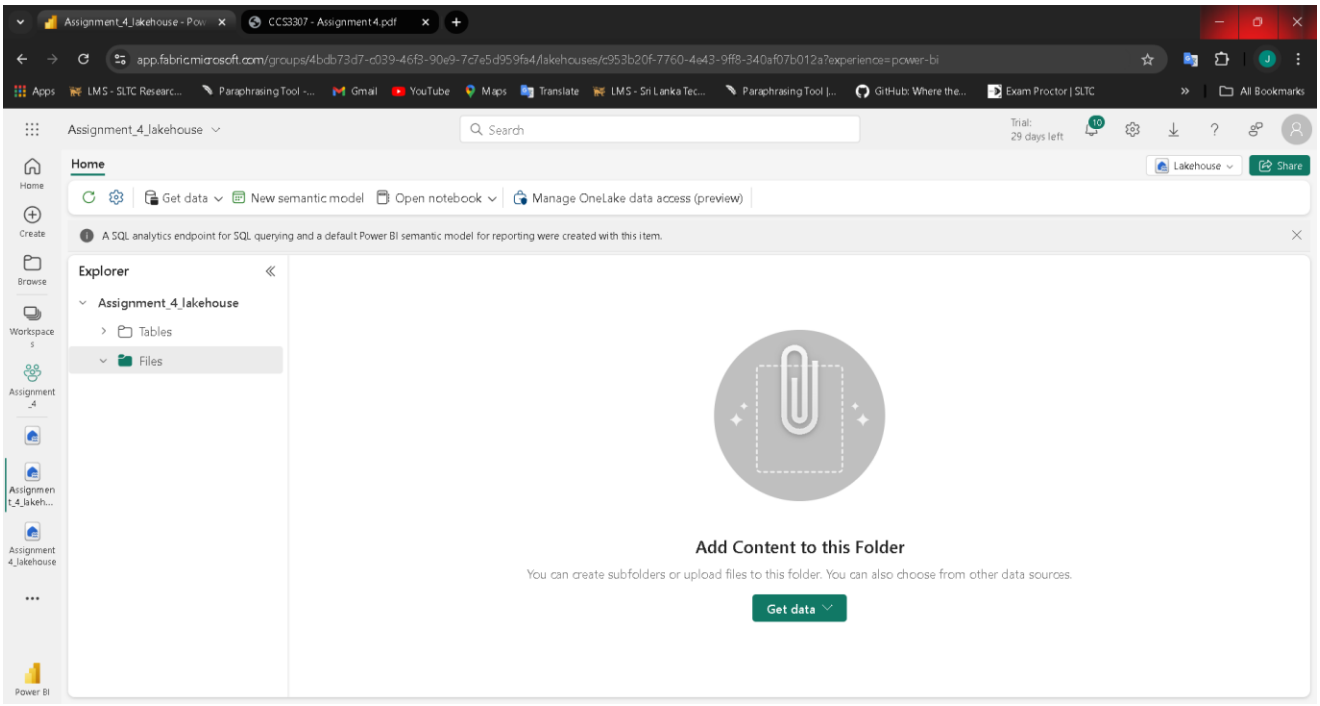
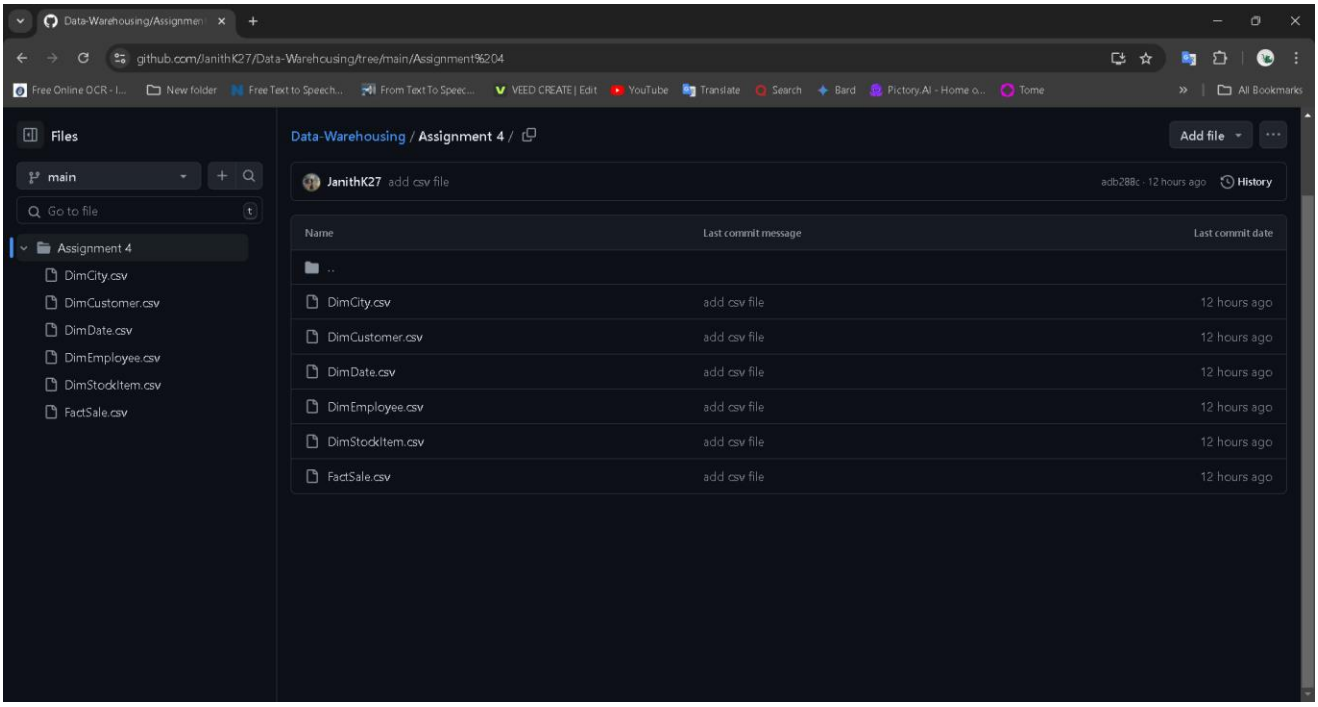
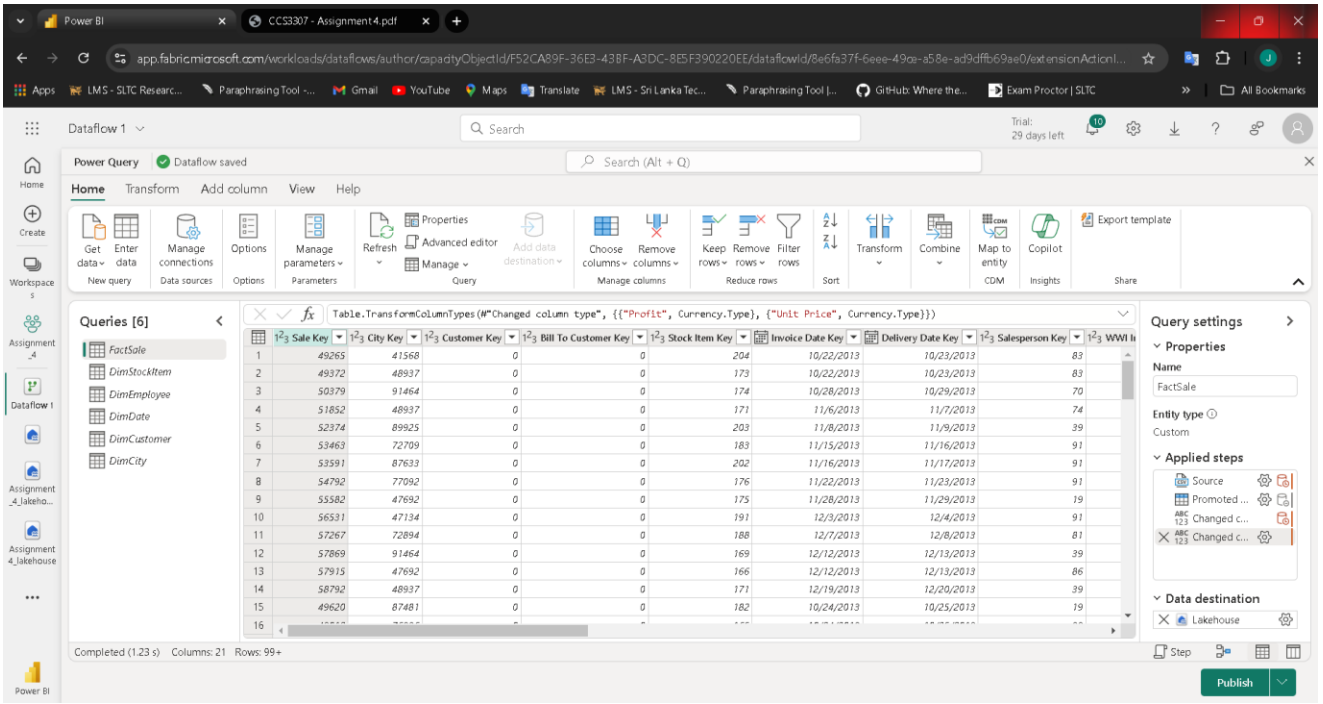
Assignment 4 # CCS3307-Data Warehousing **R. No: 21UG0228**

