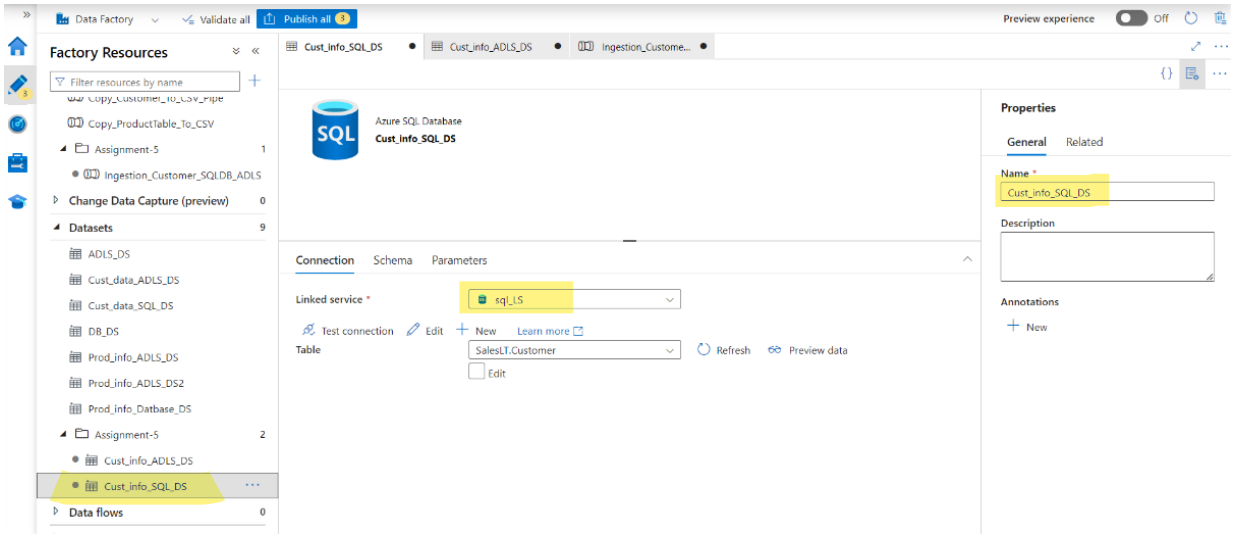
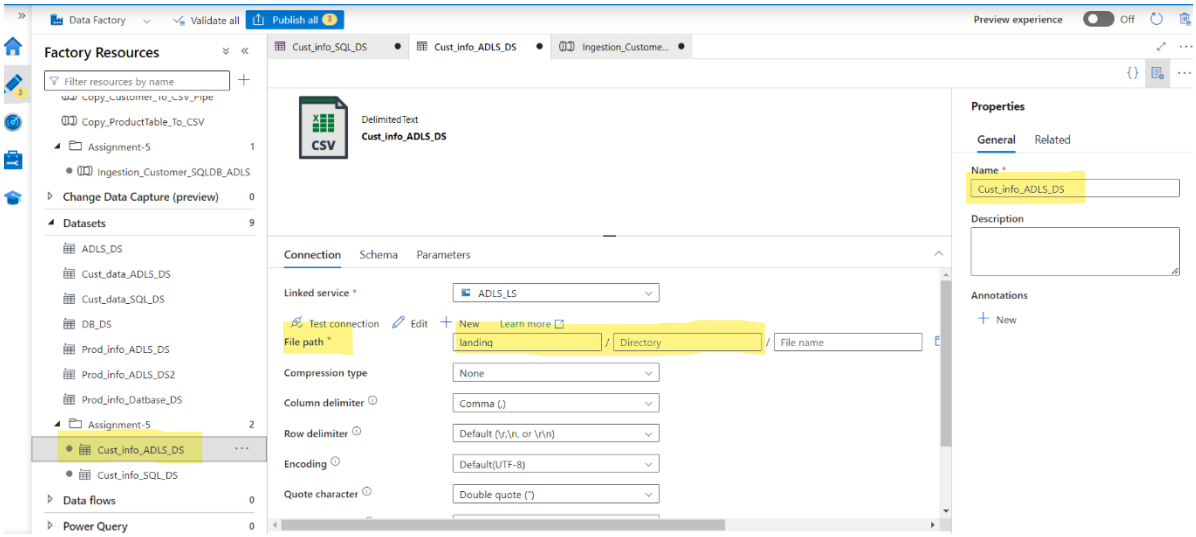
Assignment 5: ADF Pipeline 2

Question1: Create a pipeline name 'Ingestion_Customer_SQLDB_ADLS' which will copy all the records from Customer table to ADLS account as CSV File.

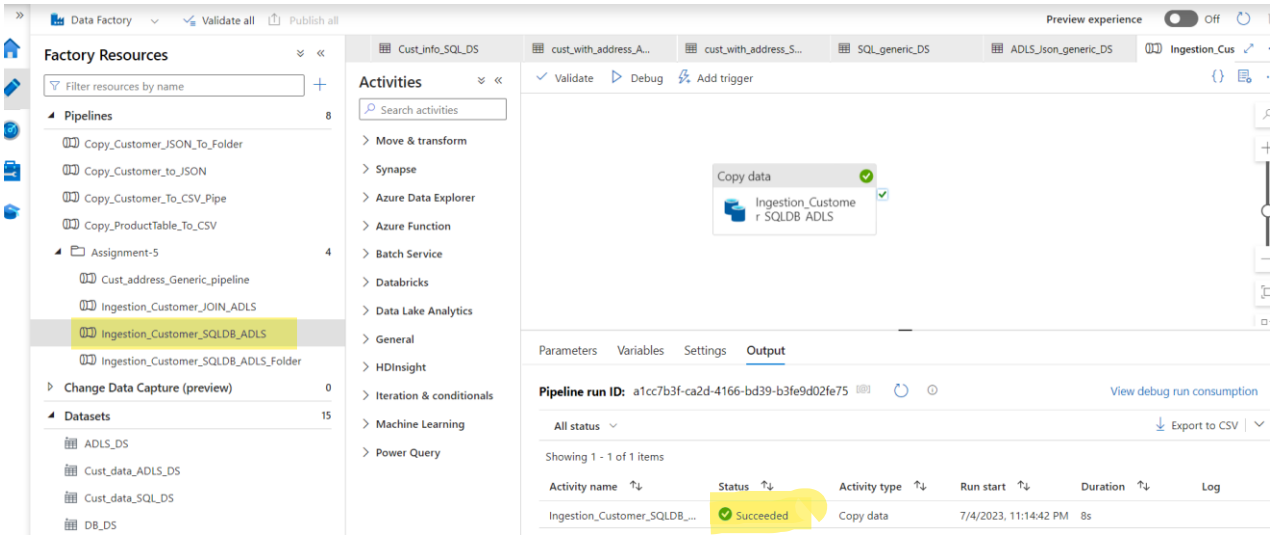
Creating Dataset using Customer info. SQL Db



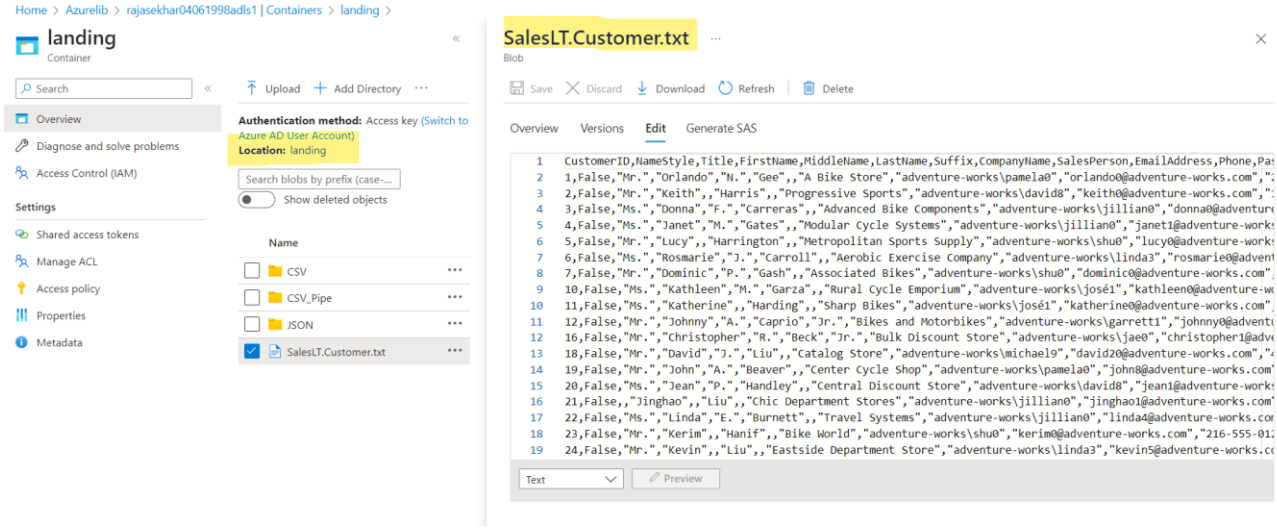
Creating Dataset using Customer info. ADLS



