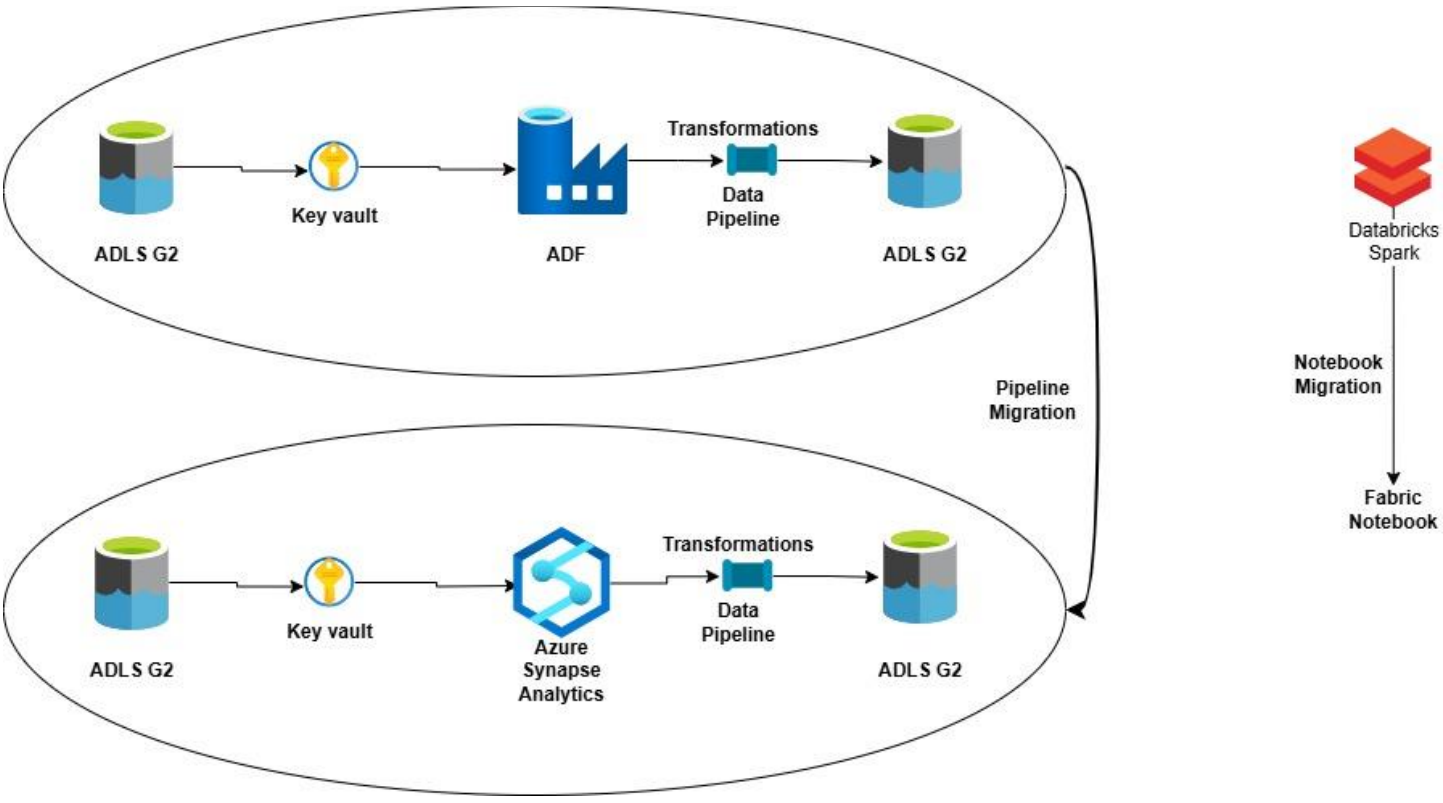
Bootcamp Project – 5
Migrating pipelines from ADF to Synapse

Problem statement:

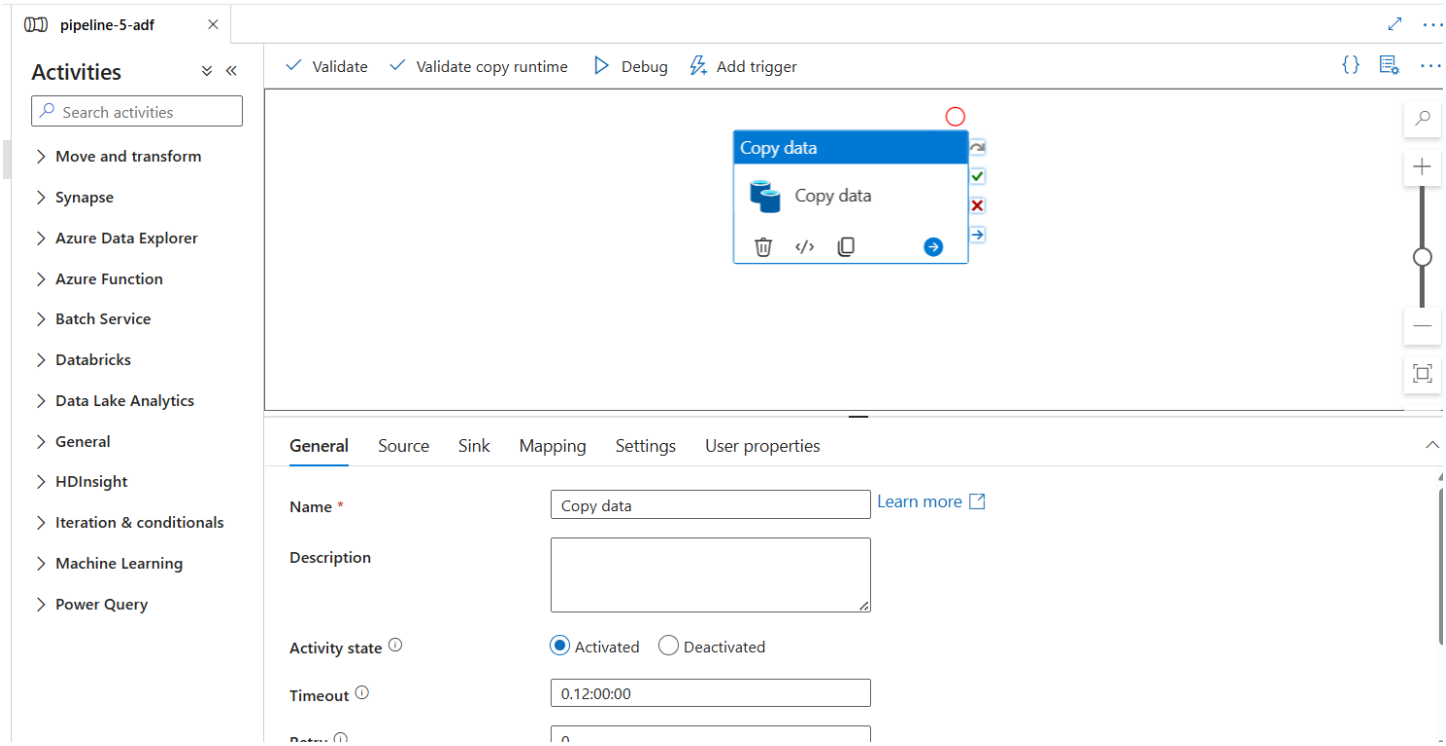
- The purpose of this project is to learn and implement and try different methods to migrate the pipeline from ADF to Synapse
- In the next phase, we are going to migrate the notebooks from data bricks to Fabric environment.

Project Architecture :



FIRST PHASE :

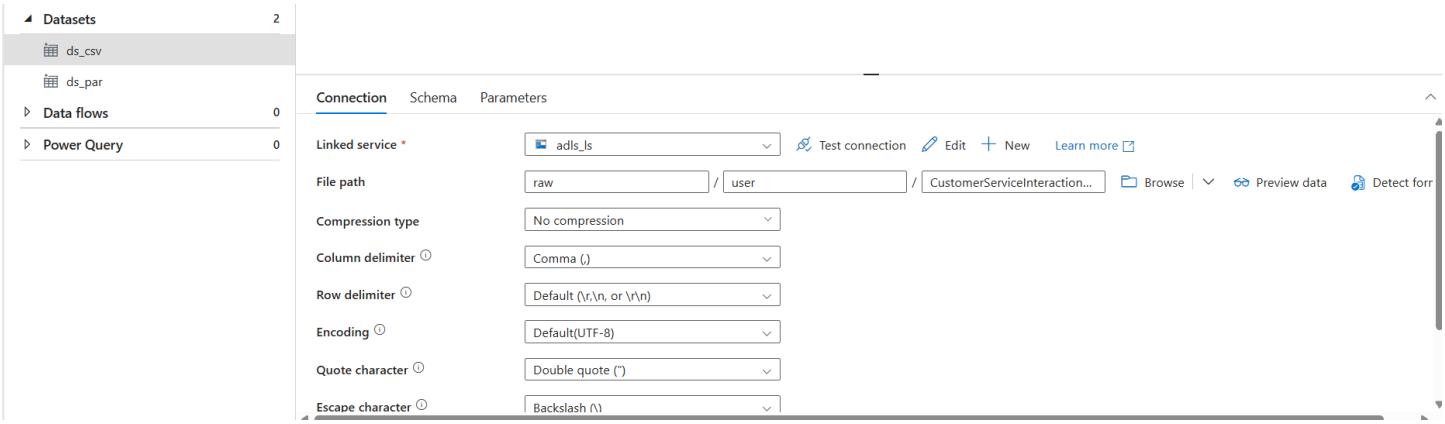
- The best way to migrate the data pipeline from ADF to synapse or vice versa :
    - Manually created all linked services and datasets in target service and copy the Json file of the pipeline.
    - We will try this method first :



In this phase, we have created pipeline with copy activity, and we are trying to copy the csv files from ADLS G2 to different container in ADLS in parquet format.

