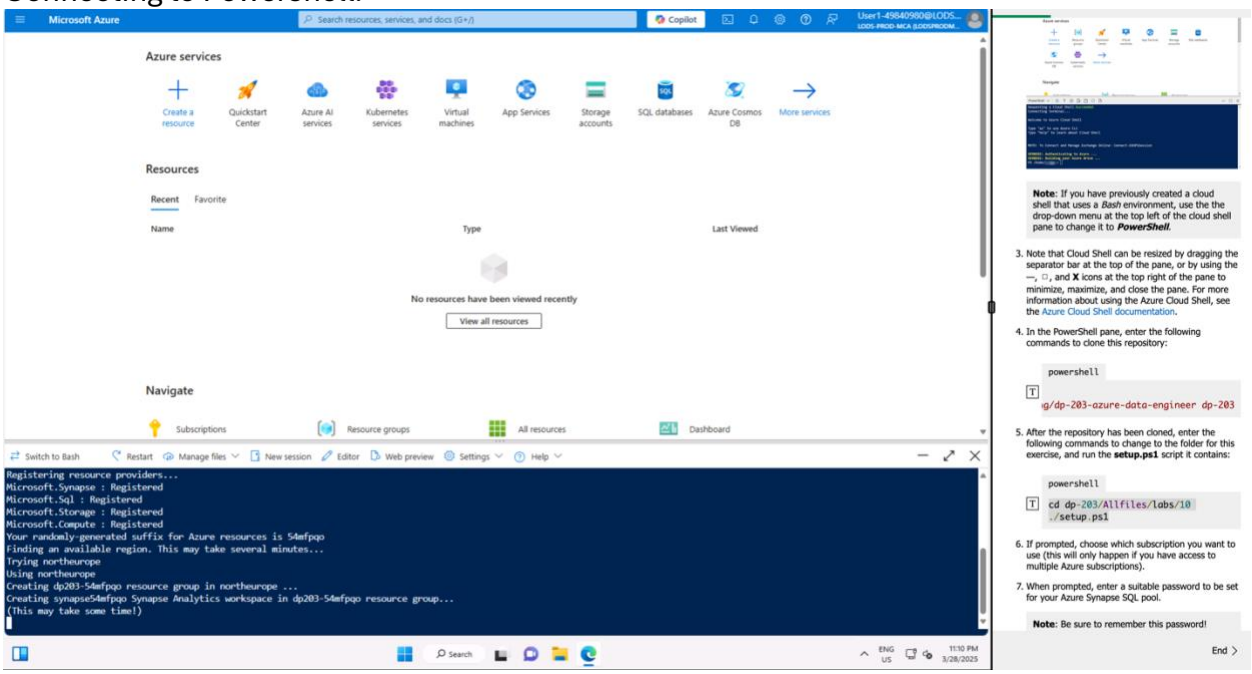
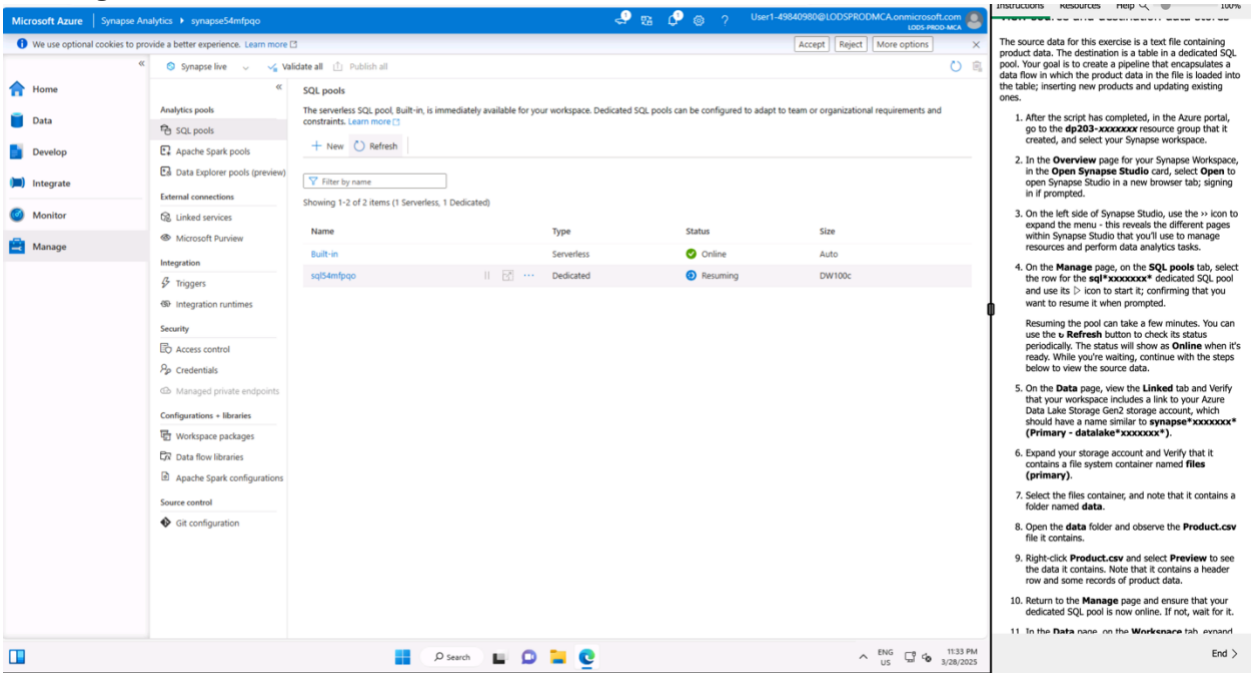
Lab 10 Synapse Pipeline
BUAN 6390.001 – Analytics Practicum