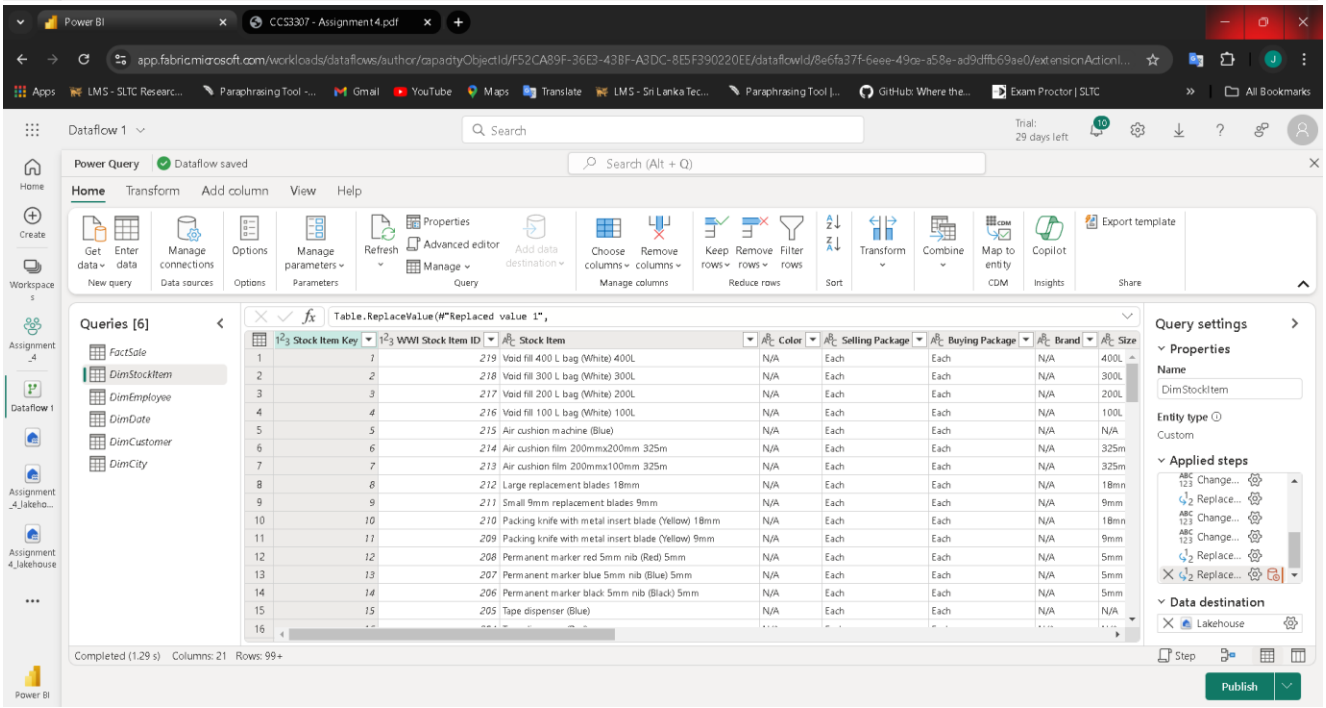
1. This dataset comprises several Excel files related to sales, including dimensions for customers, stock items, cities, dates, and employees, as well as a fact table for sales transactions. Create a Data Lakehouse in Microsoft fabric. Upload this dataset to the Microsoft fabric environment using the Upload Files option or Data Flow Gen2.