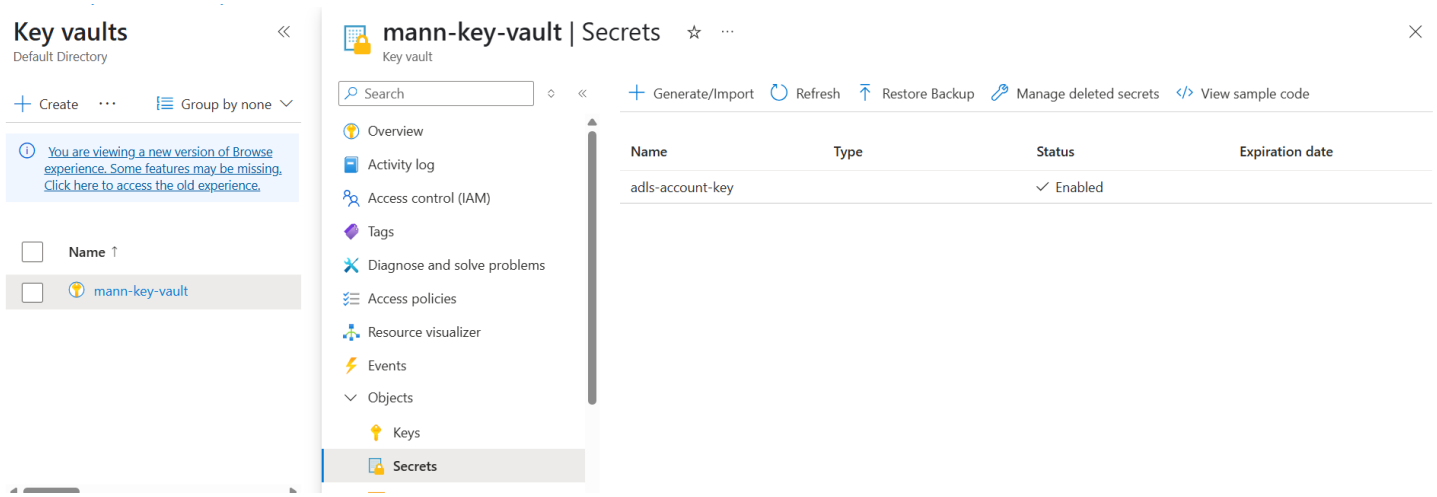
Name	Type	Related	Annotations
adls_ls	Azure Data Lake Storage Gen2	1	
adls_ls_sink	Azure Data Lake Storage Gen2	1	
keyvault_ls	Azure Key Vault	2	

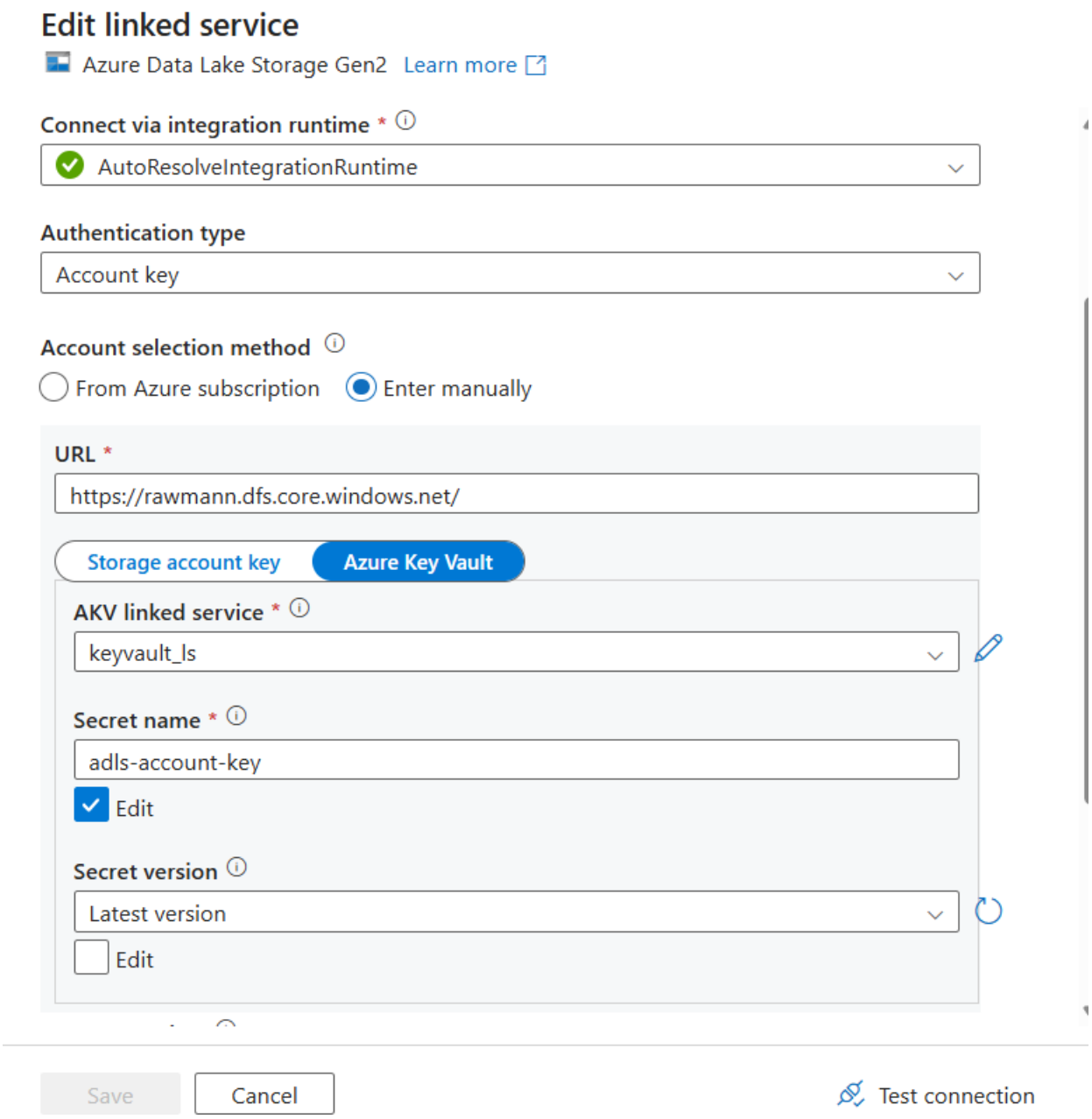
These are the linked services created for source and sink and for key vault respectively.