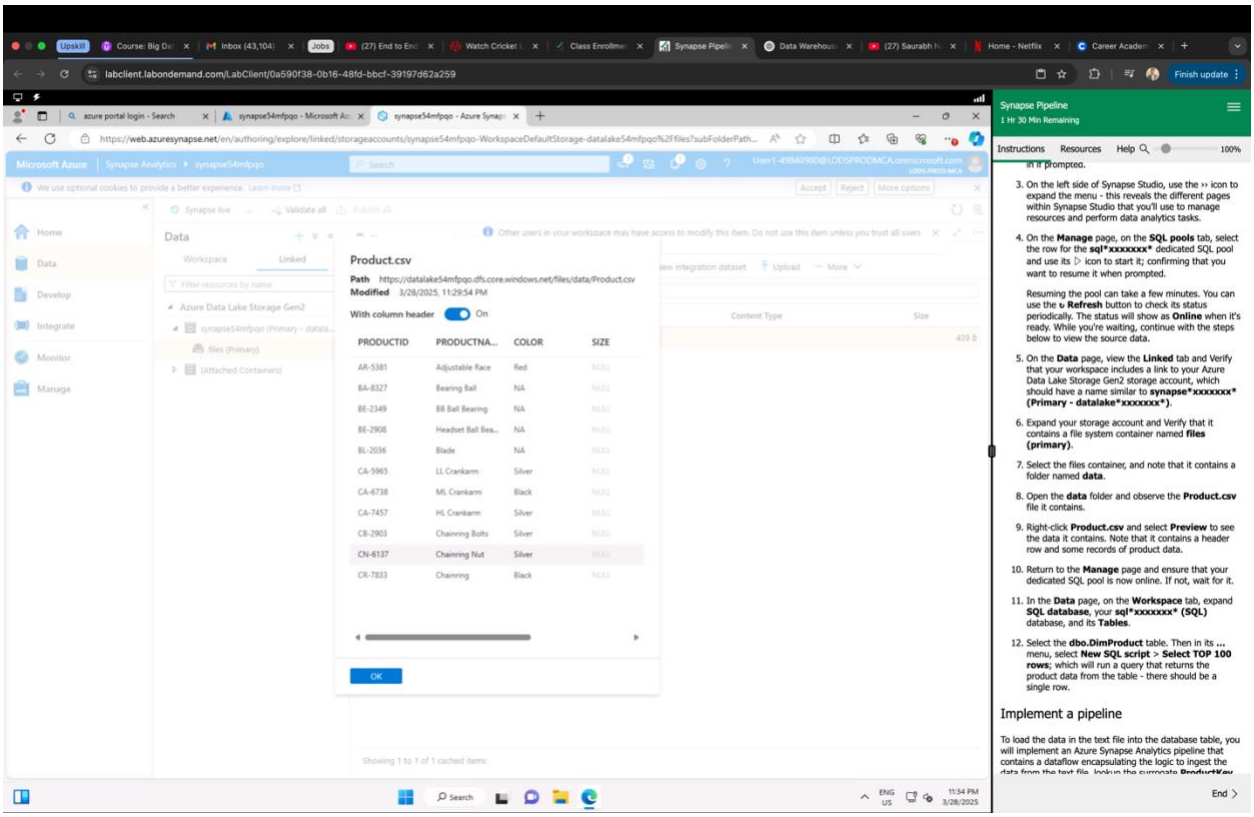
Name: Swastik Bhatnagar
Net ID: Sxb220210

Connecting to Powershell:



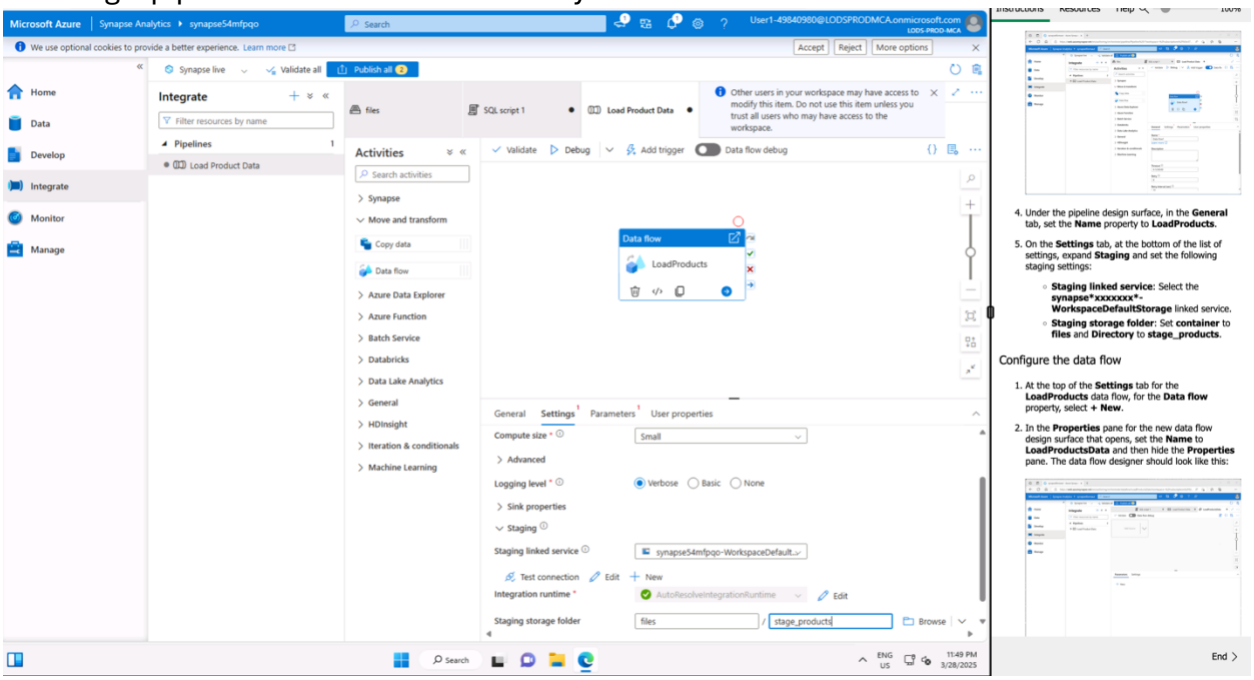
Viewing Source and Destination data stores:



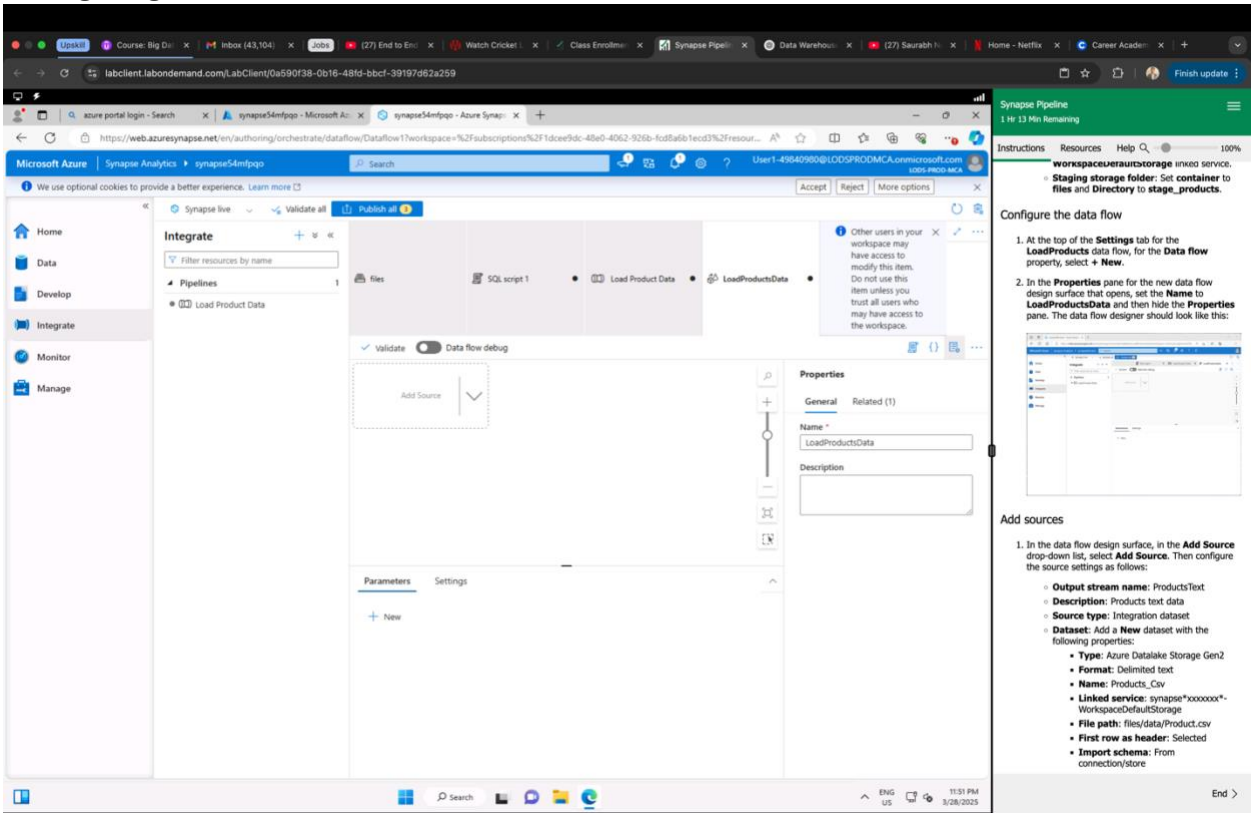


Implementing a Pipeline:

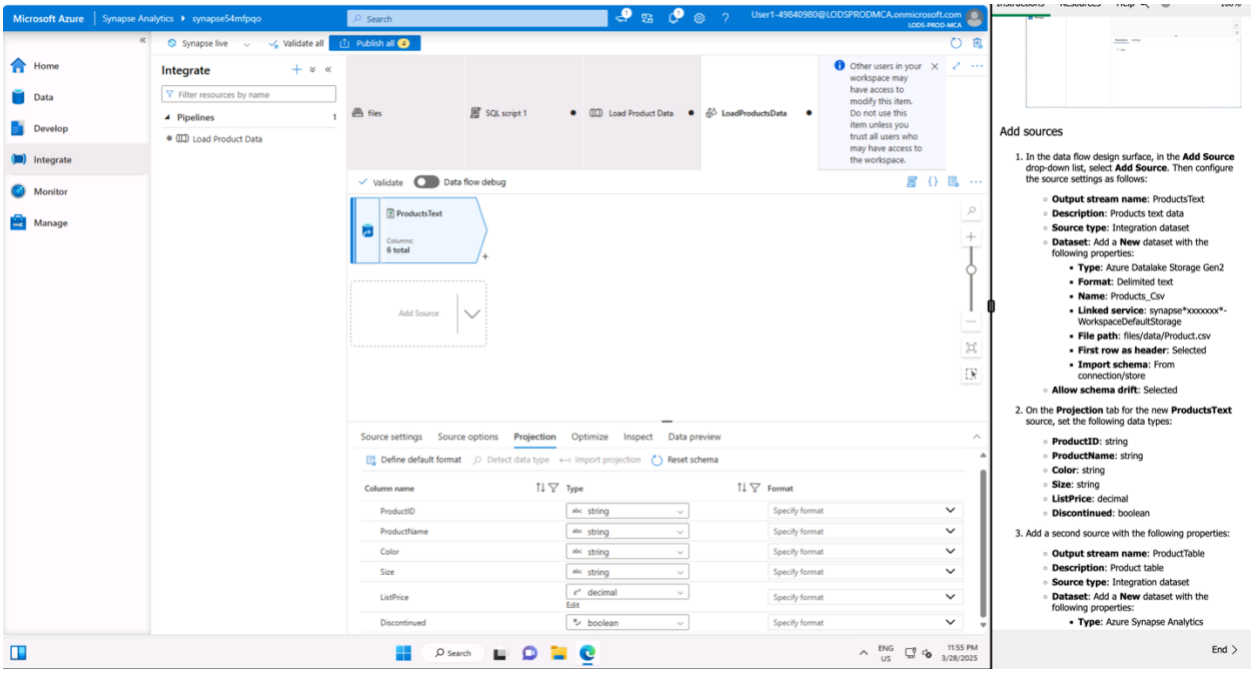
Creating a pipeline with a data flow activity:

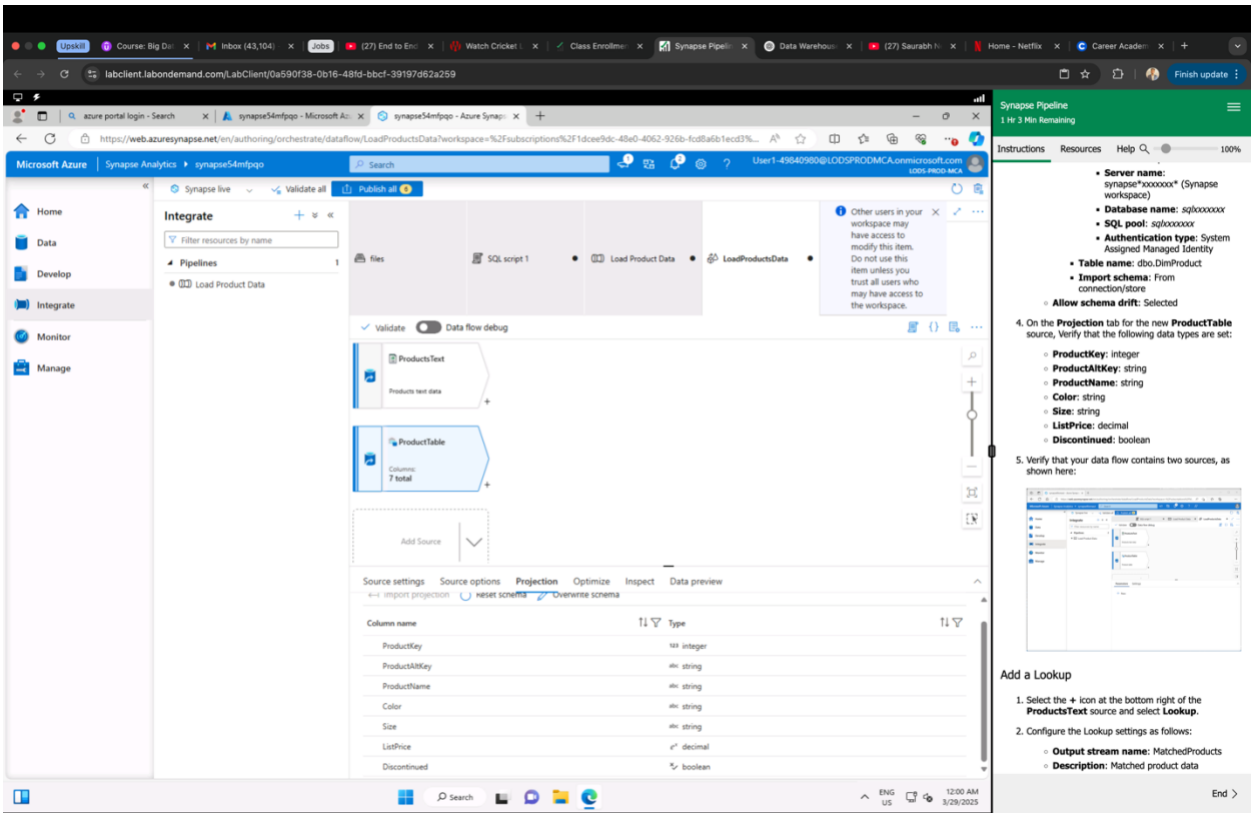


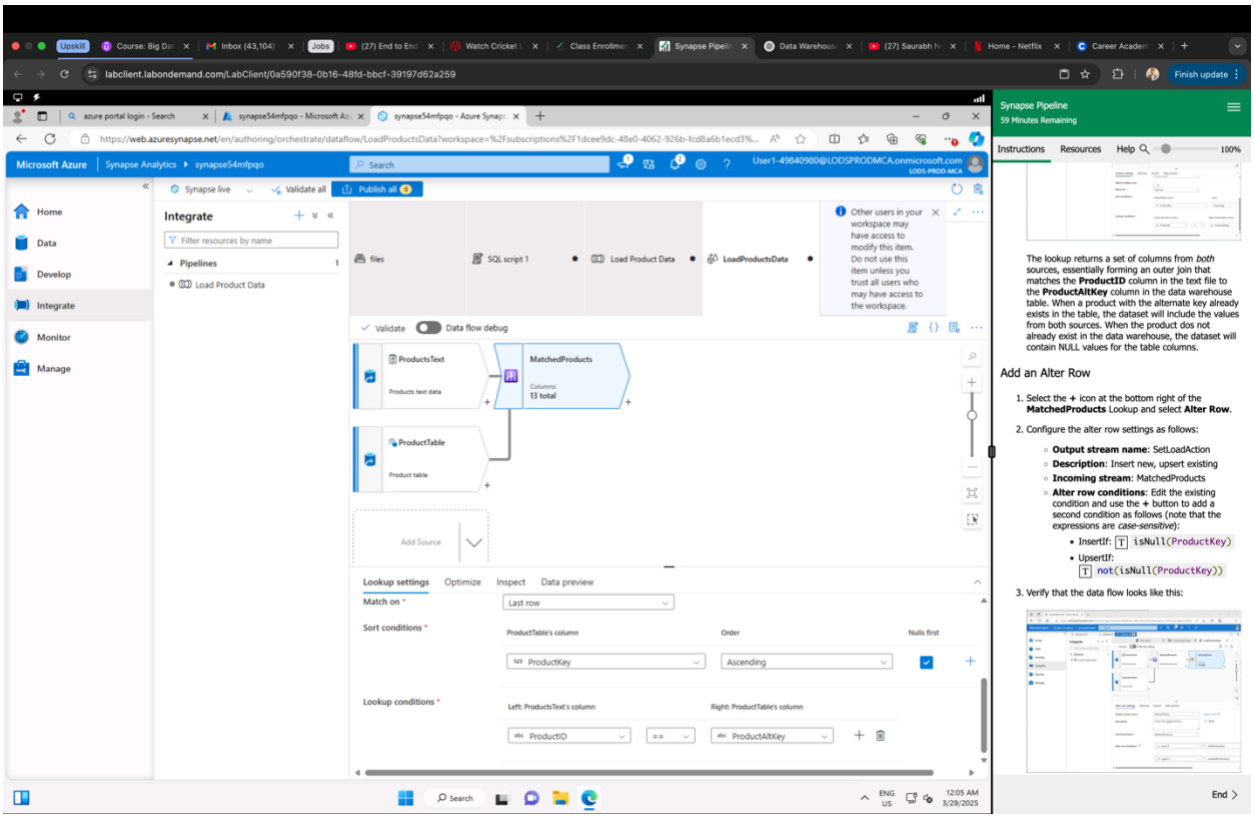
Configuring the data flow:



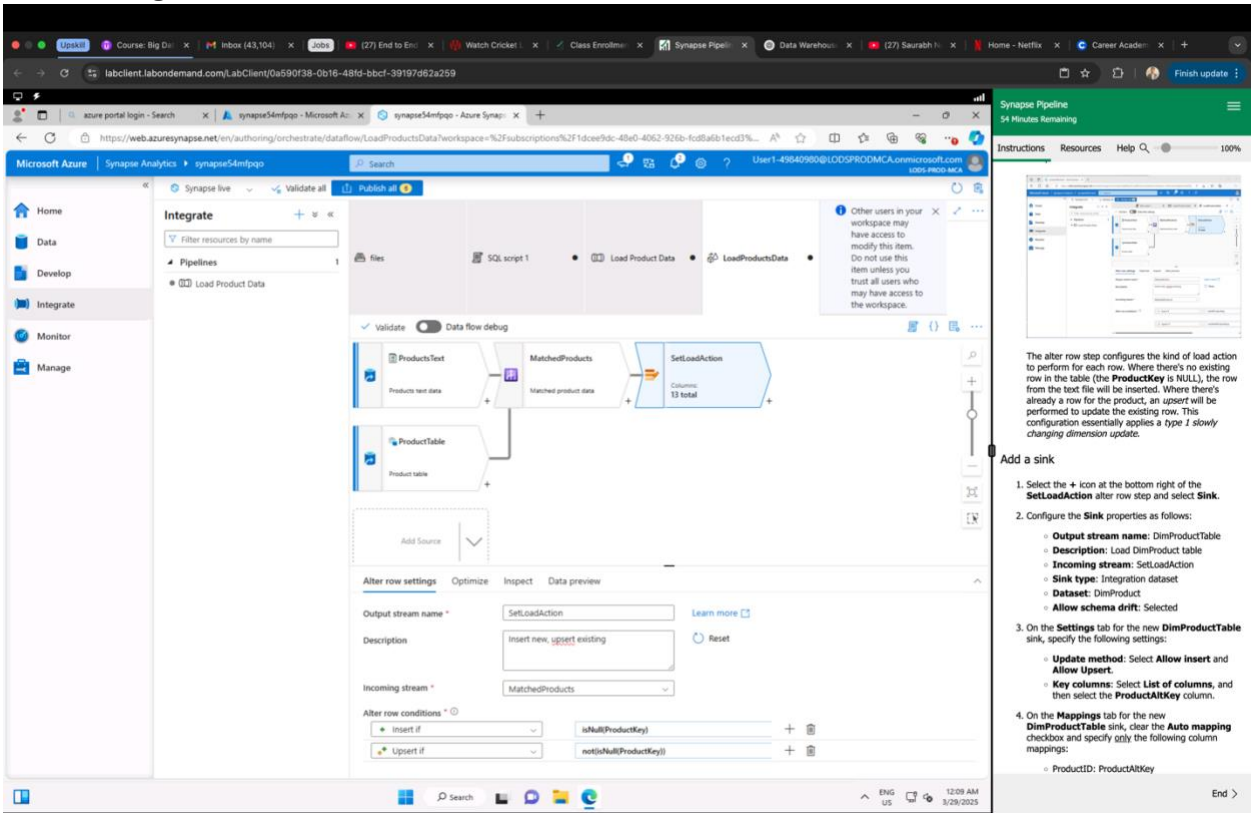
Now Adding Sources:



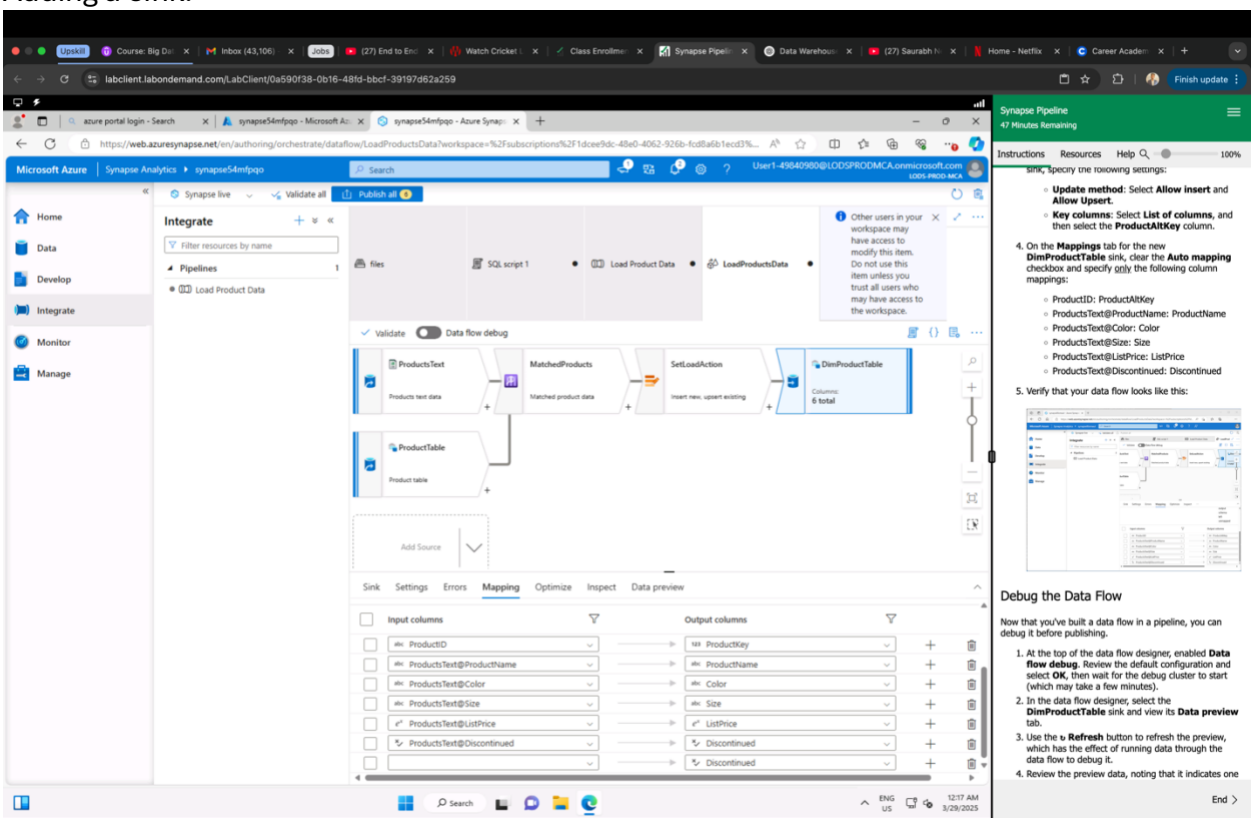

Synapse Pipeline
1 Hr 3 Min Remaining
Instructions
Resources
Help
100%
Integrate
Pipelines
Load Product Data
files
SQL script 1
Load Product Data
LoadProductsData
Validate
Data flow debug
ProductsText
ProductTable
Add Source
Source settings
Source options
Projection
Optimize
Inspect
Data preview
Column name
Type
ProductKey
integer
ProductAltKey
string
ProductName
string
Color
string
Size
string
ListPrice
decimal
Discontinued
boolean
Add a Lookup
End


Synapse Pipeline
59 Minutes Remaining
Instructions
Resources
Help
100%
Integrate
Pipelines
Load Product Data
files
SQL script 1
Load Product Data
LoadProductsData
Validate
Data flow debug
ProductsText
MatchedProducts
ProductTable
Add Source
Lookup settings
Optimize
Inspect
Data preview
Match on *
Last row
Sort conditions *
ProductTable's column
Order
Nulls first
ProductKey
Ascending
Lookup conditions *
Left: ProductsText's column
Right: ProductTable's column
ProductID
==
ProductAltKey
Add an Alter Row
End

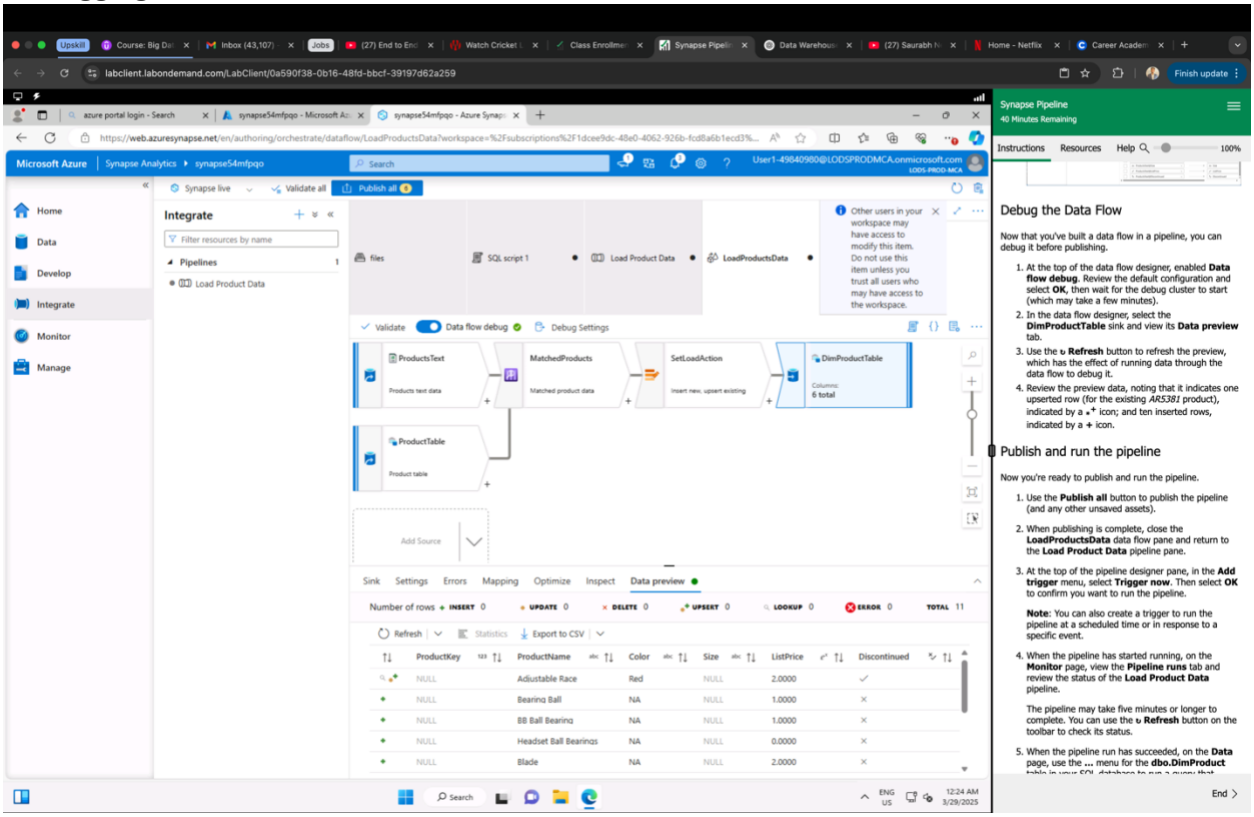
Now adding an Alter row:



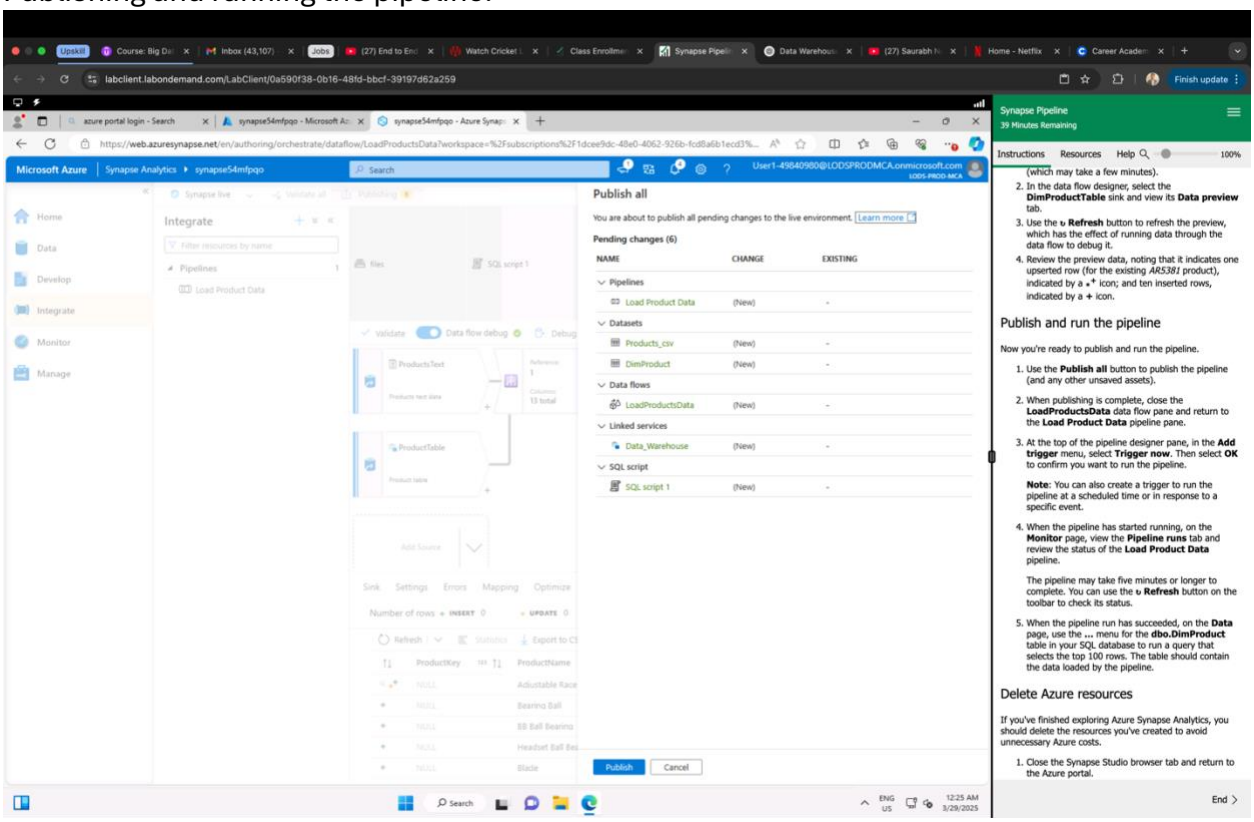
Adding a sink:

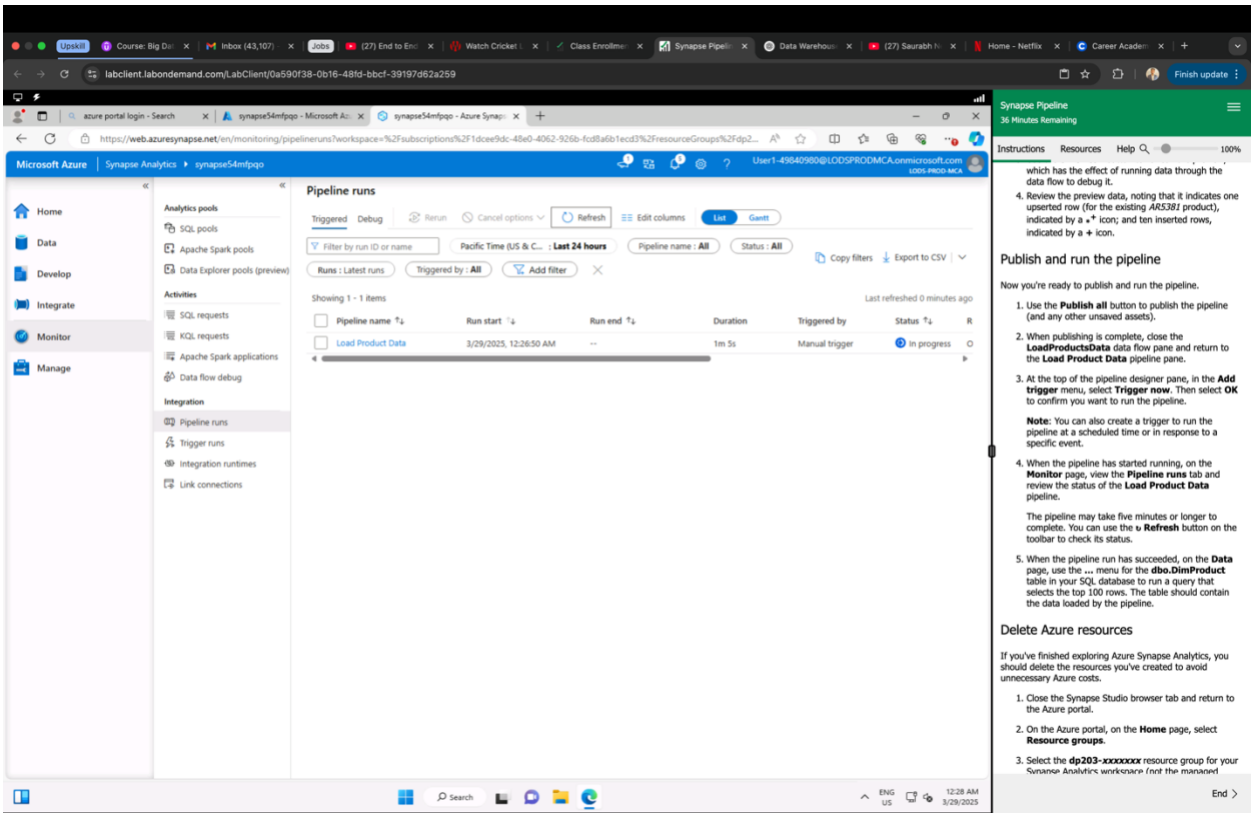


Debugging the data flow:

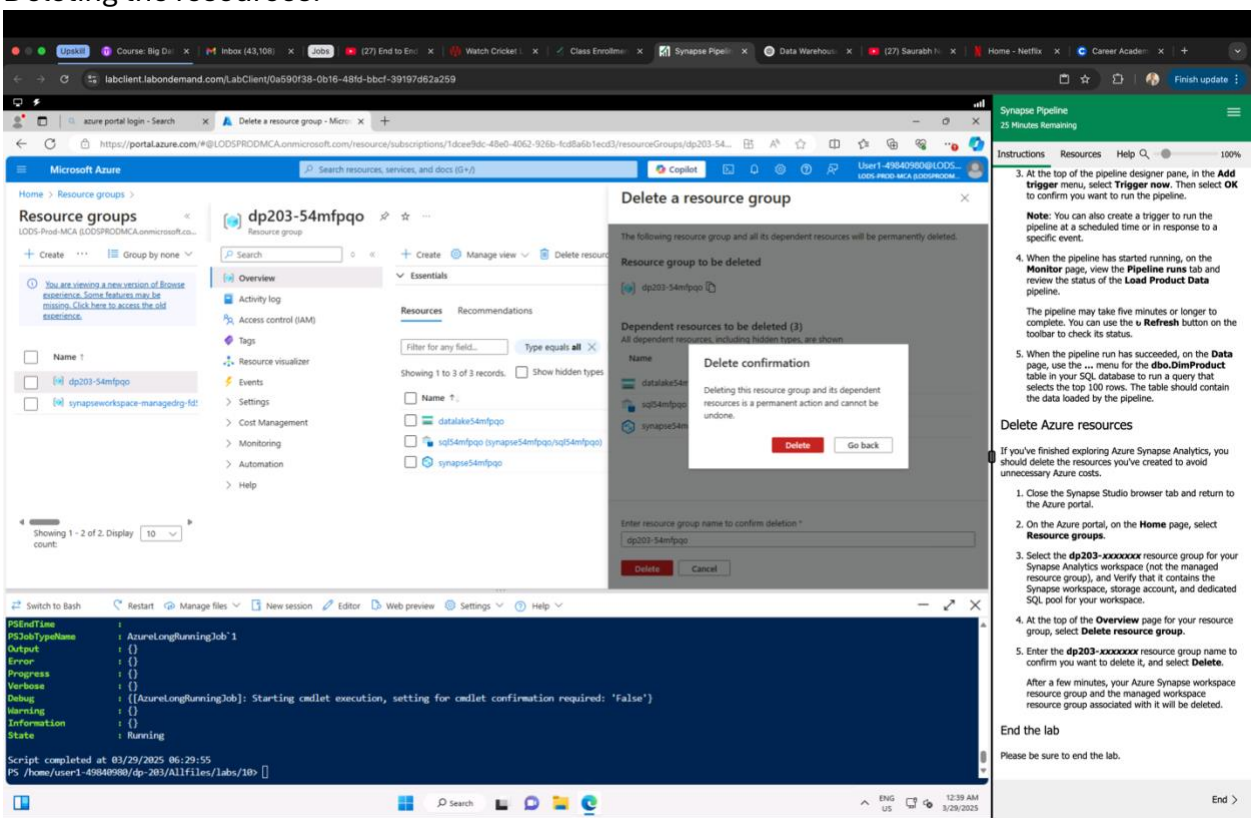


Publishing and running the pipeline:





Deleting the resources:



Conclusion:

This lab provided valuable experience in building and managing a Synapse Pipeline within Azure Synapse Analytics. I learned how to create and configure a pipeline with data flow activities, set up source and destination data stores, and apply transformations such as adding sources, altering rows, and defining sinks. Additionally, I gained practical skills in debugging, publishing, and executing pipelines to ensure seamless data integration. This exercise enhanced my understanding of orchestrating data workflows and optimizing data processing within a cloud-based environment.