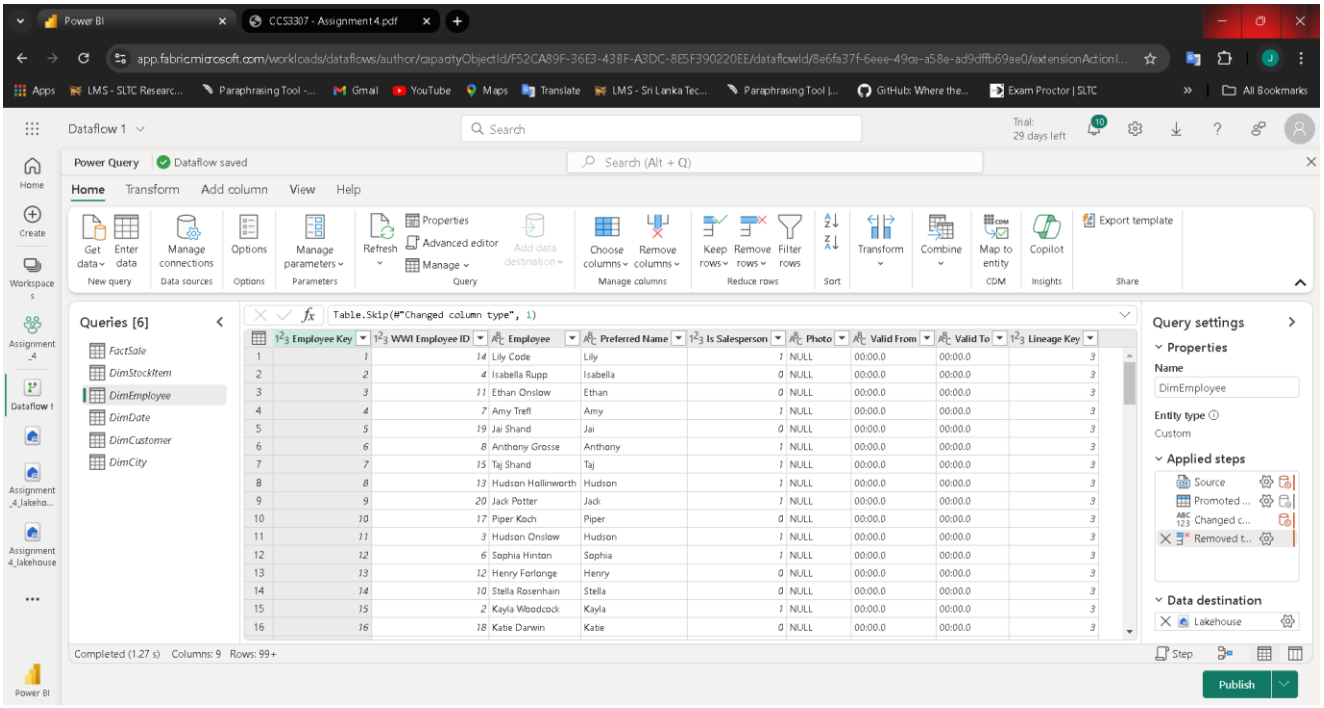


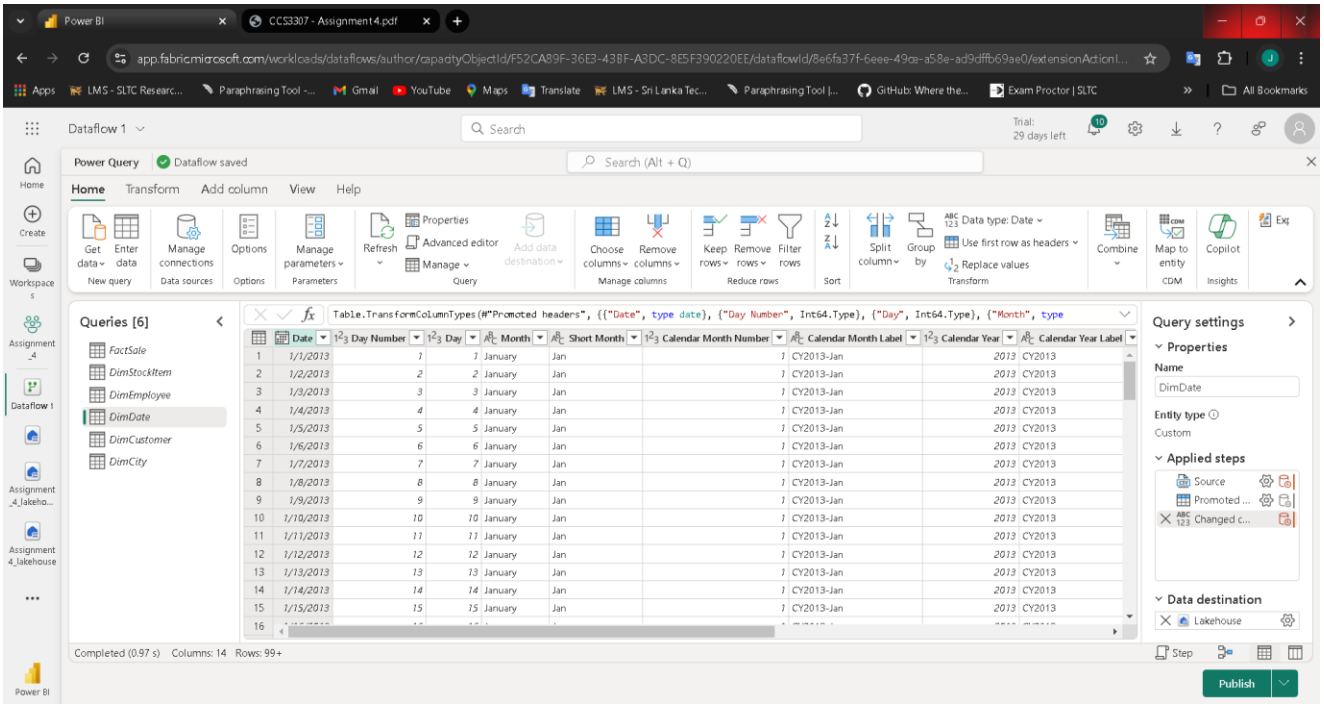


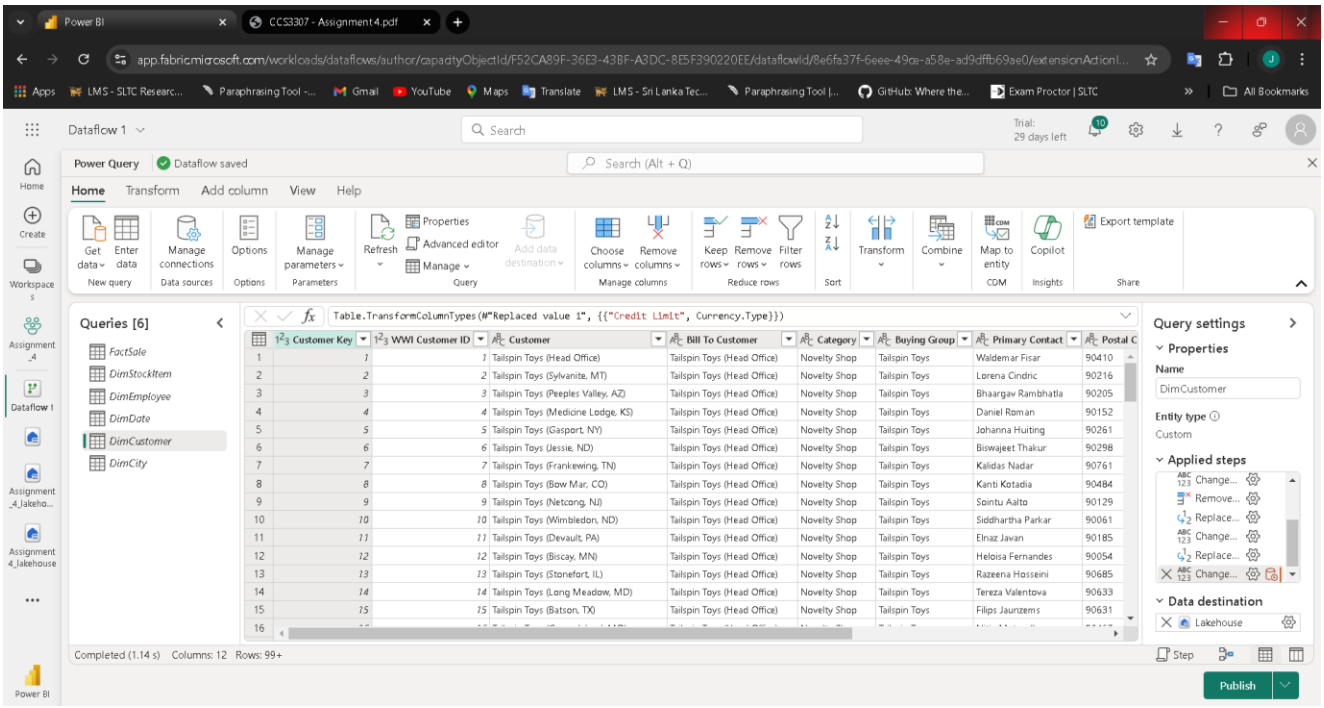
2. Apply the necessary preprocessing and transforming steps and create files in Data Lake Delta Tables. To do this ETL process use Data Flow Gen2 or Fabric Notebooks.

