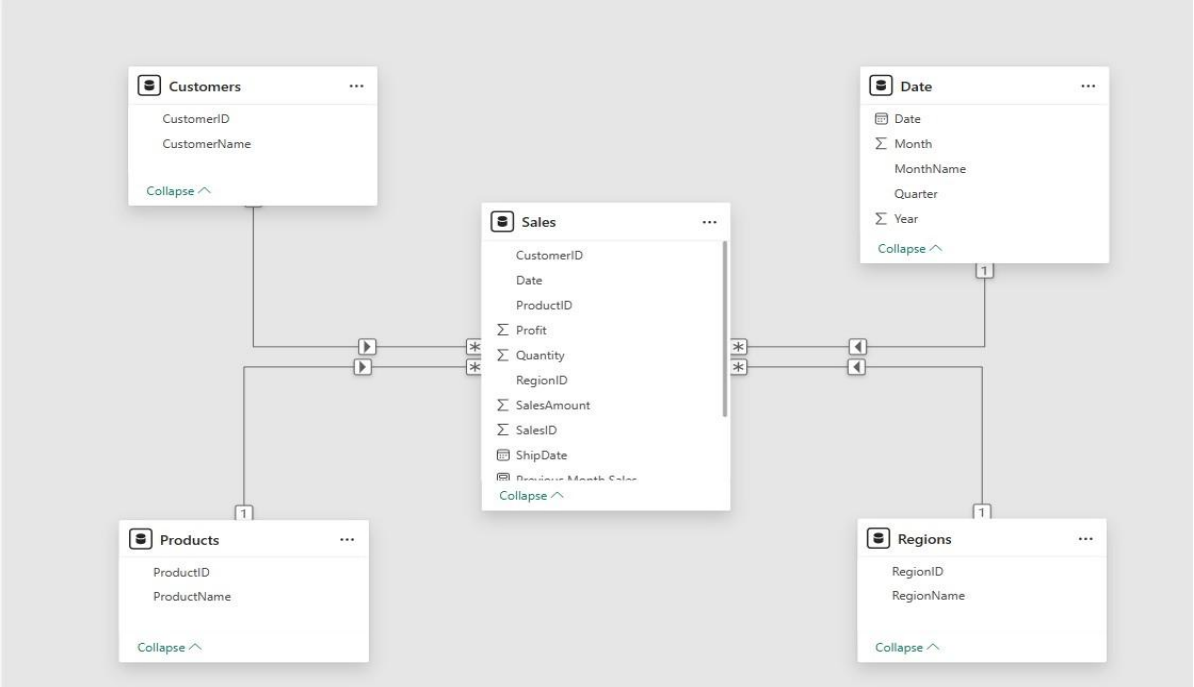
ASSIGNMENT

September-26,2025

SALES DATA:

- Import the sales data into power bi desktop application by using get data from the home tab and select the sales data and load it.
- Customers table, products table, Regions table has column names different, a little data cleaning is needed here.
- Go to transform data tab and the data opens in power query navigate to the tables and select the first row as headers for customer, products, regions table.
- Perform Data Modelling by establishing relationships.
- Sales table is the only fact table present here and remaining are all dimension tables.
- Sales table Date column is connected with Date table Date column.
- Sales table Customer ID is connected with Customers table Customer ID column.
- Sales table Product ID is connected with Products table Product ID column.
- Sales table Region ID is connected with Regions table Region ID column.



1. Calculate the Running sum for total sales amount based on each day.
   Steps:
   - Sort the date column in ascending order.
   - Running Sum = CALCULATE(SUM(Sales[SalesAmount]),FILTER(ALLSELECTED(Sales[Date]),Sales[Date]<=MAX(Sales[Date])))
   - This formula helps to calculate the sales amount till the previous date mentioned.
   - Running sum can also be called as cumulative sum.
   - Calculate function is used as we are using filter conditions, expressions etc.
   - Filter condition is used for filtering the values based on the condition.
   - All selected function helps to select all the values satisfying the condition. Take a table and pass the measure to display it.

Date	Sum of SalesAmount	Running Sum
02-01-2024	1764	1764
05-01-2024	296	2060
21-01-2024	250	2310
23-01-2024	630	2940
25-01-2024	1092	4032
31-01-2024	791	4823
03-02-2024	652	5475
05-02-2024	1200	6675
10-02-2024	690	7365
17-02-2024	1250	8615
22-02-2024	1128	9743
08-03-2024	696	10439
09-03-2024	891	11330
14-03-2024	1332	12662
23-03-2024	729	13391
24-03-2024	845	14236
07-04-2024	804	15040
08-04-2024	402	15442
17-04-2024	1278	16720
19-04-2024	720	17440
22-04-2024	183	17623
27-04-2024	290	17913
02-05-2024	690	18603
07-05-2024	163	18766
22-05-2024	690	19456
26-05-2024	312	19768
06-06-2024	900	20668
19-06-2024	540	21208
04-07-2024	164	21372
25-07-2024	1560	22932
02-08-2024	530	23462
Total	**33888**	**33888**

2. Calculate the Previous month sales for every month.

Steps:

- To calculate the previous month sales we first need to calculate the monthly sales amount.
- Take a table and pass month and year to the columns and sum of sales amount.
- Now, the month wise sales data is present we need to calculate the previous month sales amount by creating a measure.
- Previous Month Sales = CALCULATE(SUM(Sales[SalesAmount]),PREVIOUSMONTH('Date'[Date]))
- Now pass the measure to the table to display it.

Year	Month	Sum of SalesAmount	Previous Month Sales
2024	January	4823	
2024	February	4920	4823
2024	March	4493	4920
2024	April	3677	4493
2024	May	1855	3677
2024	June	1440	1855
2024	July	1724	1440
2024	August	1350	1724
2024	September	2117	1350
2024	October	847	2117
2024	November	4171	847
2024	December	2471	4171
Total		**33888**	

3. Calculate the sales amount difference between the present month and the previous month.

   Steps:

   - We already have the current month sales amount and previous month sales amount.
   - From the existing data we can create the sales amount difference by subtracting the previous month sales from the present month sales.
   - Sales Difference = SUM(Sales[SalesAmount])-Sales[Previous Month Sales]
   - Take the table visual and pass the values to it
   - Columns: Year, Month, Sum of Sales Amount, Previous month sales, Sales Difference.

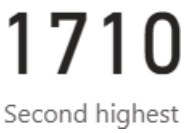
Year	Month	Sum of SalesAmount	Previous Month Sales	Sales Difference
2024	January	4823		4823
2024	February	4920	4823	97
2024	March	4493	4920	-427
2024	April	3677	4493	-816
2024	May	1855	3677	-1822
2024	June	1440	1855	-415
2024	July	1724	1440	284
2024	August	1350	1724	-374
2024	September	2117	1350	767
2024	October	847	2117	-1270
2024	November	4171	847	3324
2024	December	2471	4171	-1700
Total		**33888**		**33888**

4. Calculate the maximum sales amount.

Steps:

- Take a card and pass sales amount column to it.
- Select the maximum option from implicit measures.

5. Calculate the second highest sales amount.



Steps:

- To calculate the second highest sales amount a measure has to be made as below.
- Second highest = CALCULATE(MAX(Sales[SalesAmount]),Sales[SalesAmount]< MAX(Sales[SalesAmount]))
- The nested query concept is used here the salary lesser than the maximum salary is calculated and displayed as second highest salary.
- Take a card and pass the value to display it in the report view.