# Bootcamp Project 1 - Data Pipeline for Customer Account Analysis

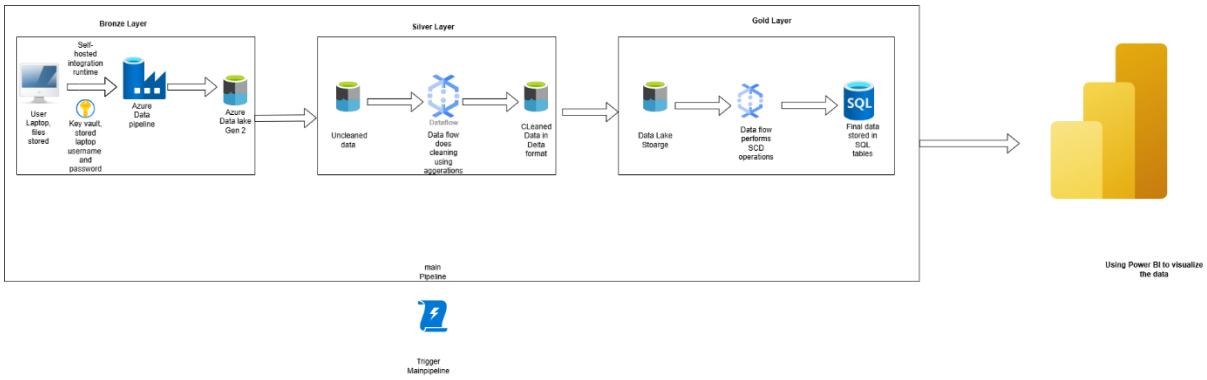
## 1. Objective:

The project aims to design and implement a robust data pipeline for processing customer account data. This includes copying data from a backend team's storage account, performing necessary transformations using ADF and upserting (inserting or updating) data from a file stored in Azure Data Lake Storage ADLS GOLD Storage into SQL database table. The pipeline aims to ensure efficient, accurate, and scalable data processing to support downstream analytics and reporting needs.

## 2. Tools Required:

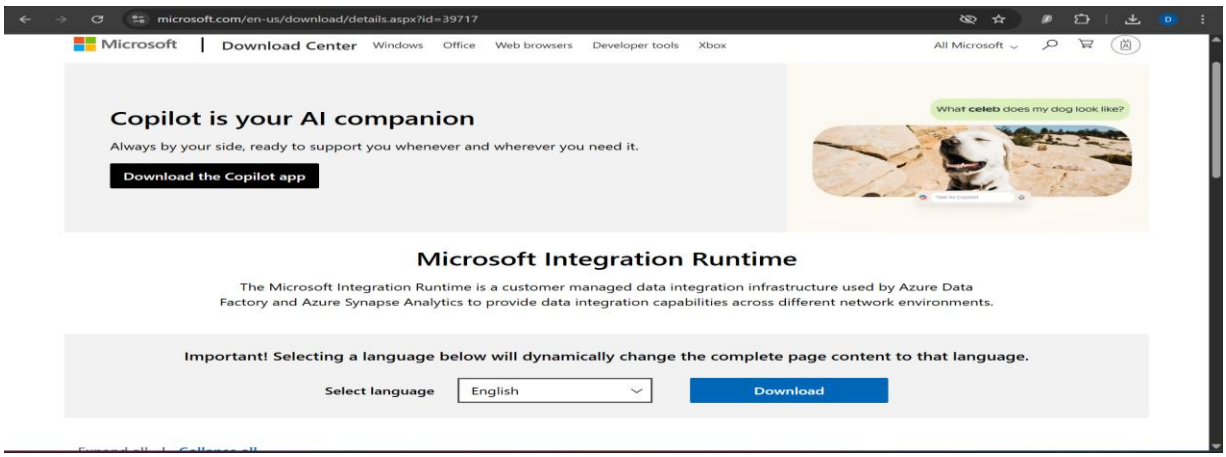
Azure Data Factory
Local System
Azure SQL data base