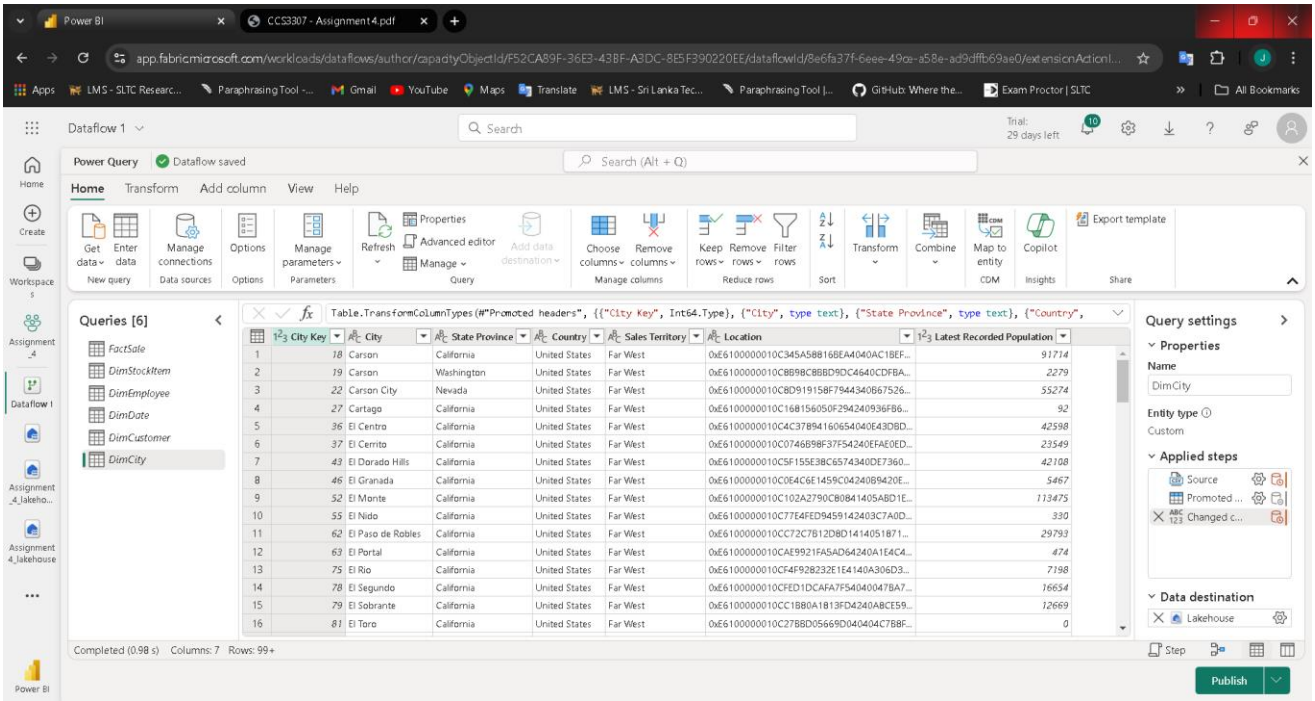


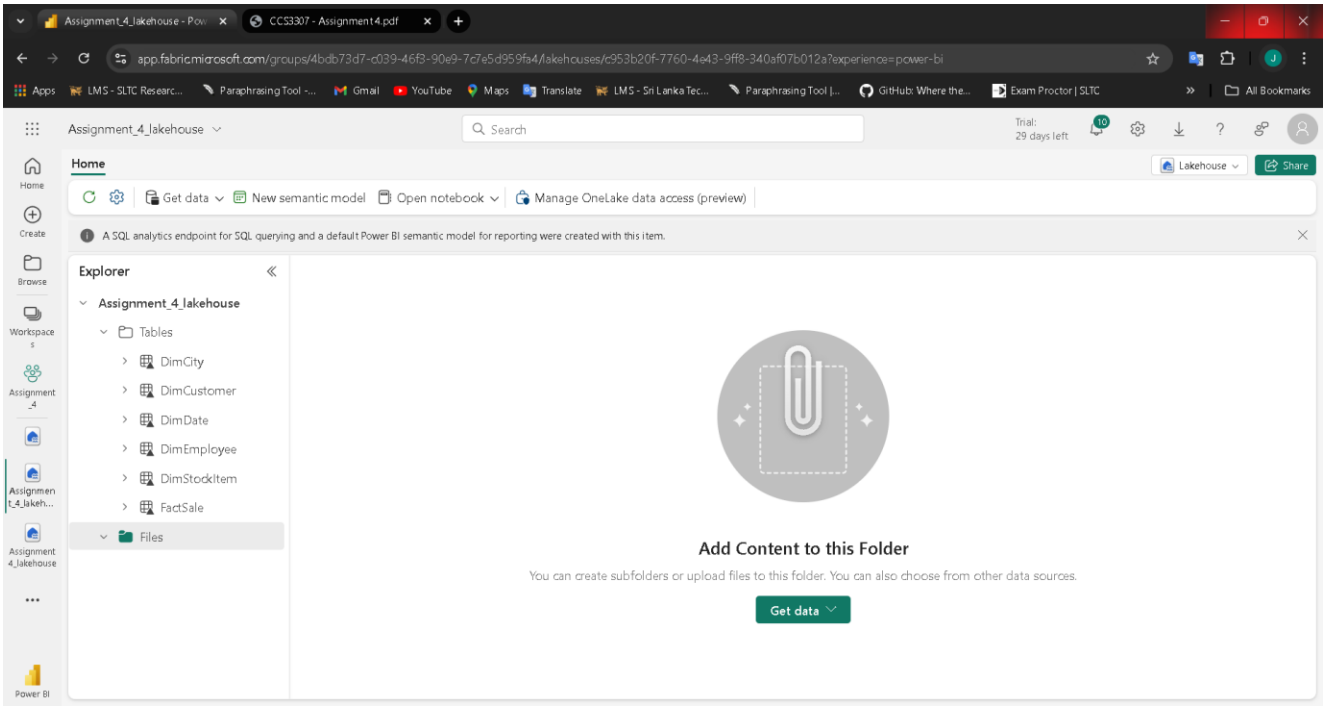



Power BI
CCS3307 - Assignment4.pdf
Dataflow 1
Power Query
Dataflow saved
Home
Transform
Add column
View
Help
Queries [6]
FactSale
DimStockItem
DimEmployee
DimDate
DimCustomer
DimCity
Table.Skip(#"Changed column type", 1)
Query settings
Properties
Name
DimEmployee
Entity type
Custom
Applied steps
Source
Promoted ...
Changed c...
Removed t...
Data destination
Lakehouse
Completed (1.27 s) Columns: 9 Rows: 99+
Publish