Execution and Triggering the pipeline

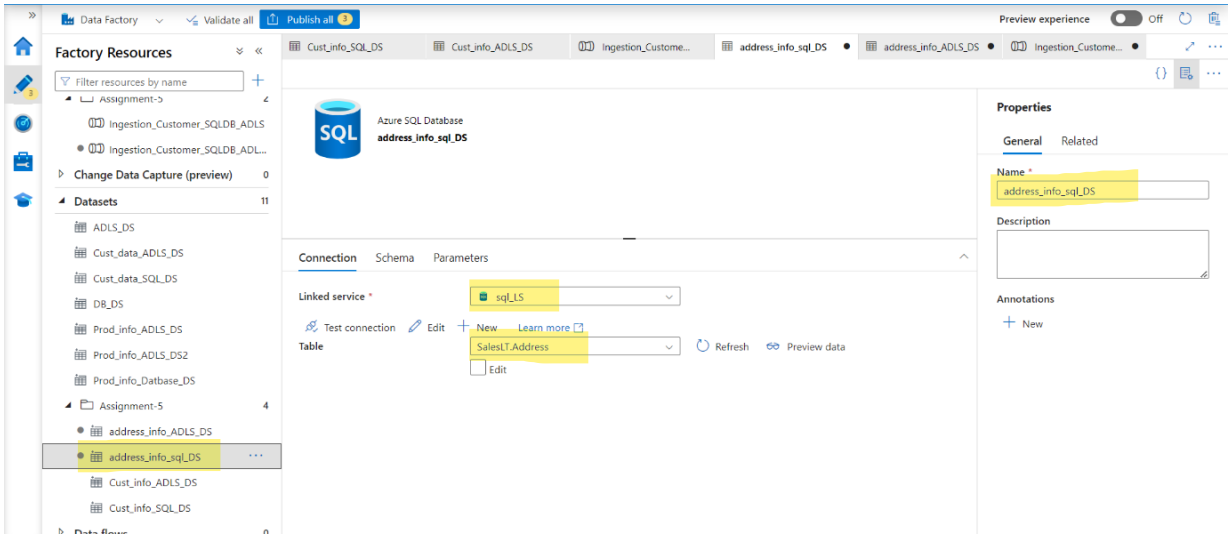


Finally Checking the Customer Data in landing ADLS

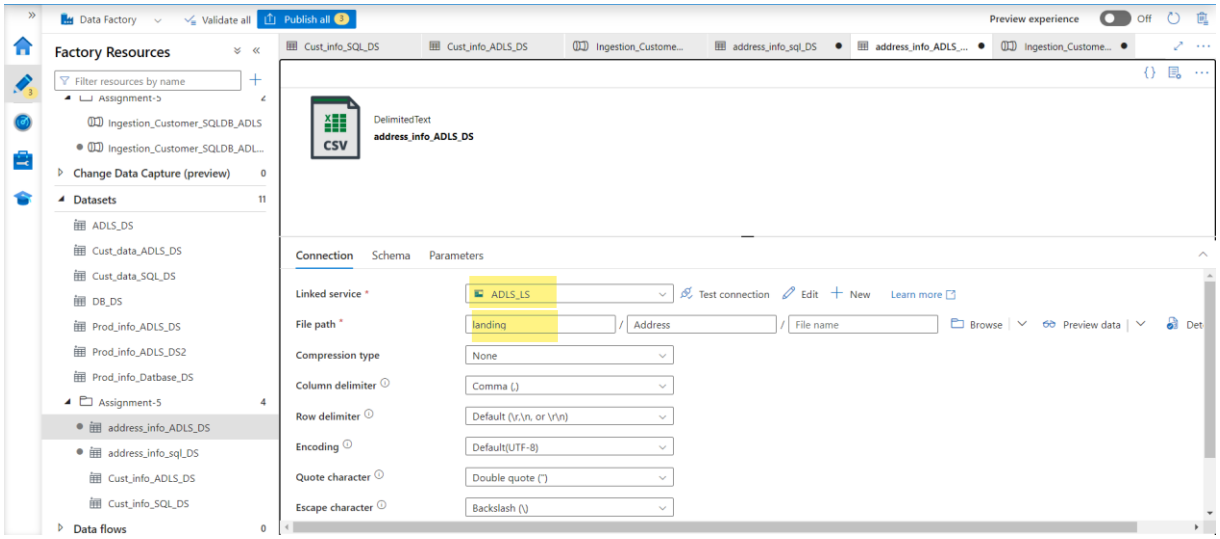


Question2: Create a pipeline name 'Ingestion_Customer_SQLDB_ADLS_Folder' which will copy all the records from Address table to ADLS account inside the 'Address' folder as CSV File.

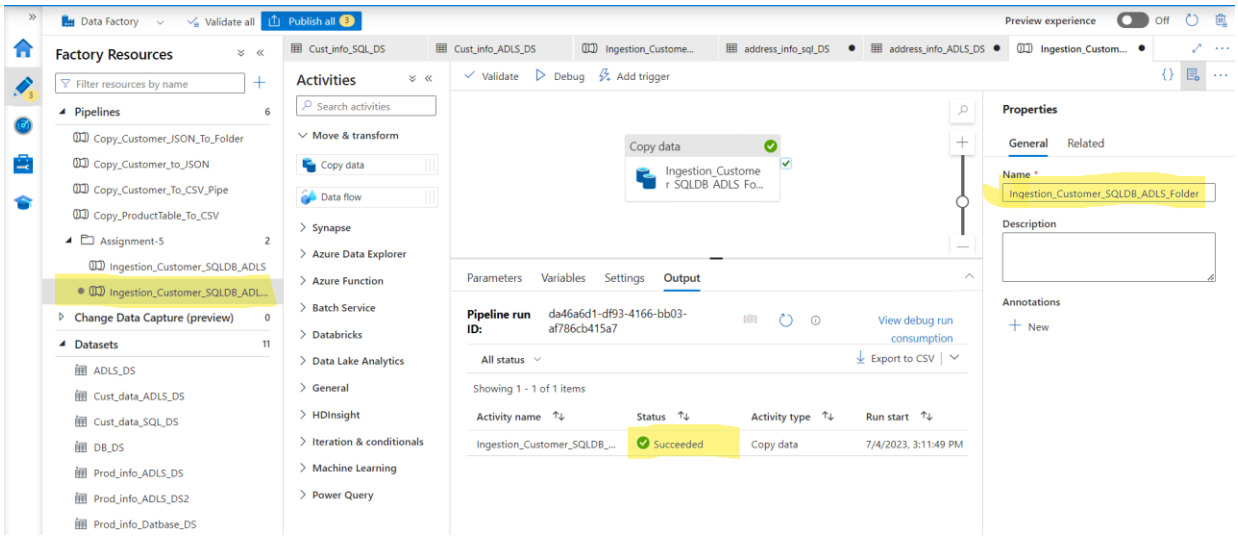
Creating Dataset using Address info. SQL DB



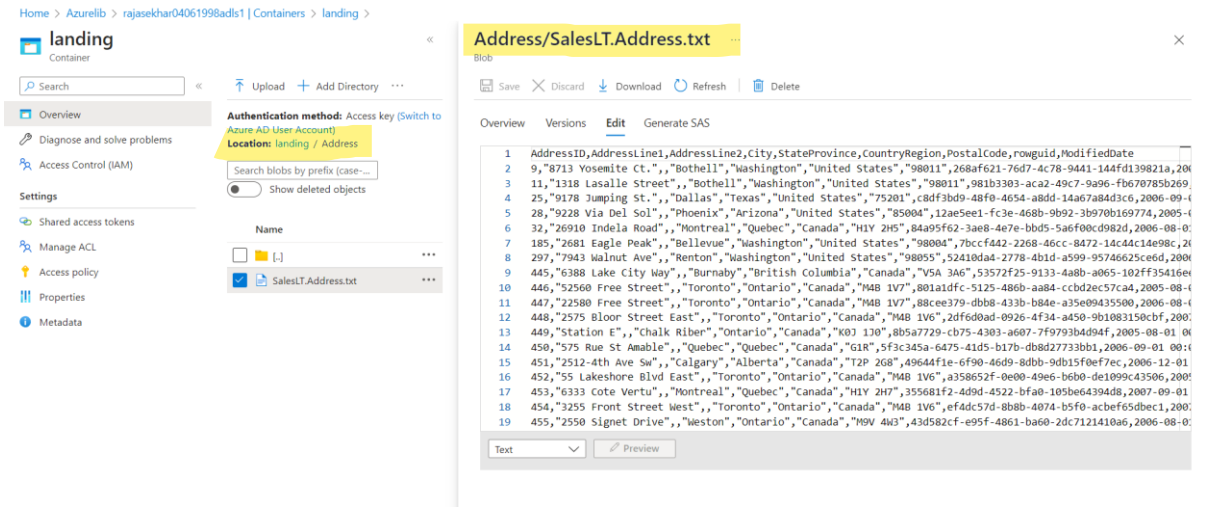
Creating Dataset using Address info. ADLS