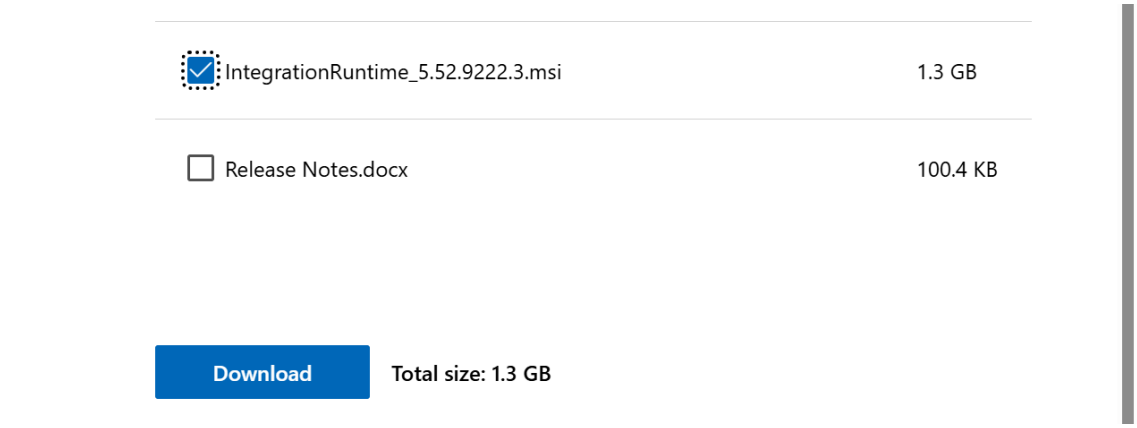
## 3. Created an Architecture Diagram

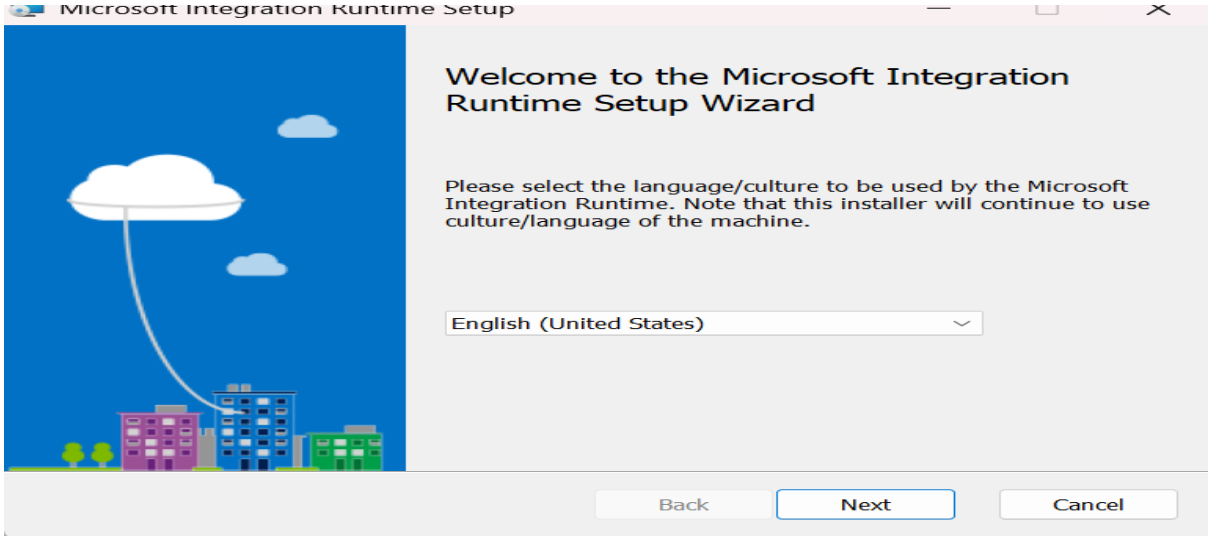


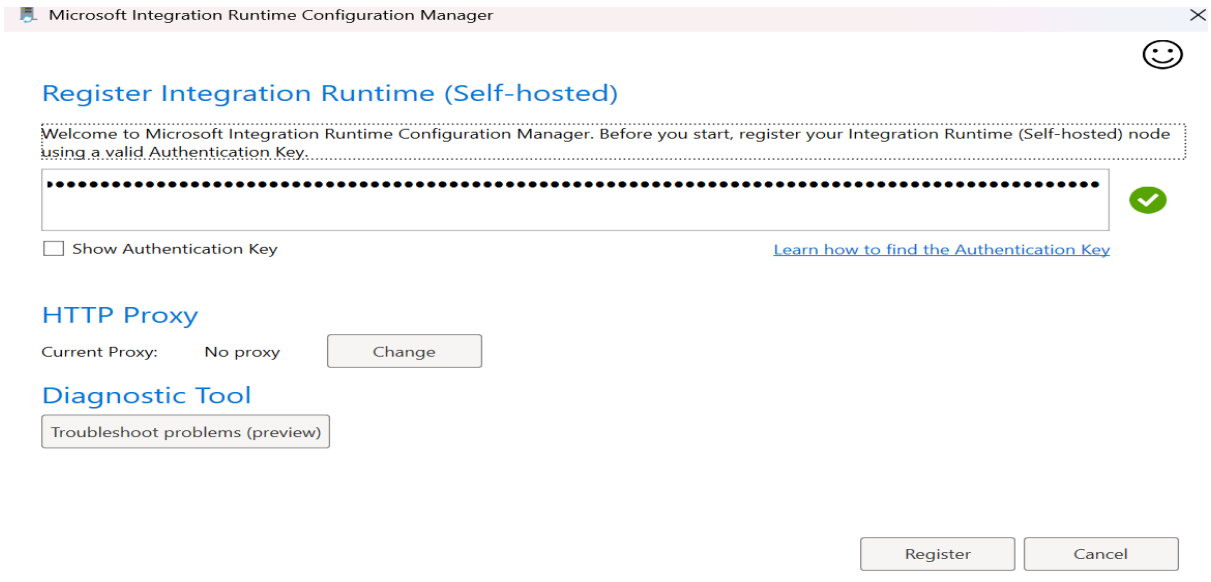

## 4. Started Creating the Pipeline

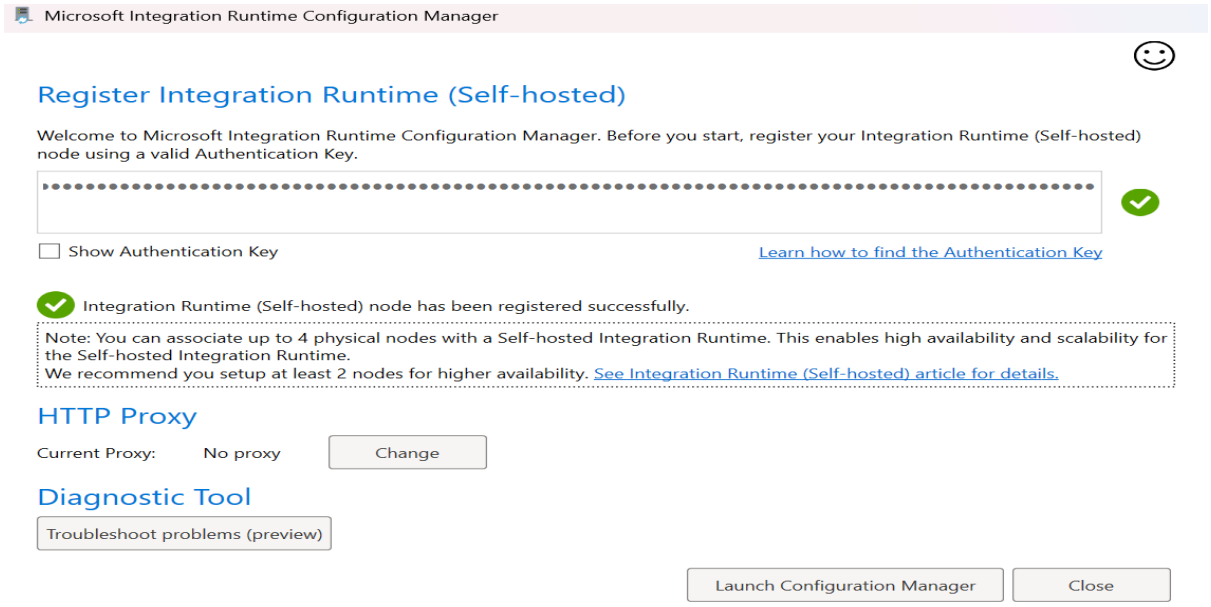
1. First Data pipeline, is to copy data from on premise file storage system to ADLS into Bronze folder.
    - First, we have to download selfhosted integration runtime in local system to connect to Azure cloud.