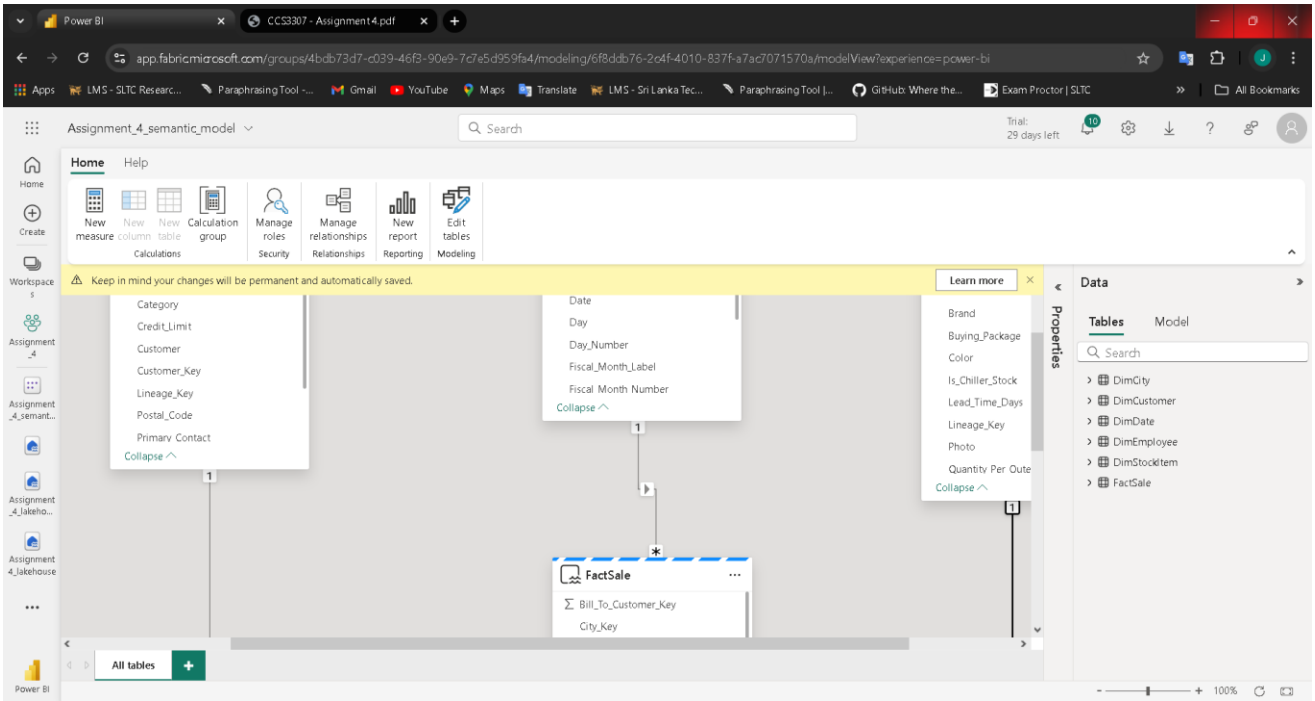

Power BI
CCS3307 - Assignment4.pdf
Dataflow 1
Power Query
Dataflow saved
Home
Transform
Add column
View
Help
Queries [6]
FactSale
DimStockItem
DimEmployee
DimDate
DimCustomer
DimCity
Table.TransformColumnTypes(#"Promoted headers", {{"Date", type date}, {"Day Number", Int64.Type}, {"Day", Int64.Type}, {"Month", type
Query settings
Properties
Name
DimDate
Entity type
Custom
Applied steps
Source
Promoted ...
Changed c...
Data destination
Lakehouse
Completed (0.97 s) Columns: 14 Rows: 99+
Publish

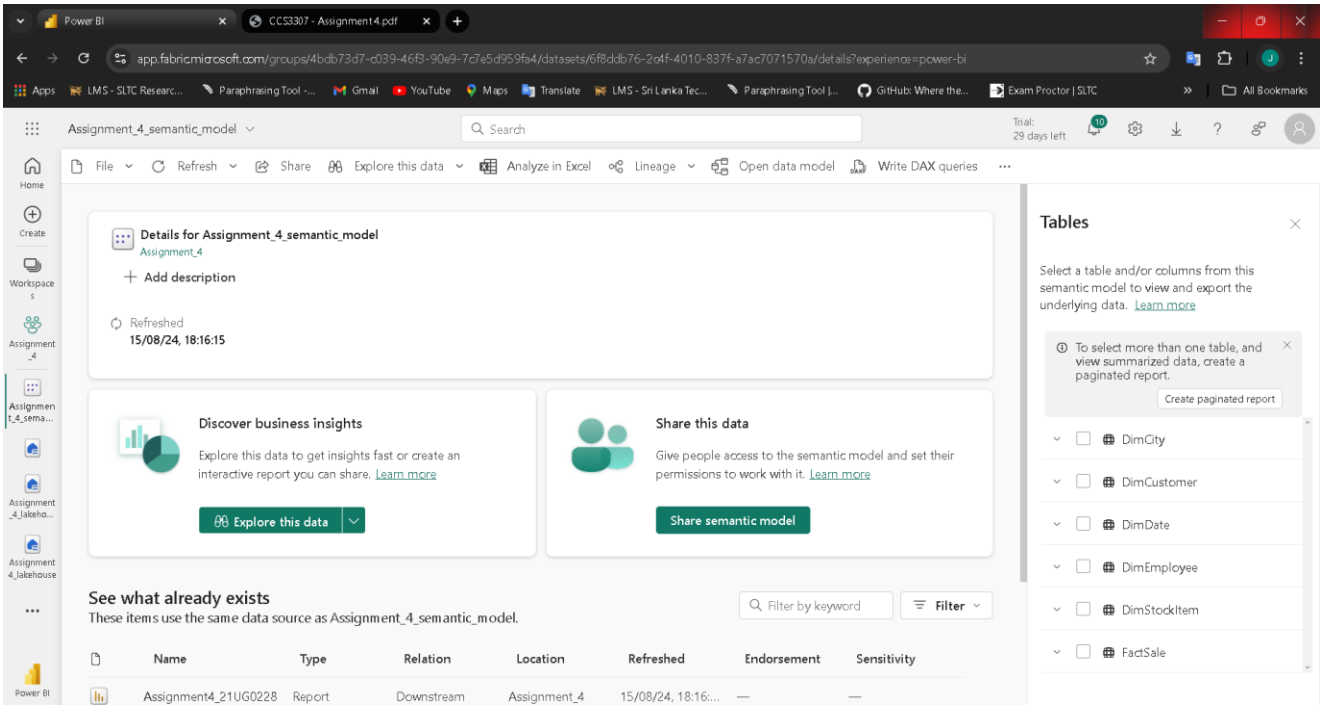

Power BI
CCS3307 - Assignment 4.pdf
Dataflow 1
Power Query
Dataflow saved
Home
Transform
Add column
View
Help
Queries [6]
FactSale
DimStockItem
DimEmployee
DimDate
DimCustomer
DimCity
Table.TransformColumnTypes(#"Replaced value 1", {{"Credit Limit", Currency.Type}})
Query settings
Properties
Name
DimCustomer
Entity type
Custom
Applied steps
Data destination
Lakehouse
Completed (1.14 s) Columns: 12 Rows: 99+
Publish


Power BI
CCS3307 - Assignment 4.pdf
Dataflow 1
Power Query
Dataflow saved
Home
Transform
Add column
View
Help
Queries [6]
FactSale
DimStockItem
DimEmployee
DimDate
DimCustomer
DimCity
Table.TransformColumnTypes(#"Promoted headers", {{"City Key", Int64.Type}, {"City", type text}, {"State Province", type text}, {"Country",
Query settings
Properties
Name
DimCity
Entity type
Custom
Applied steps
Source
Promoted ...
Changed c...
Data destination
Lakehouse
Completed (0.98 s) Columns: 7 Rows: 99+
Publish