Executing and Triggering the Pipeline

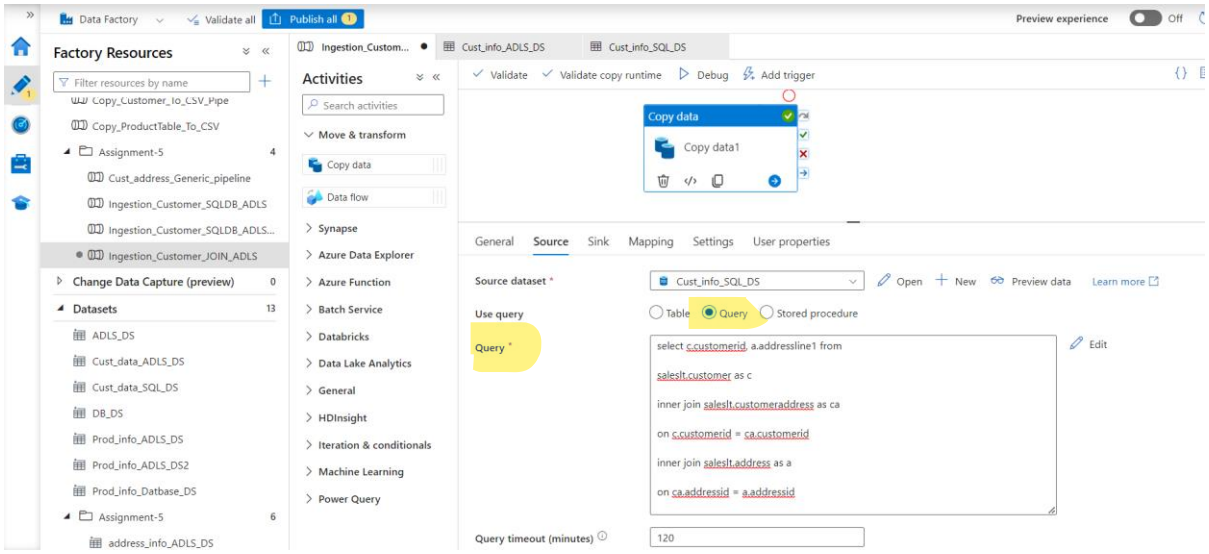


Finally Checking the Address Data in landing/Address ADLS

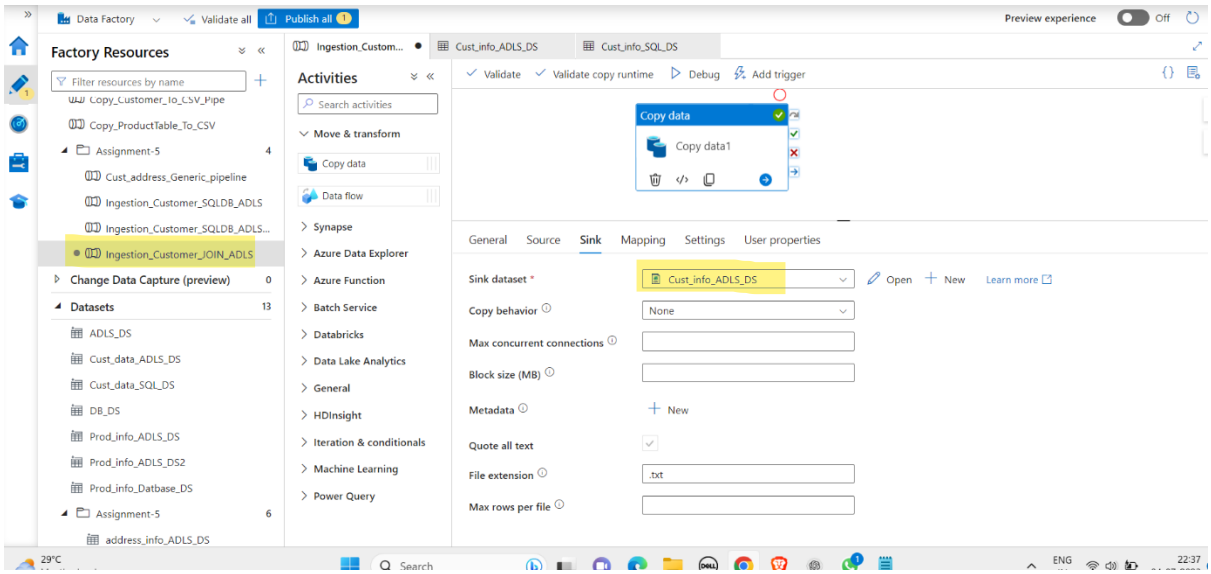


Question3: Create a Pipeline name 'Ingestion_Customer_JOIN_ADLS' which will copy the all the customer names along with their address into the csv. (Hint Join Customer+ Customer Address table)

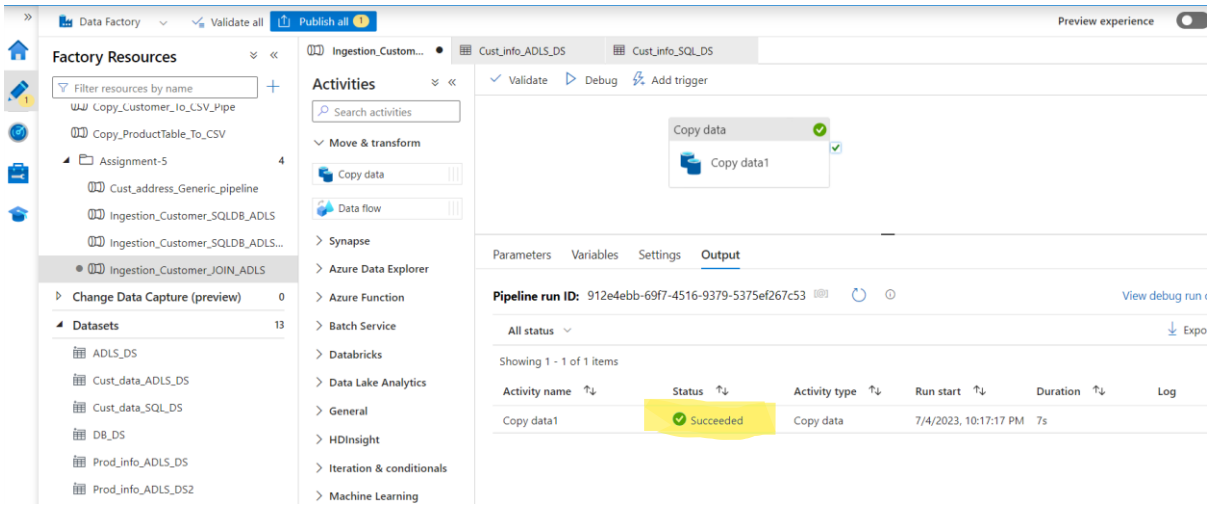
Creating a Source DS and Providing Query to get Customers along with Address