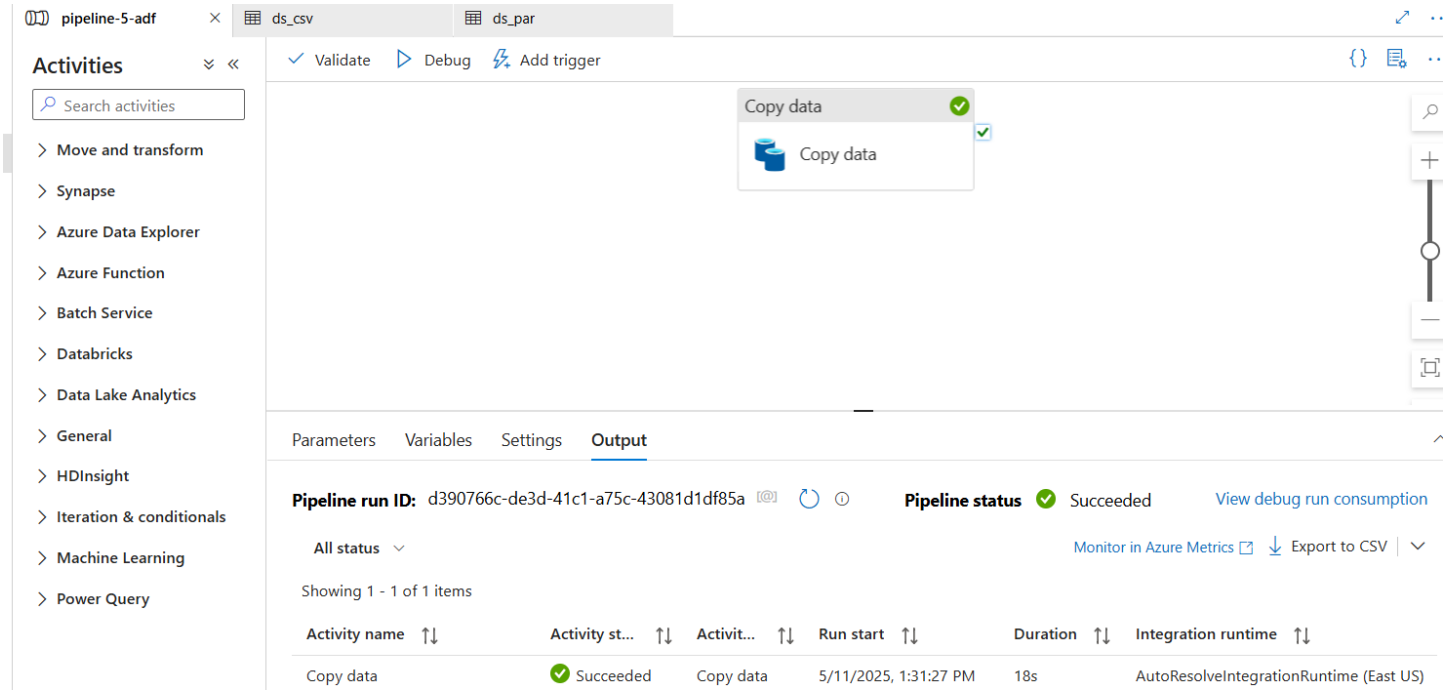
These are the datasets for source and sink files respectively.

Here I am accessing ADLS G2 by account key and it is being stored in key vault secret.