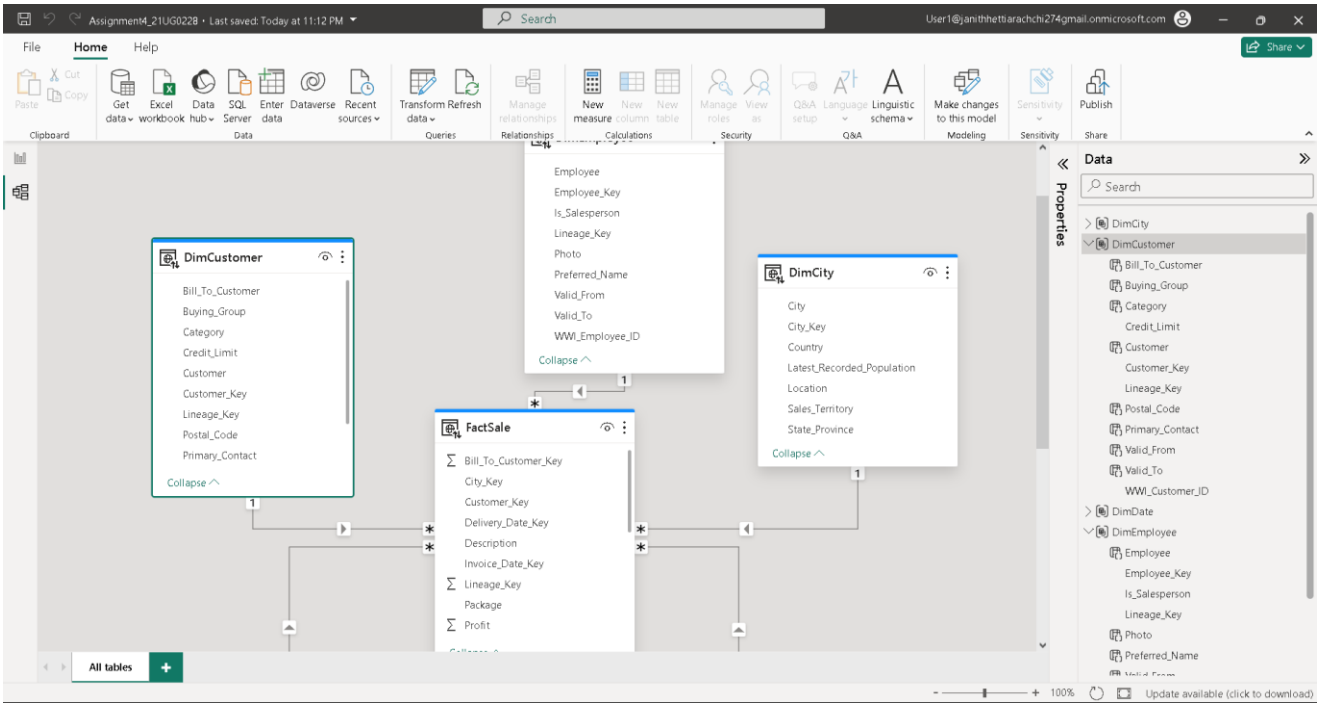


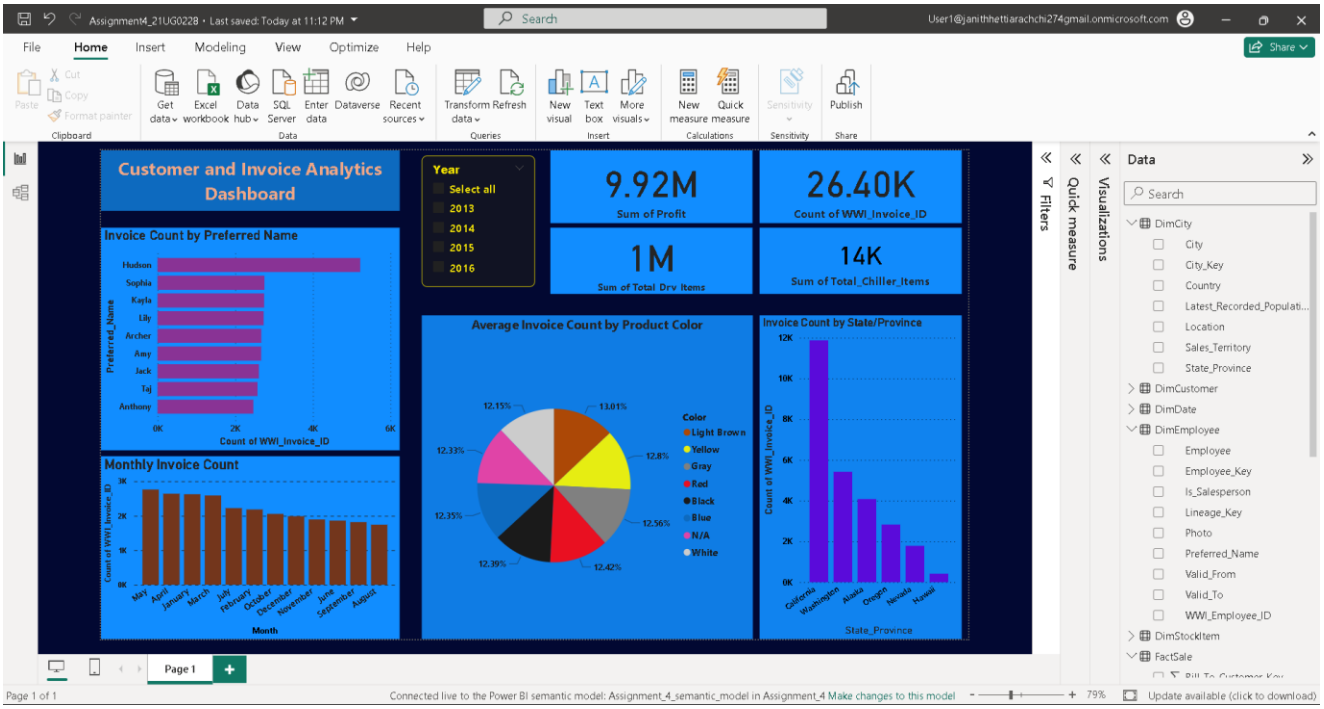
3. After Completing the ETL process and Delta Table Creation part on your data lake, create a semantic Model using the “New Semantic Model” option. Make sure to identify Keys in every table while creating the semantic model.