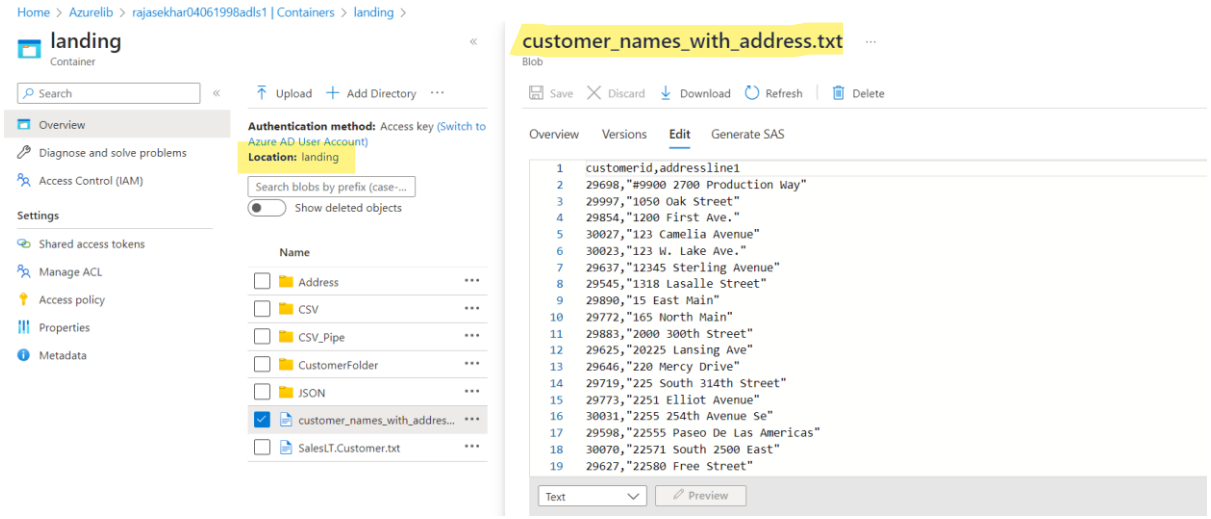
Creating a Sink in DS



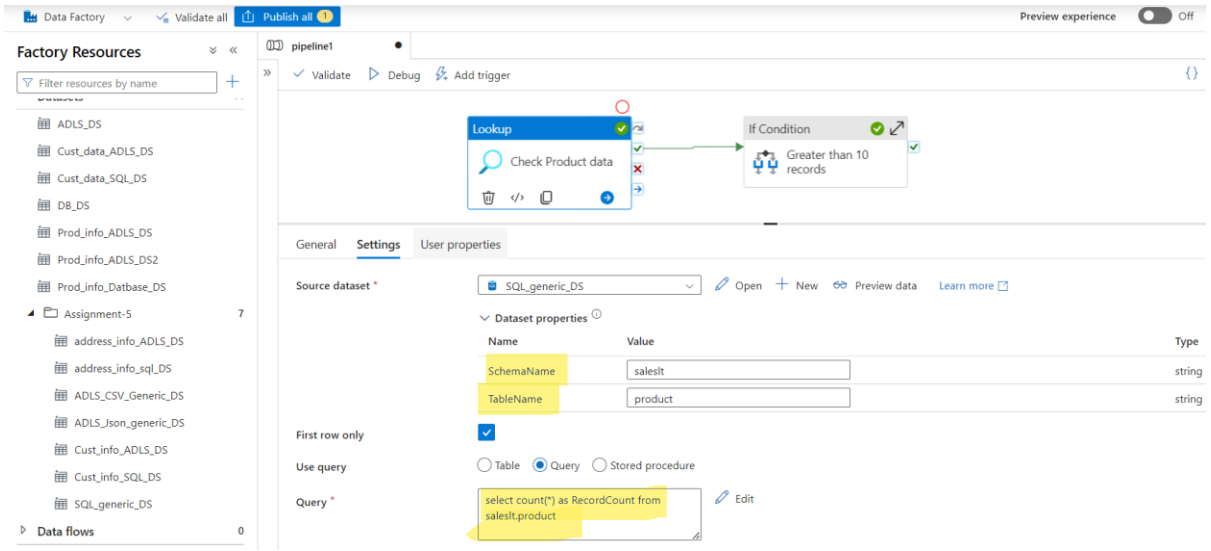
Executing and Triggering the Pipeline

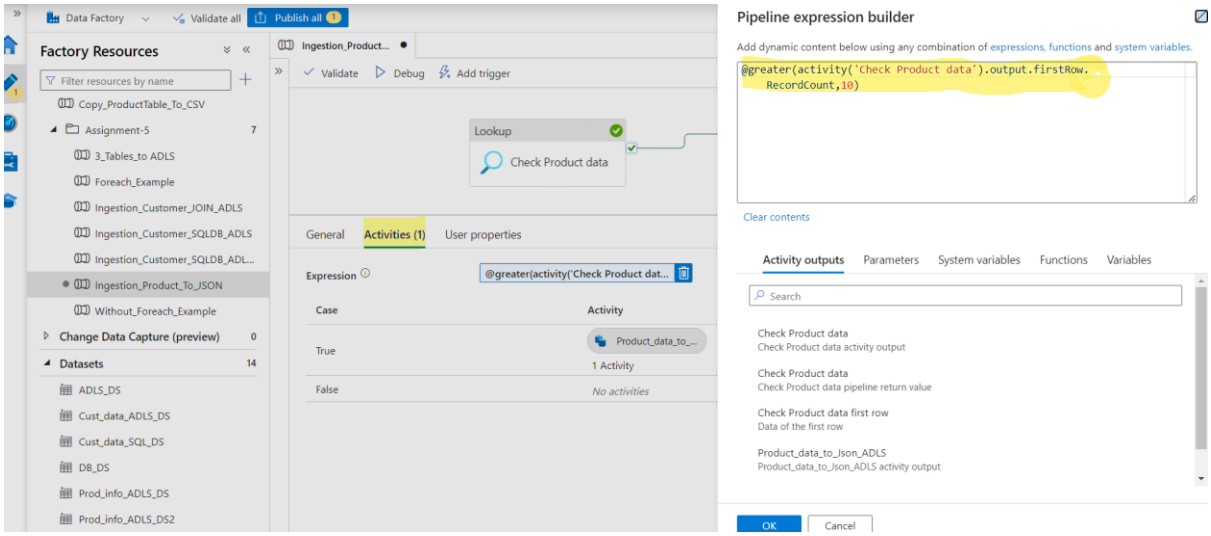


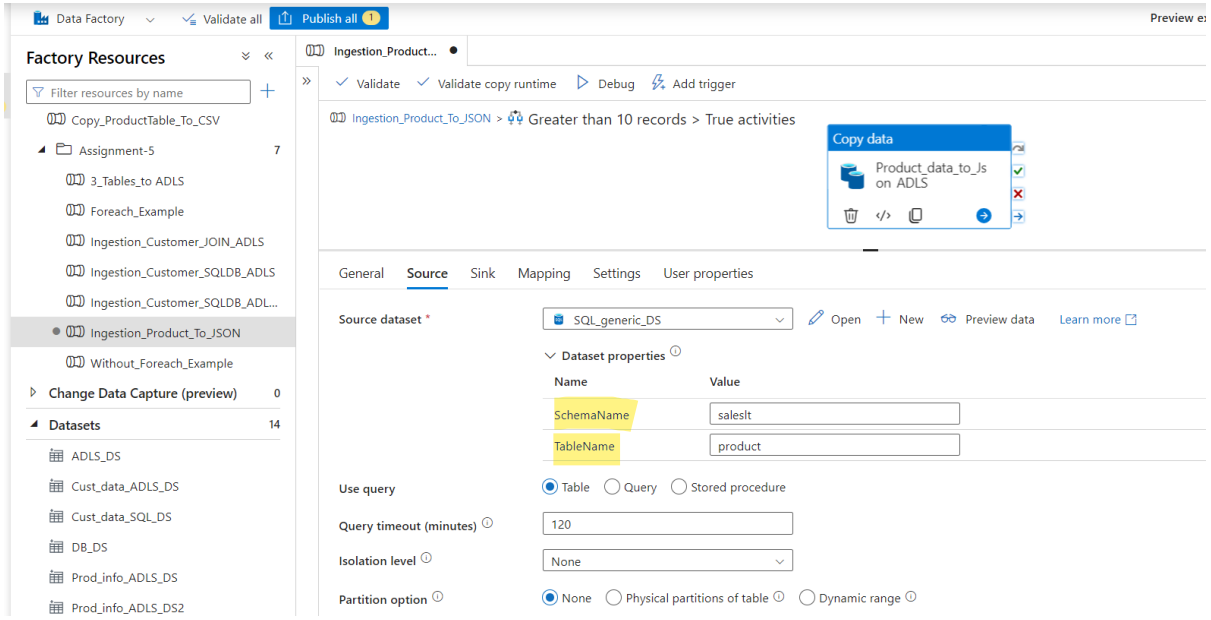
Finally checking CustomerId, Address data in ADLS