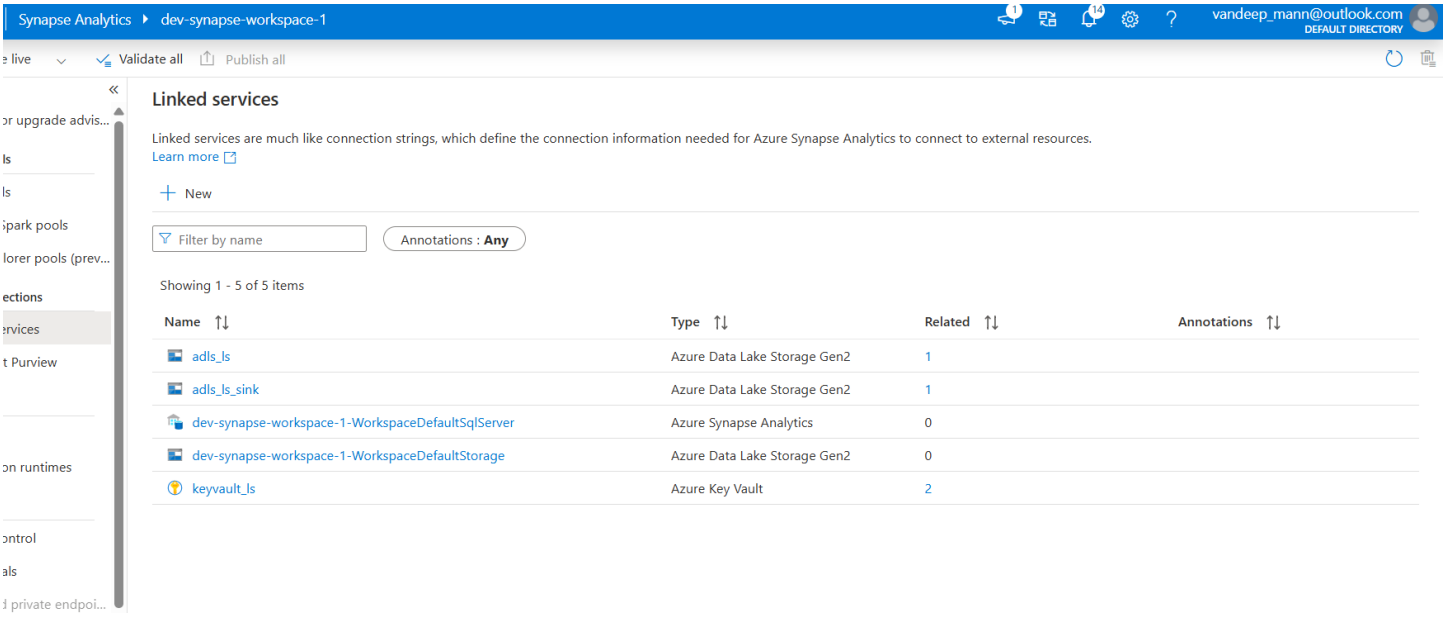
I am using key vault to access account key in the linked service of source and sink.



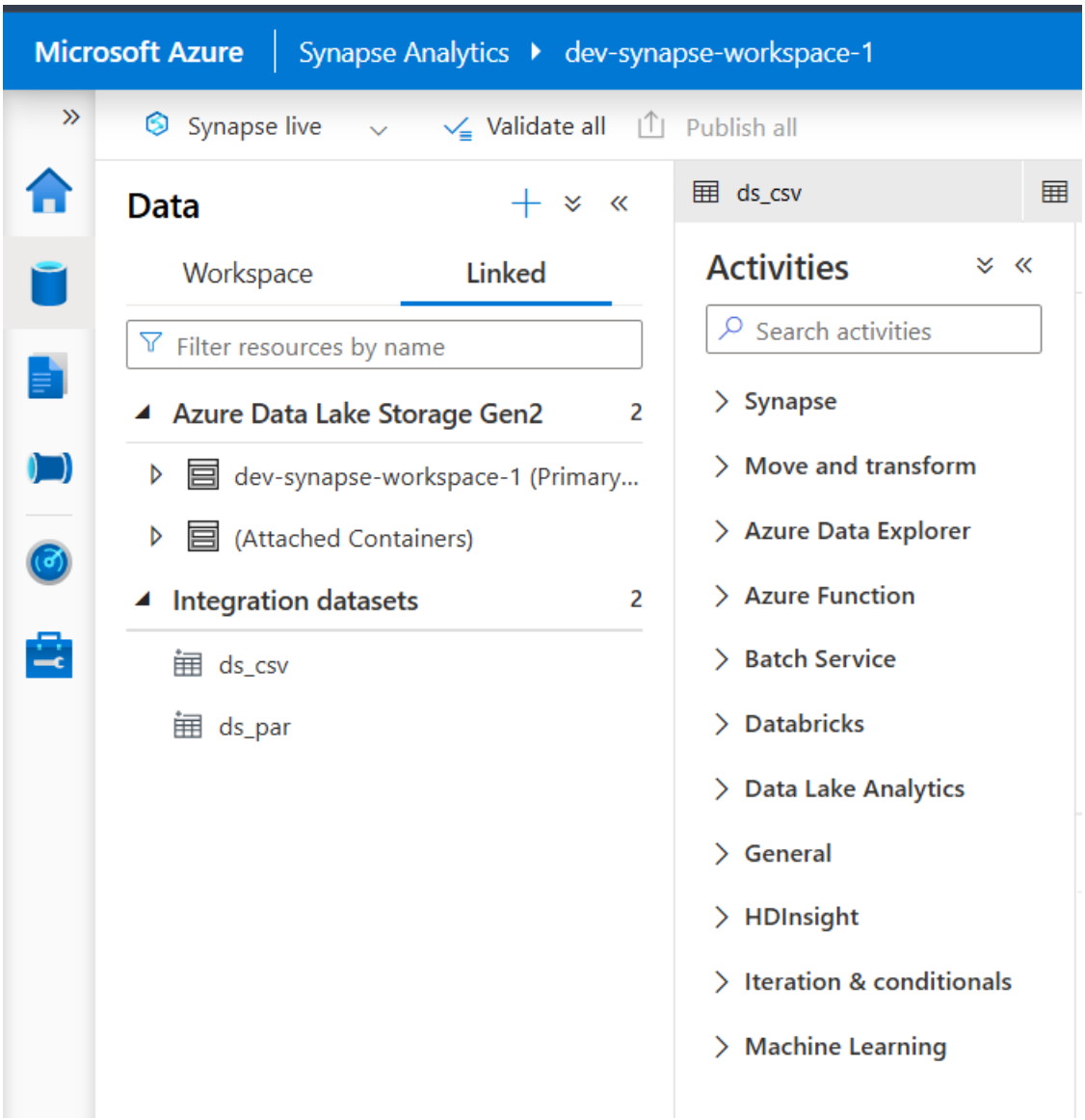
Here is the result of adf pipeline.

