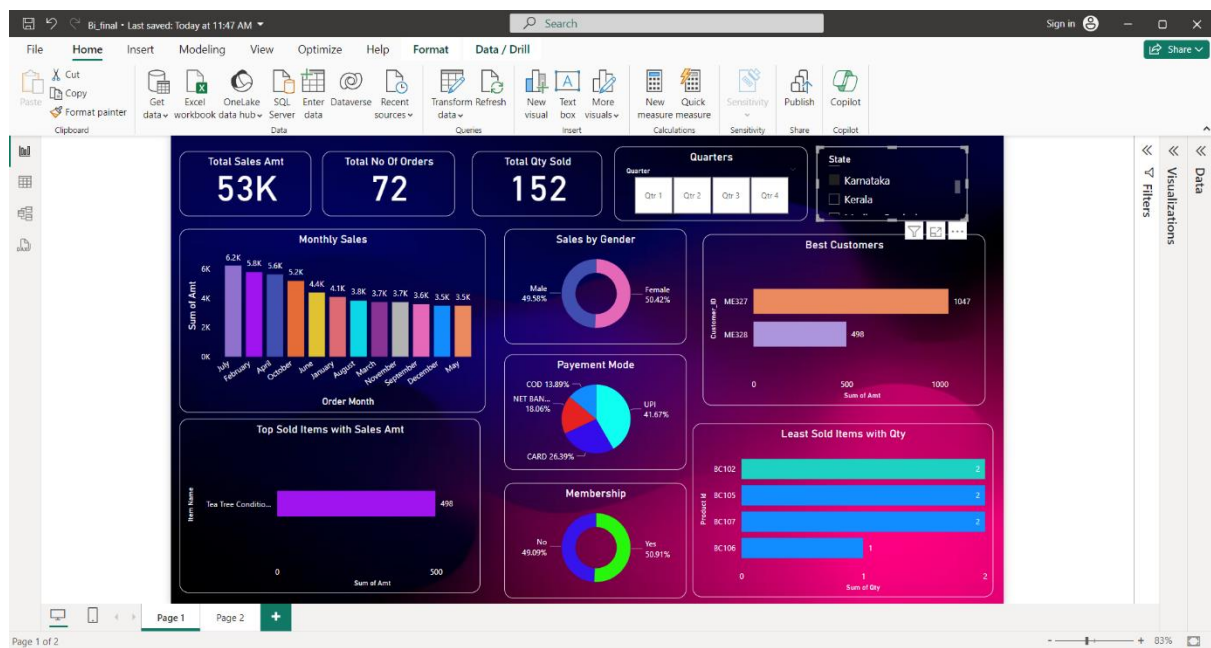


Fig. Sales of Particular State(Karnataka)



Fig. Dashboard After Slicing



Fig. Dashboard after Dicing

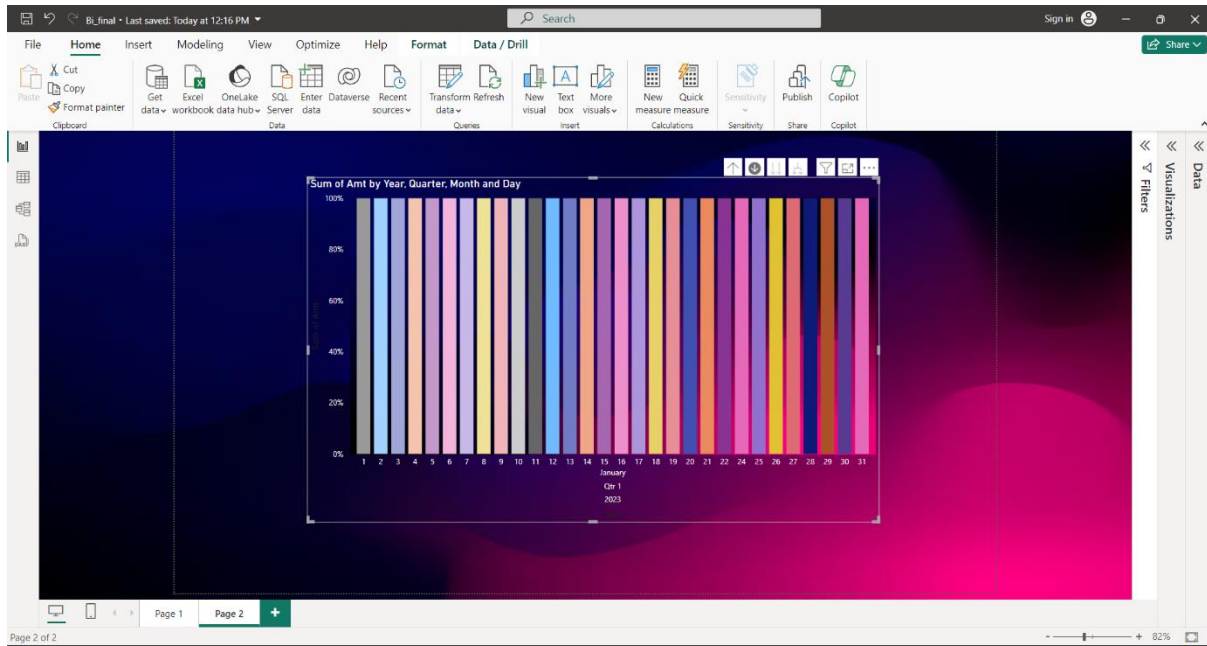


Fig. Complete Drill Down