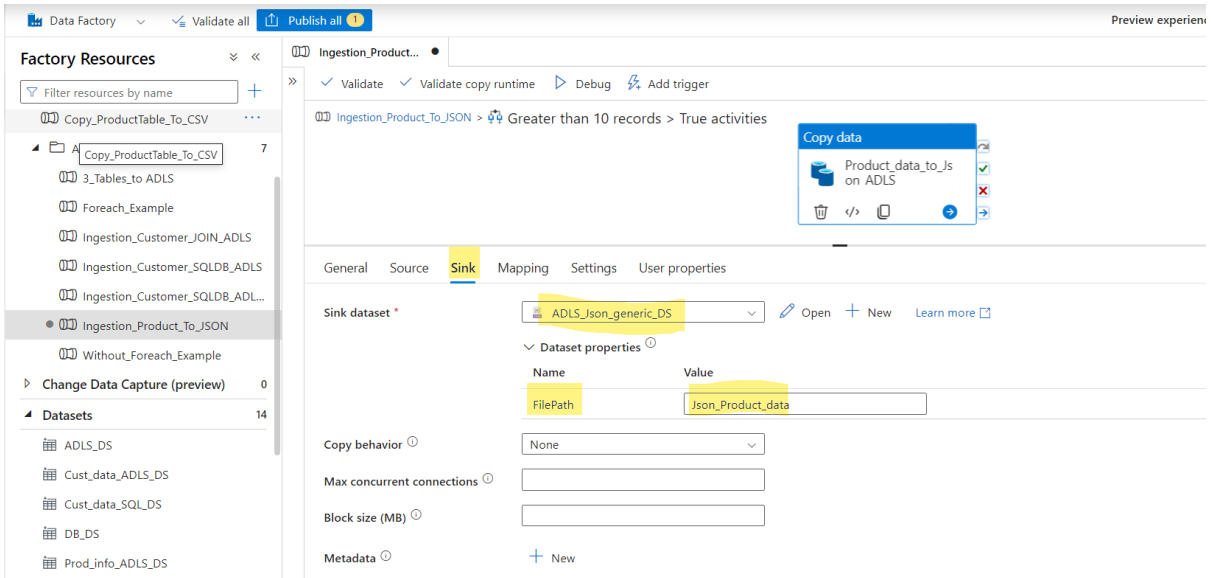


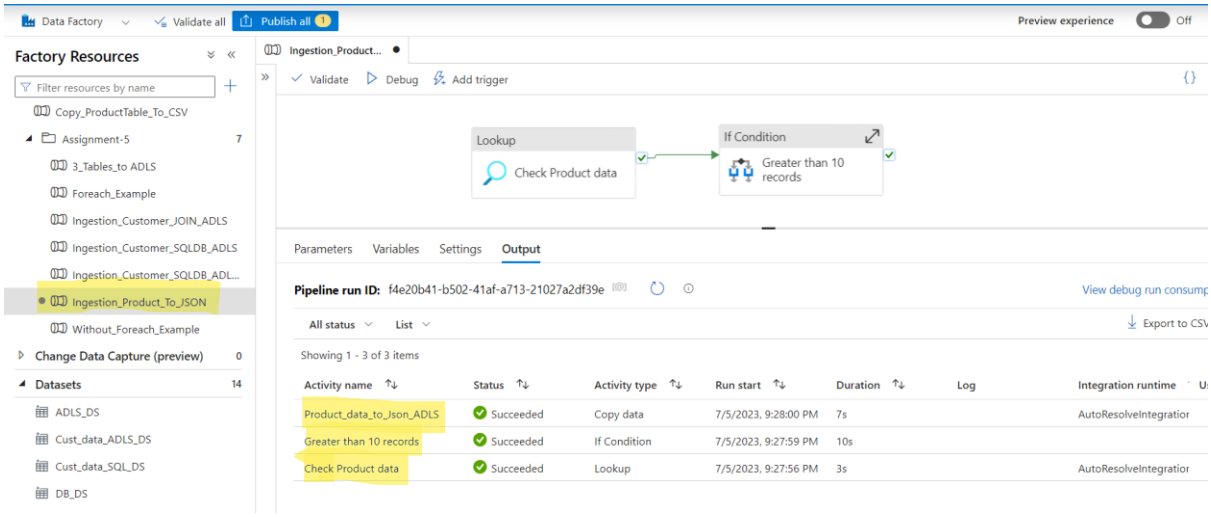
Question4: Create a pipeline name 'Ingestion_Product_To_JSON' which will copy all the product records as JSON only if total number of records >10.

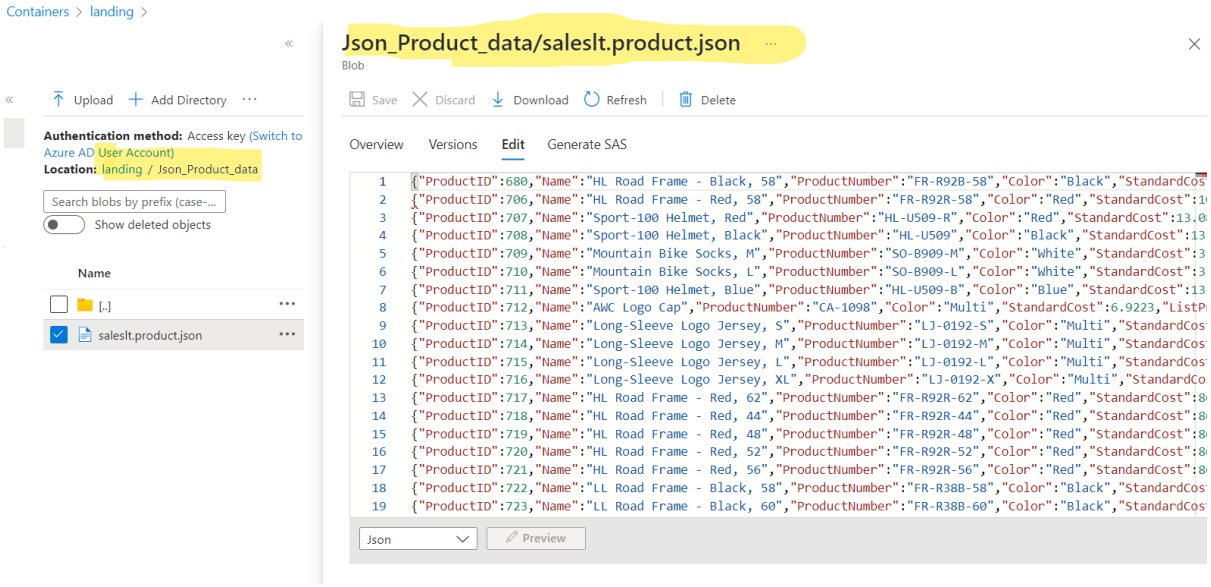



Data Factory
Validate all
Publish all 1
Factory Resources
Filter resources by name
Copy_ProductTable_To_CSV
Assignment-5 7
3_Tables_to ADLS
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Prod_info_ADLS_DS2
Ingestion_Product...
Validate
Debug
Add trigger
Lookup
Check Product data
General
Activities (1)
User properties
Expression
@greater(activity('Check Product dat...
Case
Activity
True
Product_data_to_...
1 Activity
False
No activities
Pipeline expression builder
Add dynamic content below using any combination of expressions, functions and system variables.
@greater(activity('Check Product data').output.firstRow.
RecordCount,10)
Clear contents
Activity outputs
Parameters
System variables
Functions
Variables
Search
Check Product data
Check Product data activity output
Check Product data
Check Product data pipeline return value
Check Product data first row
Data of the first row
Product_data_to_Json_ADLS
Product_data_to_Json_ADLS activity output
OK
Cancel


Data Factory
Validate all
Publish all 1
Factory Resources
Filter resources by name
Copy_ProductTable_To_CSV
Assignment-5 7
3_Tables_to ADLS
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Prod_info_ADLS_DS2
Ingestion_Product...
Validate
Validate copy runtime
Debug
Add trigger
Ingestion_Product_To_JSON > Greater than 10 records > True activities
Copy data
Product_data_to_Js
on ADLS
General
Source
Sink
Mapping
Settings
User properties
Source dataset *
SQL_generic_DS
Open
New
Preview data
Learn more
Dataset properties
Name
Value
SchemaName
saleslt
TableName
product
Use query
Table
Query
Stored procedure
Query timeout (minutes)
120
Isolation level
None
Partition option
None
Physical partitions of table
Dynamic range

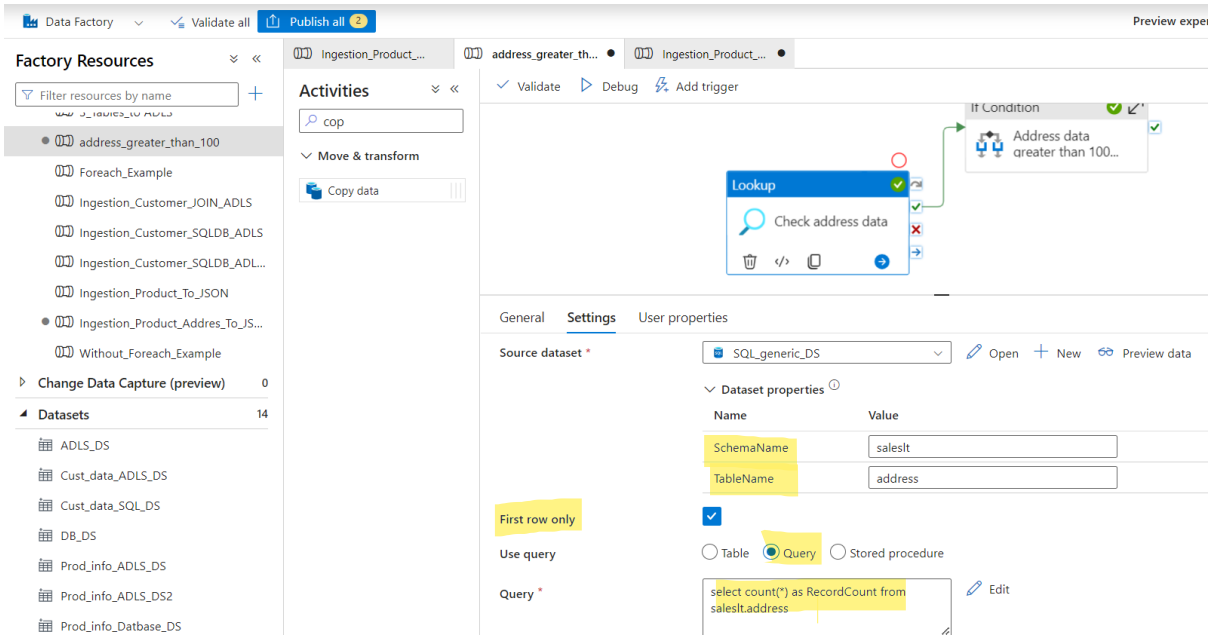

Data Factory
Validate all
Publish all 1
Factory Resources
Filter resources by name
Copy_ProductTable_To_CSV
Assignment-5 7
3_Tables_to ADLS
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Ingestion_Product...
Validate
Validate copy runtime
Debug
Add trigger
Ingestion_Product_To_JSON > Greater than 10 records > True activities
Copy data
Product_data_to_Js
on ADLS
General
Source
Sink
Mapping
Settings
User properties
Sink dataset *
ADLS_Json_generic_DS
Open
New
Learn more
Dataset properties
Name
Value
FilePath
Json_Product_data
Copy behavior
None
Max concurrent connections
Block size (MB)
Metadata
New