Migrating to Synapse:

For this we have to first create linked services and data sets with the same name as given in ADF.

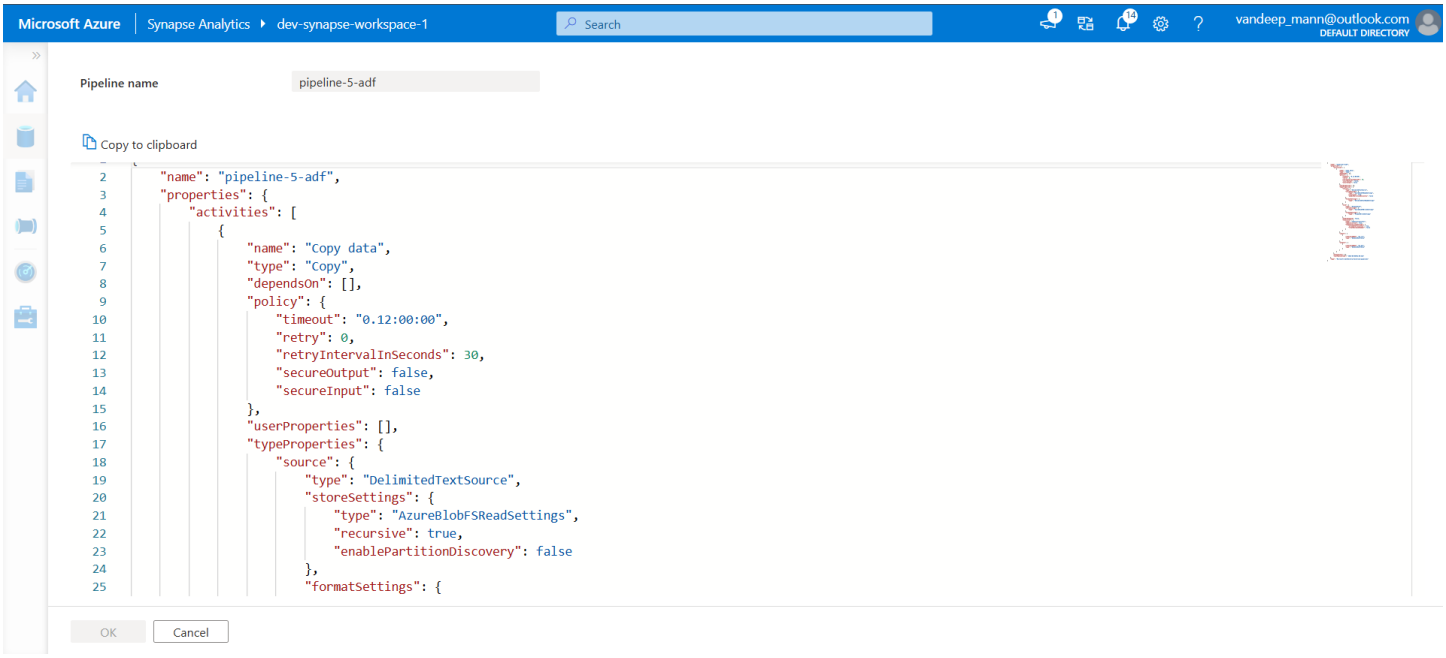


Here I have created Linked services in the synapse and test the connections.