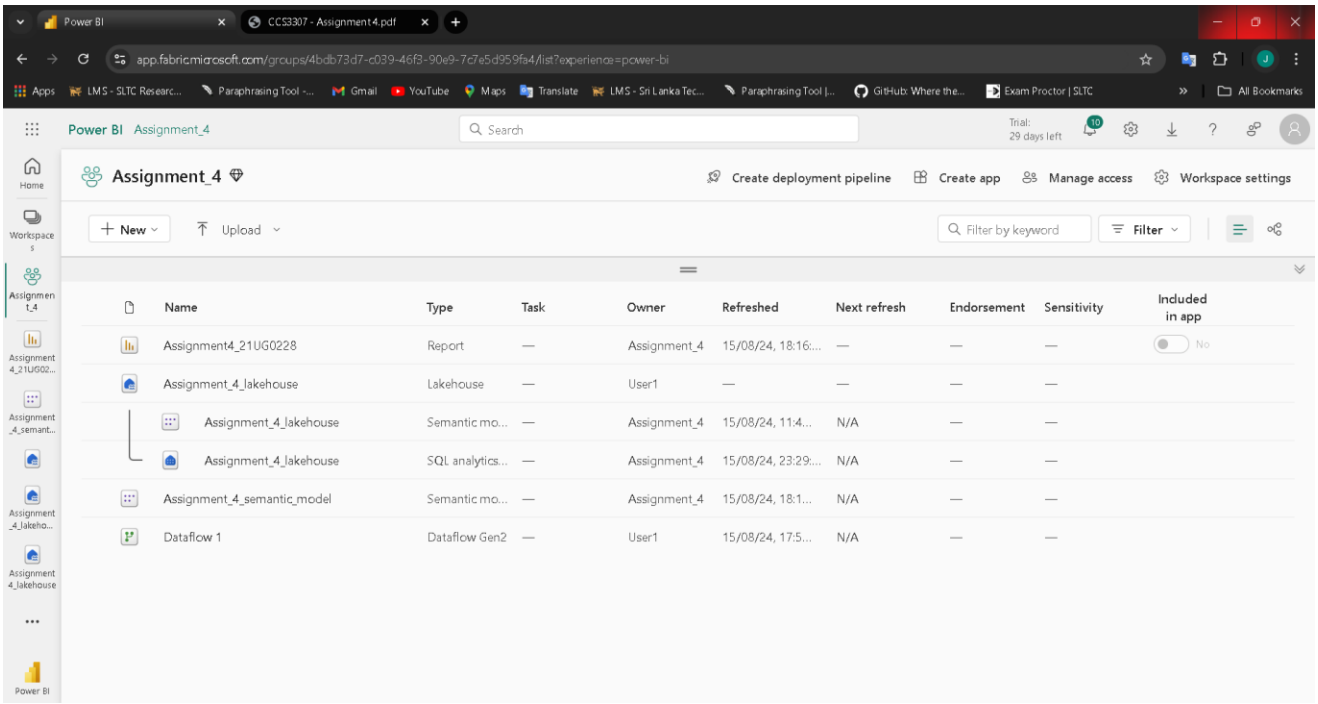


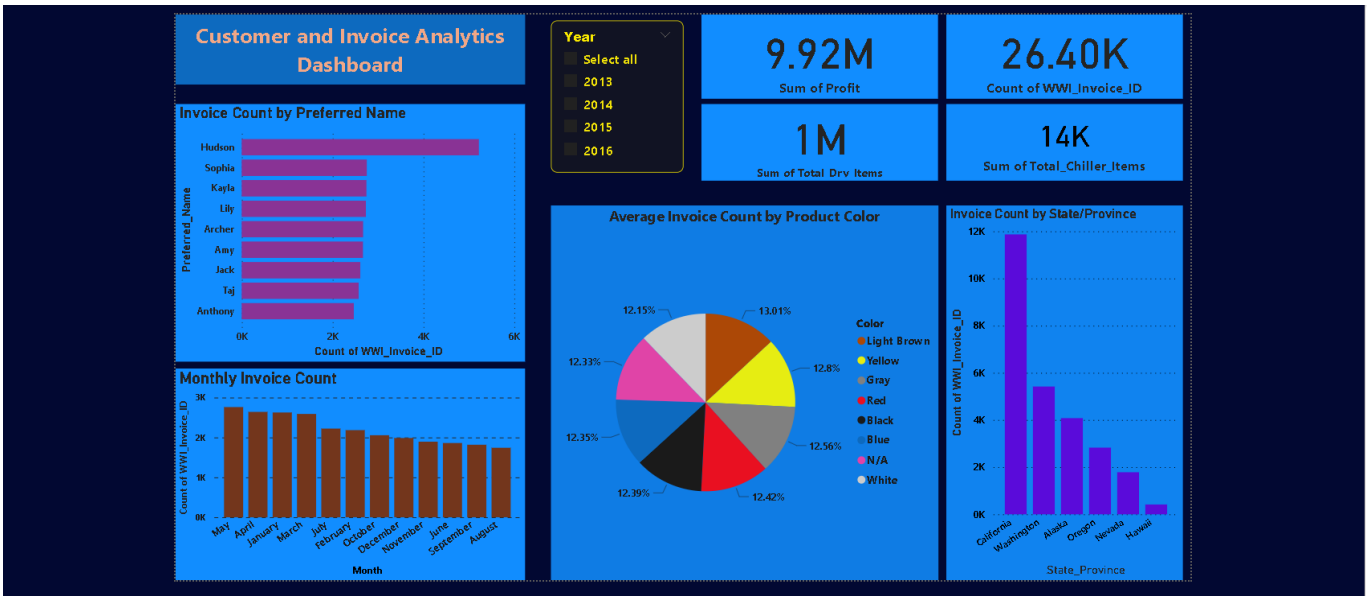
4. Connect the semantic model to Microsoft Power BI and Create a Dashboard to visualize important KPIs according to given Sales Data.





5. Publish your Power BI dashboard to Power BI service enabling a free trial and share a Link as a submission. Create a Lab Report adding necessary screenshots. Attach a Published link to the Lab Report. Make sure to rename the report using your student Index number.




Customer and Invoice Analytics Dashboard
Year
Select all
2013
2014
2015
2016
9.92M
Sum of Profit
26.40K
Count of WWI_Invoice_ID
1M
Sum of Total_Dry_Items
14K
Sum of Total_Chiller_Items
Invoice Count by Preferred Name
Hudson
Sophia
Kayla
Lily
Archer
Amy
Jack
Taj
Anthony
Preferred_Name
0K
2K
4K
6K
Count of WWI_Invoice_ID
Monthly Invoice Count
Count of WWI_Invoice_ID
3K
2K
1K
0K
May
April
January
March
July
February
October
December
November
June
September
August
Month
Average Invoice Count by Product Color
12.15%
13.01%
12.33%
12.8%
12.35%
12.56%
12.39%
12.42%
Color
Light Brown
Yellow
Gray
Red
Black
Blue
N/A
White
Invoice Count by State/Province
Count of WWI_Invoice_ID
12K
10K
8K
6K
4K
2K
0K
California
Washington
Alaska
Oregon
Nevada
Hawaii
State_Province