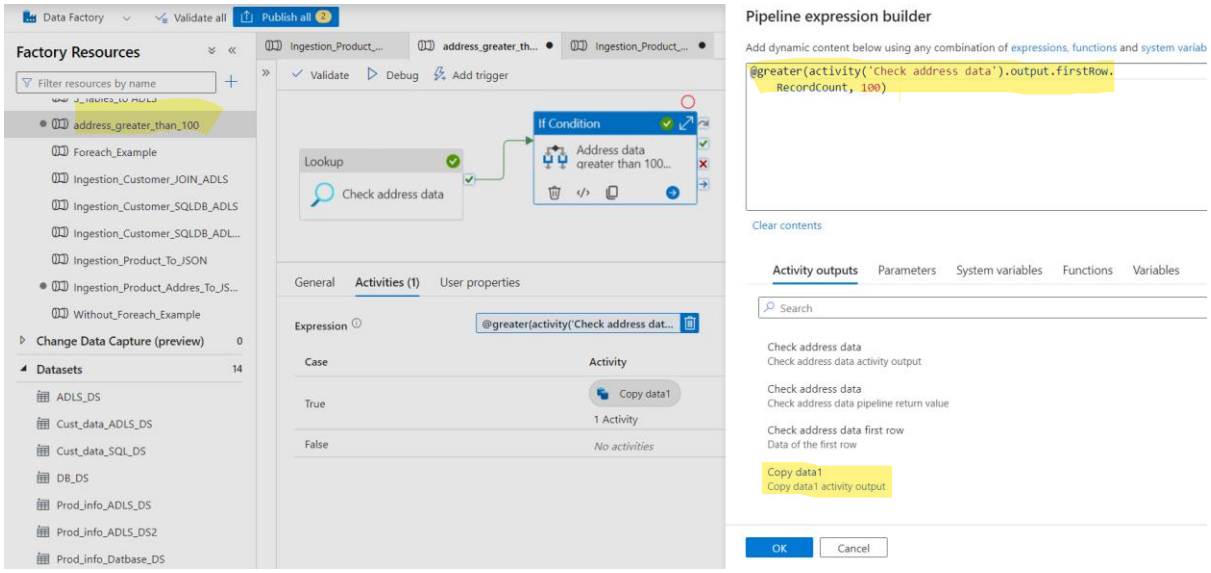


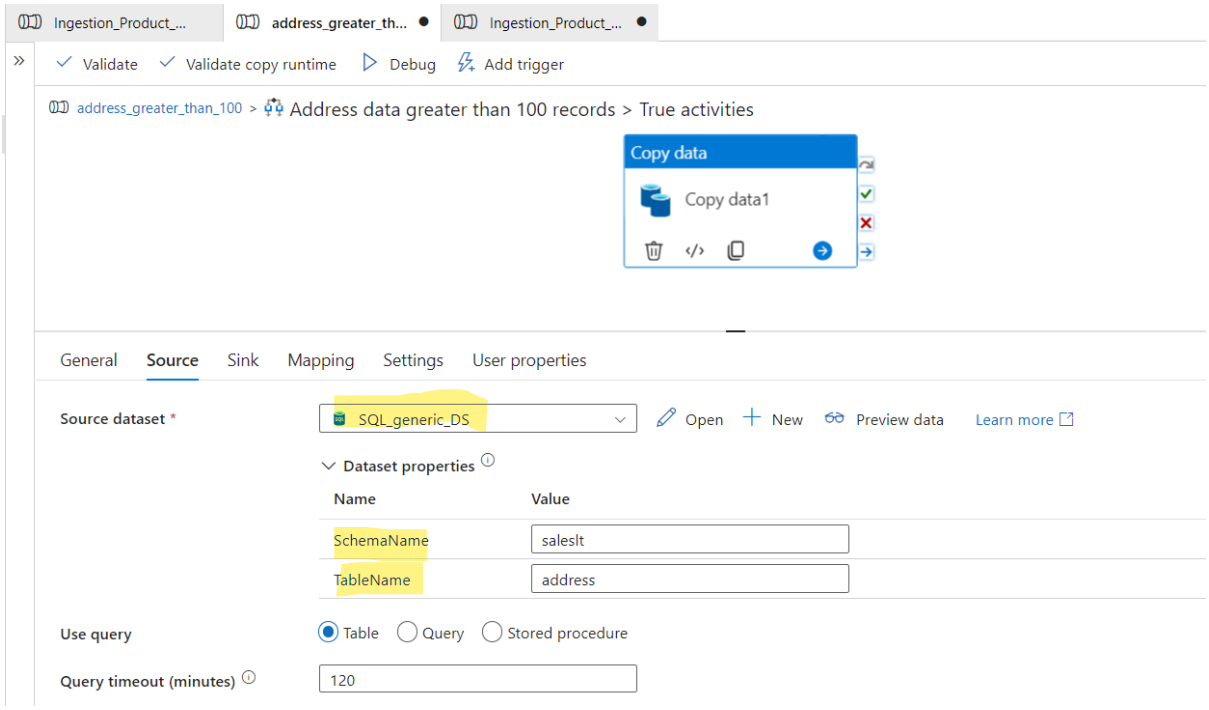


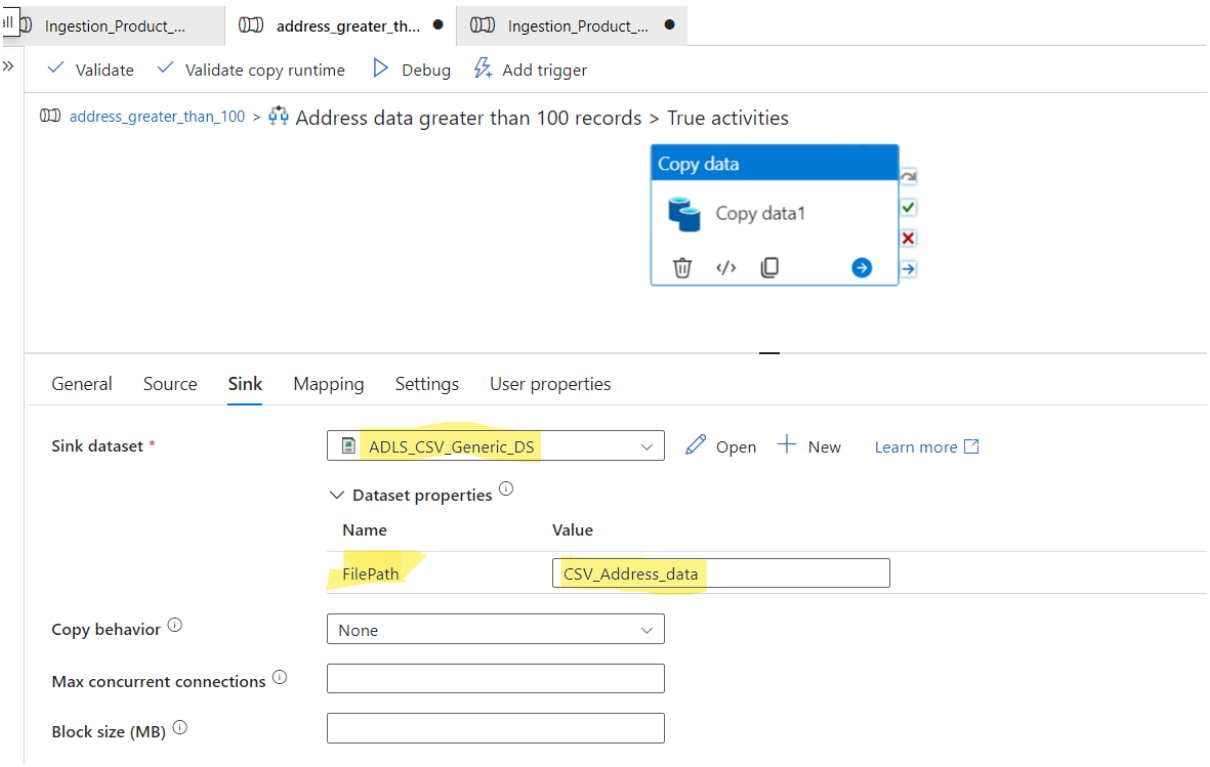
Question5: Create a pipeline name 'Ingestion_Product_Address_To_JSON' which will copy all the product records as JSON only if total number of records >10. After that check total record count in address table if they are greater than 100 then copy the adress table data as CSV in ADLS.