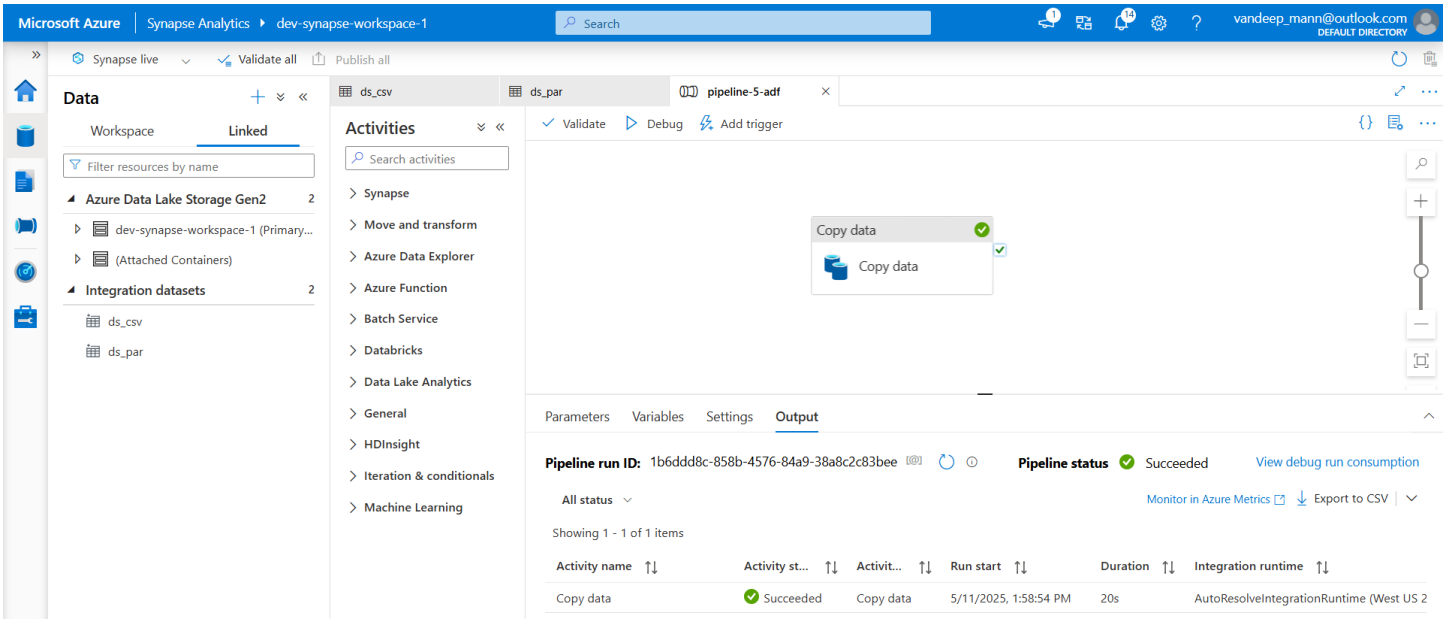


I have also created Datasets with same names in synapse too.

Then. Create a pipeline in synapse and name it same as given in adf and go to it's json code and paste the whole json code in it.