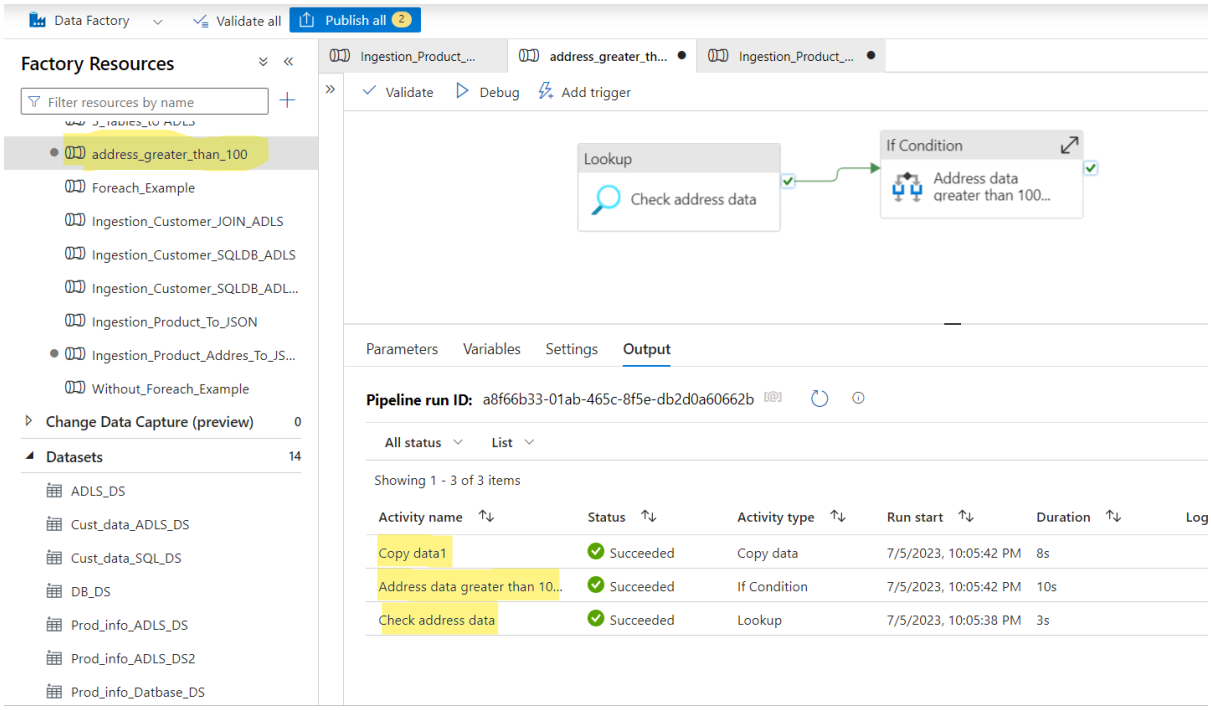
Note: Product data already created in above Q4.

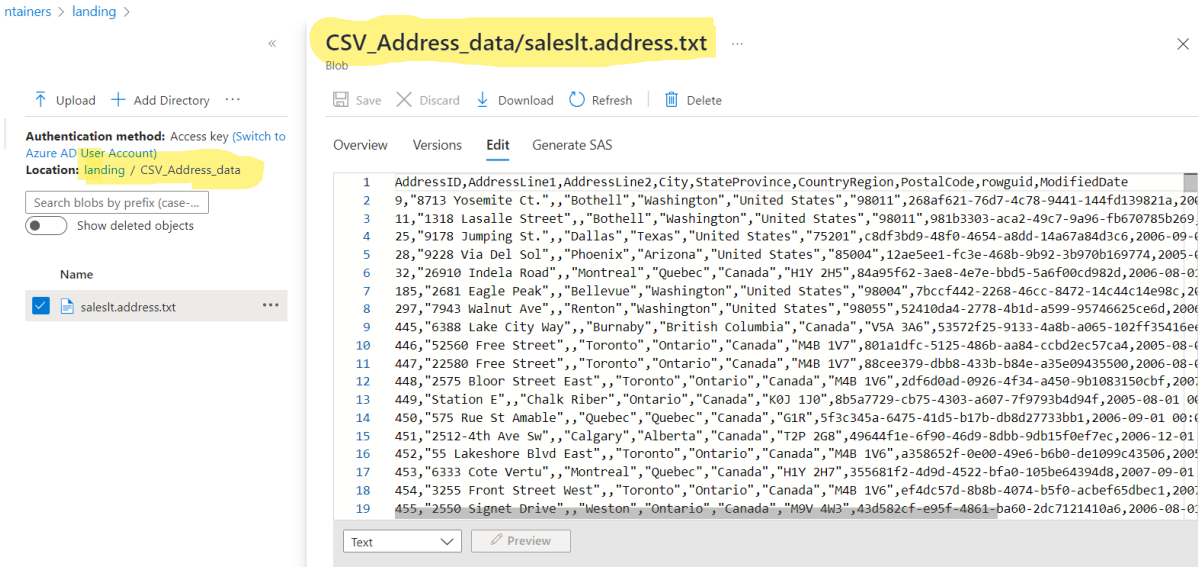

Data Factory
Validate all
Publish all 2
Preview exper
Factory Resources
Filter resources by name
address_greater_than_100
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Ingestion_Product_Addres_To_JS...
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Prod_info_ADLS_DS2
Prod_info_Datbase_DS
Ingestion_Product_...
address_greater_th...
Ingestion_Product_...
Activities
cop
Move & transform
Copy data
Validate
Debug
Add trigger
If Condition
Address data greater than 100...
Lookup
Check address data
General
Settings
User properties
Source dataset *
SQL_generic_DS
Open
New
Preview data
Dataset properties
Name
Value
SchemaName
salesIt
TableName
address
First row only
Use query
Table
Query
Stored procedure
Query *
select count(*) as RecordCount from salesIt.address
Edit


Data Factory
Validate all
Publish all 2
Factory Resources
Filter resources by name
address_greater_than_100
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Ingestion_Product_Addres_To_JS...
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Prod_info_ADLS_DS2
Prod_info_Datbase_DS
Validate
Debug
Add trigger
If Condition
Address data greater than 100...
Lookup
Check address data
General
Activities (1)
User properties
Expression
@greater(activity('Check address dat...
Case
Activity
True
Copy data1
1 Activity
False
No activities
Pipeline expression builder
Add dynamic content below using any combination of expressions, functions and system variab
@greater(activity('Check address data').output.firstRow.
RecordCount, 100)
Clear contents
Activity outputs
Parameters
System variables
Functions
Variables
Search
Check address data
Check address data activity output
Check address data
Check address data pipeline return value
Check address data first row
Data of the first row
Copy data1
Copy data1 activity output
OK
Cancel


Ingestion_Product_...
address_greater_th...
Ingestion_Product_...
Validate
Validate copy runtime
Debug
Add trigger
address_greater_than_100 > Address data greater than 100 records > True activities
Copy data
Copy data1
General
Source
Sink
Mapping
Settings
User properties
Source dataset *
SQL_generic_DS
Open
New
Preview data
Learn more
Dataset properties
Name
Value
SchemaName
saleslt
TableName
address
Use query
Table
Query
Stored procedure
Query timeout (minutes)
120


Ingestion_Product_...
address_greater_th...
Ingestion_Product_...
Validate
Validate copy runtime
Debug
Add trigger
address_greater_than_100 > Address data greater than 100 records > True activities
Copy data
Copy data1
General
Source
Sink
Mapping
Settings
User properties
Sink dataset *
ADLS_CSV_Generic_DS
Open
New
Learn more
Dataset properties
Name
Value
FilePath
CSV_Address_data
Copy behavior
None
Max concurrent connections
Block size (MB)


Data Factory
Validate all
Publish all 2
Factory Resources
Filter resources by name
address_greater_than_100
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Ingestion_Product_Addres_To_JS...
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Prod_info_ADLS_DS2
Prod_info_Datbase_DS
Ingestion_Product_...
address_greater_th...
Ingestion_Product_...
Validate
Debug
Add trigger
Lookup
Check address data
If Condition
Address data greater than 100...
Parameters
Variables
Settings
Output
Pipeline run ID: a8f66b33-01ab-465c-8f5e-db2d0a60662b
All status
List
Showing 1 - 3 of 3 items
Activity name
Status
Activity type
Run start
Duration
Log
Copy data1
Succeeded
Copy data
7/5/2023, 10:05:42 PM
8s
Address data greater than 10...
Succeeded
If Condition
7/5/2023, 10:05:42 PM
10s
Check address data
Succeeded
Lookup
7/5/2023, 10:05:38 PM
3s