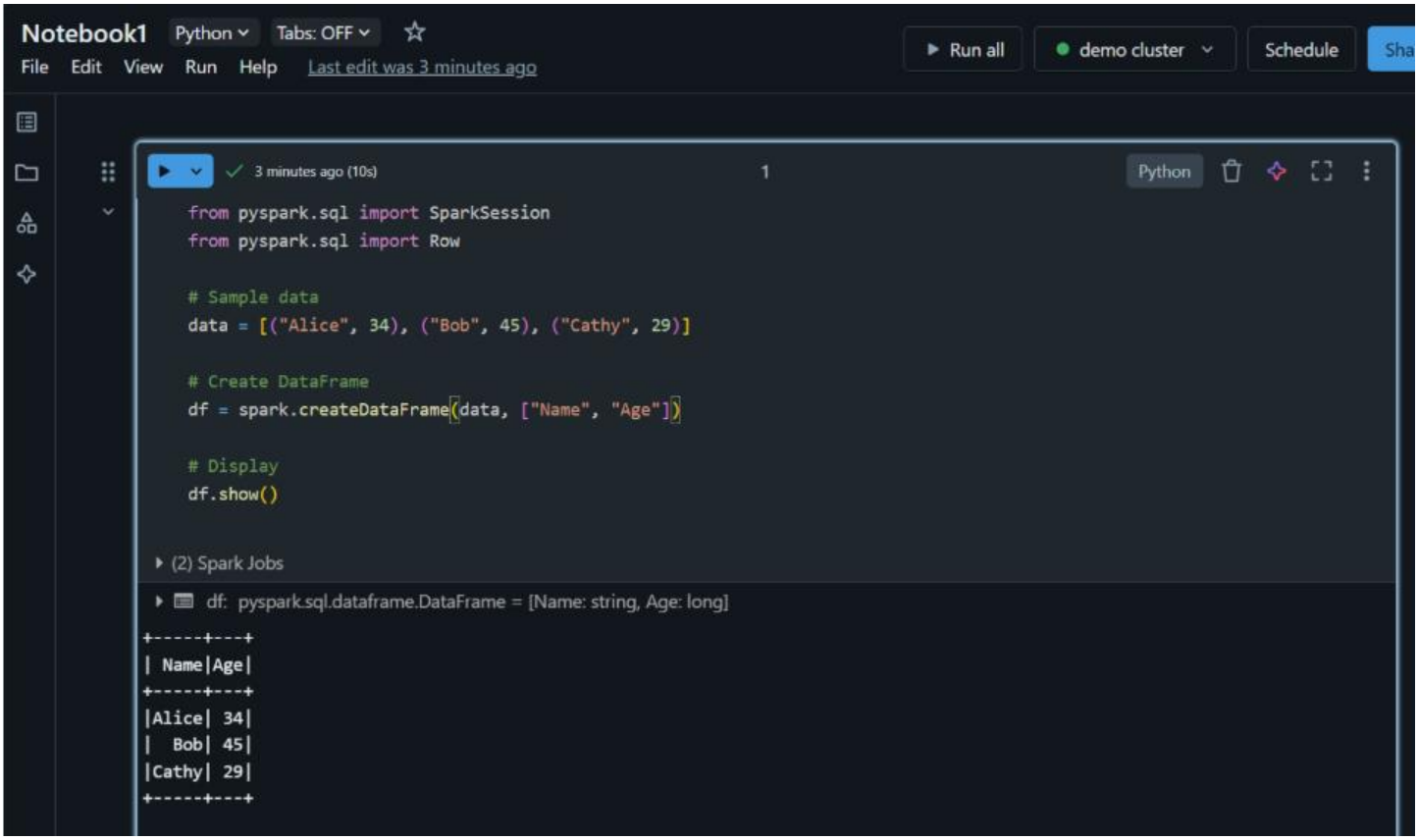


Here pipeline has been created in synapse working successfully

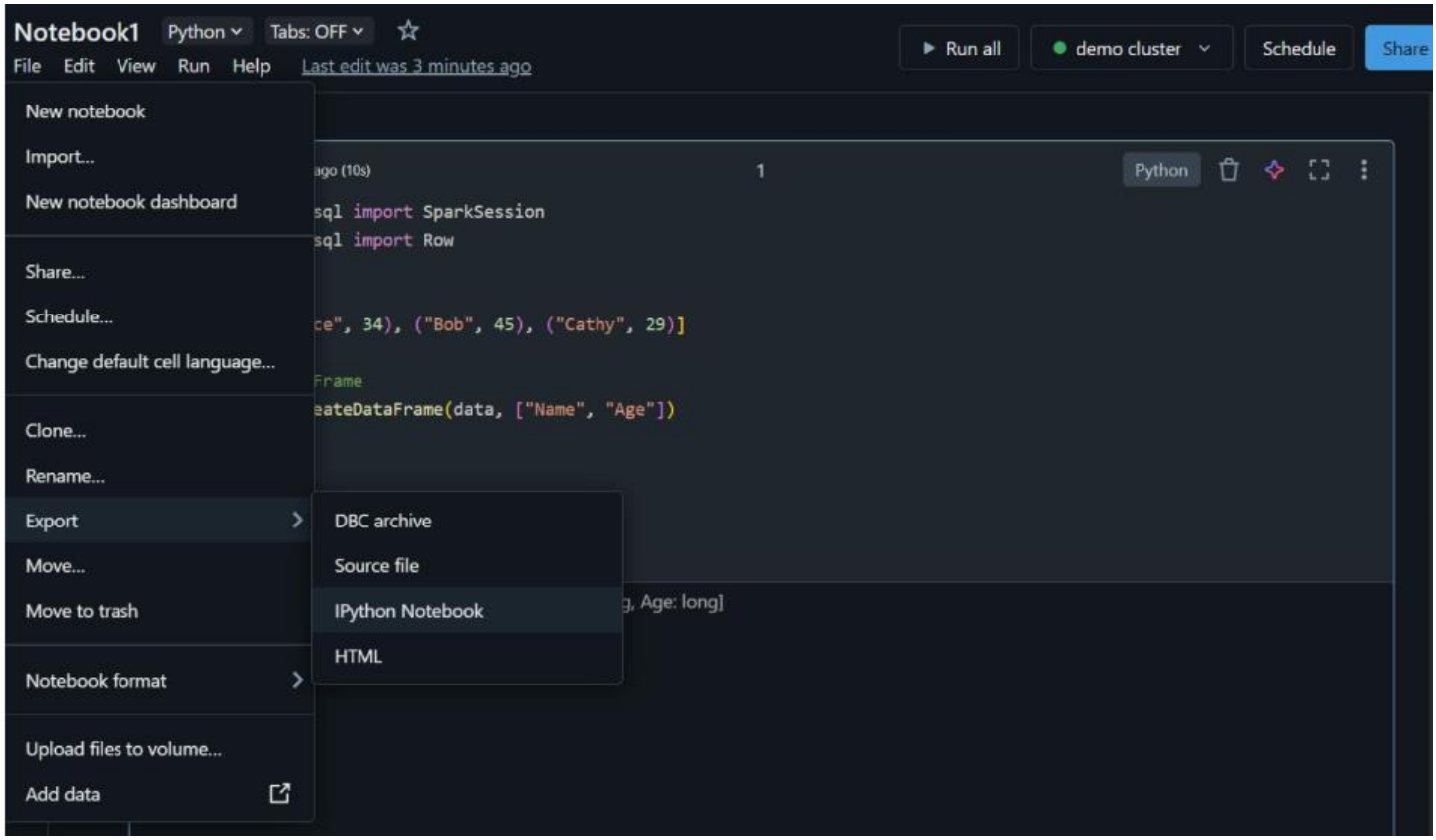


2ND PHASE OF THE PROJECT:

To migrate notebook from databricks to Fabric.



Export the notebook in ipynb



Now we can import those notebooks in fabric.