ntainers > landing >
Upload
Add Directory
Authentication method: Access key (Switch to Azure AD User Account)
Location: landing / CSV_Address_data
Search blobs by prefix (case-...
Show deleted objects
Name
saleslt.address.txt
CSV_Address_data/saleslt.address.txt
Blob
Save
Discard
Download
Refresh
Delete
Overview
Versions
Edit
Generate SAS
AddressID,AddressLine1,AddressLine2,City,StateProvince,CountryRegion,PostalCode,rowguid,ModifiedDate
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11,"1318 Lasalle Street",,"Bothell","Washington","United States","98011",981b3303-aca2-49c7-9a96-fb670785b269,
25,"9178 Jumping St.",,"Dallas","Texas","United States","75201",c8df3bd9-48f0-4654-a8dd-14a67a84d3c6,2006-09-
28,"9228 Via Del Sol",,"Phoenix","Arizona","United States","85004",12ae5ee1-fc3e-468b-9b92-3b970b169774,2005-
32,"26910 Indela Road",,"Montreal","Quebec","Canada","H1Y 2H5",84a95f62-3ae8-4e7e-bbd5-5a6f00cd982d,2006-08-0
185,"2681 Eagle Peak",,"Bellevue","Washington","United States","98004",7bccf442-2268-46cc-8472-14c44c14e98c,2
297,"7943 Walnut Ave",,"Renton","Washington","United States","98055",52410da4-2778-4b1d-a599-95746625ce6d,200
445,"6388 Lake City Way",,"Burnaby","British Columbia","Canada","V5A 3A6",53572f25-9133-4a8b-a065-102ff35416e
446,"52560 Free Street",,"Toronto","Ontario","Canada","M4B 1V7",801a1dfc-5125-486b-aa84-ccbd2ec57ca4,2005-08-
447,"22580 Free Street",,"Toronto","Ontario","Canada","M4B 1V7",88cee379-dbb8-433b-b84e-a35e09435500,2006-08-
448,"2575 Bloor Street East",,"Toronto","Ontario","Canada","M4B 1V6",2df6d0ad-0926-4f34-a450-9b1083150cbf,200
449,"Station E",,"Chalk River","Ontario","Canada","K0J 1J0",8b5a7729-cb75-4303-a607-7f9793b4d94f,2005-08-01 0
450,"575 Rue St Amable",,"Quebec","Quebec","Canada","G1R",5f3c345a-6475-41d5-b17b-db8d27733bb1,2006-09-01 00:
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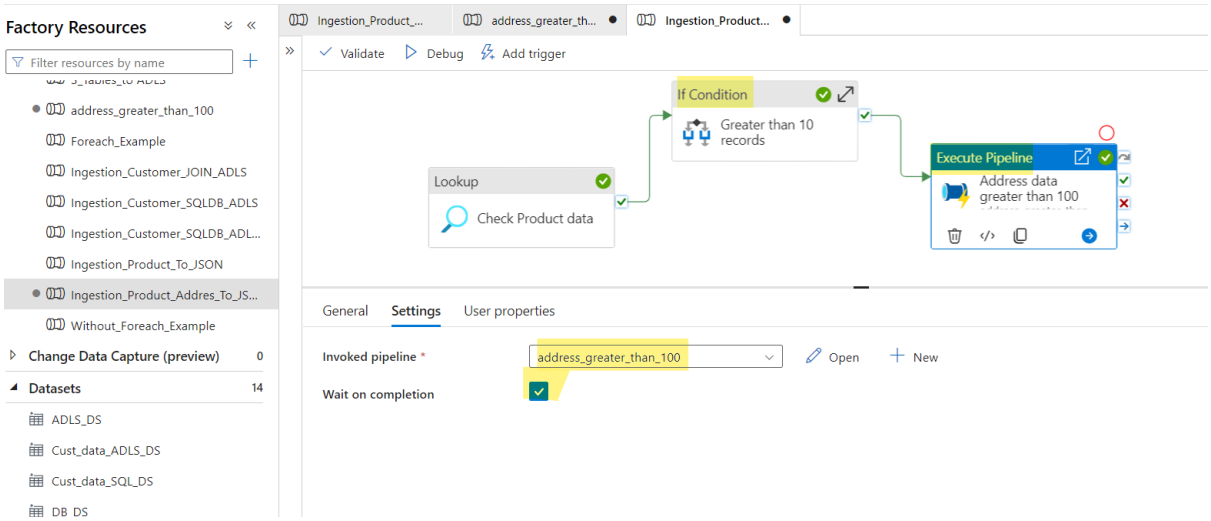
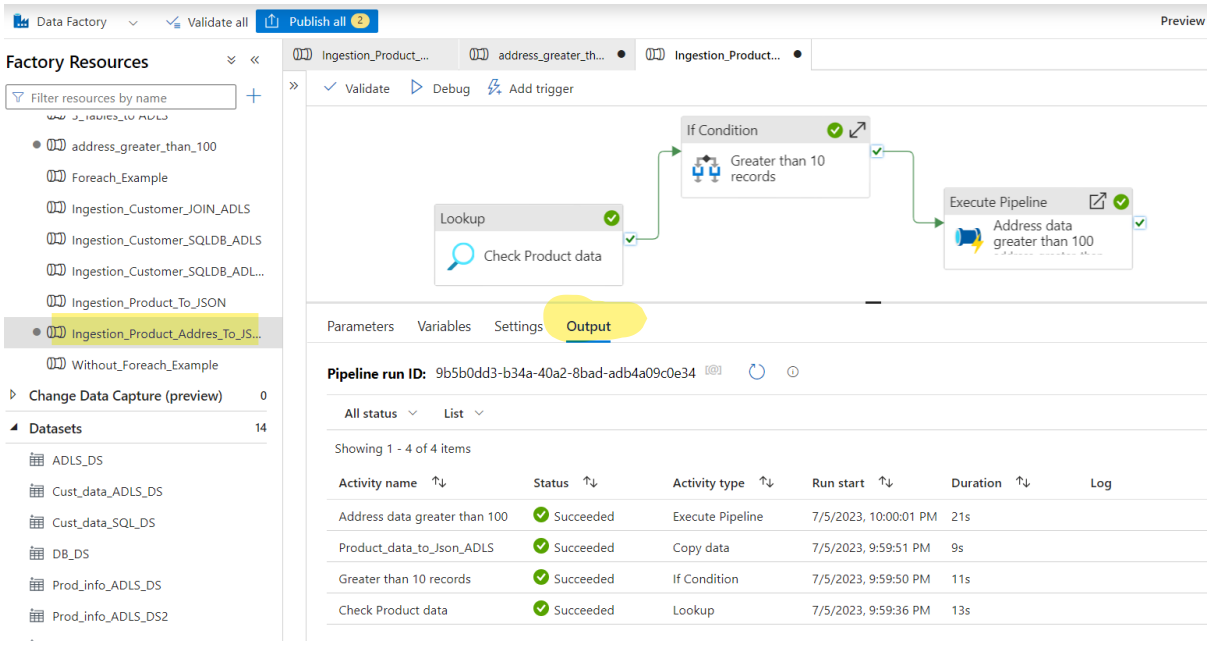
452,"55 Lakeshore Blvd East",,"Toronto","Ontario","Canada","M4B 1V6",a358652f-0e00-49e6-b6b0-de1099c43506,200
453,"6333 Cote Vertu",,"Montreal","Quebec","Canada","H1Y 2H7",355681f2-4d9d-4522-bfa0-105be64394d8,2007-09-01
454,"3255 Front Street West",,"Toronto","Ontario","Canada","M4B 1V6",ef4dc57d-8b8b-4074-b5f0-acbef65dbec1,200
455,"2550 Signet Drive",,"Weston","Ontario","Canada","M9V 4W3",43d582cf-e95f-4861-ba60-2dc7121410a6,2006-08-0
Text
Preview


Factory Resources
Filter resources by name
address_greater_than_100
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Ingestion_Product_Addres_To_JS...
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Ingestion_Product_...
address_greater_th...
Ingestion_Product...
Validate
Debug
Add trigger
Lookup
Check Product data
If Condition
Greater than 10 records
Execute Pipeline
Address data greater than 100
General
Settings
User properties
Invoked pipeline *
address_greater_than_100
Open
New
Wait on completion


Data Factory
Validate all
Publish all 2
Preview
Factory Resources
Filter resources by name
address_greater_than_100
Foreach_Example
Ingestion_Customer_JOIN_ADLS
Ingestion_Customer_SQLDB_ADLS
Ingestion_Customer_SQLDB_ADL...
Ingestion_Product_To_JSON
Ingestion_Product_Addres_To_JS...
Without_Foreach_Example
Change Data Capture (preview) 0
Datasets 14
ADLS_DS
Cust_data_ADLS_DS
Cust_data_SQL_DS
DB_DS
Prod_info_ADLS_DS
Prod_info_ADLS_DS2
Ingestion_Product_...
address_greater_th...
Ingestion_Product...
Validate
Debug
Add trigger
If Condition
Greater than 10 records
Lookup
Check Product data
Execute Pipeline
Address data greater than 100
Parameters
Variables
Settings
Output
Pipeline run ID: 9b5b0dd3-b34a-40a2-8bad-adb4a09c0e34
All status
List
Showing 1 - 4 of 4 items
Activity name
Status
Activity type
Run start
Duration
Log
Address data greater than 100
Succeeded
Execute Pipeline
7/5/2023, 10:00:01 PM
21s
Product_data_to_Json_ADLS
Succeeded
Copy data
7/5/2023, 9:59:51 PM
9s
Greater than 10 records
Succeeded
If Condition
7/5/2023, 9:59:50 PM
11s
Check Product data
Succeeded
Lookup
7/5/2023, 9:59:36 PM
13s