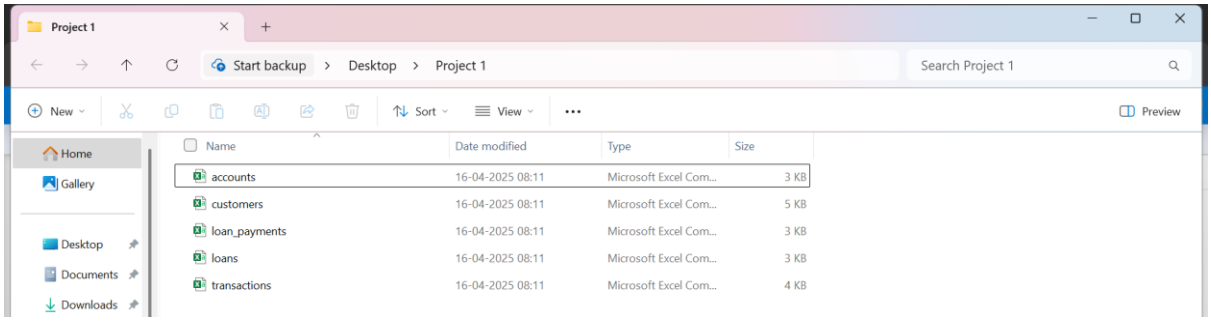

IntegrationRuntime_5.52.9222.3.msi
1.3 GB
Release Notes.docx
100.4 KB
Download
Total size: 1.3 GB


Microsoft Integration Runtime Setup
Welcome to the Microsoft Integration Runtime Setup Wizard
Please select the language/culture to be used by the Microsoft Integration Runtime. Note that this installer will continue to use culture/language of the machine.
English (United States)
Back
Next
Cancel

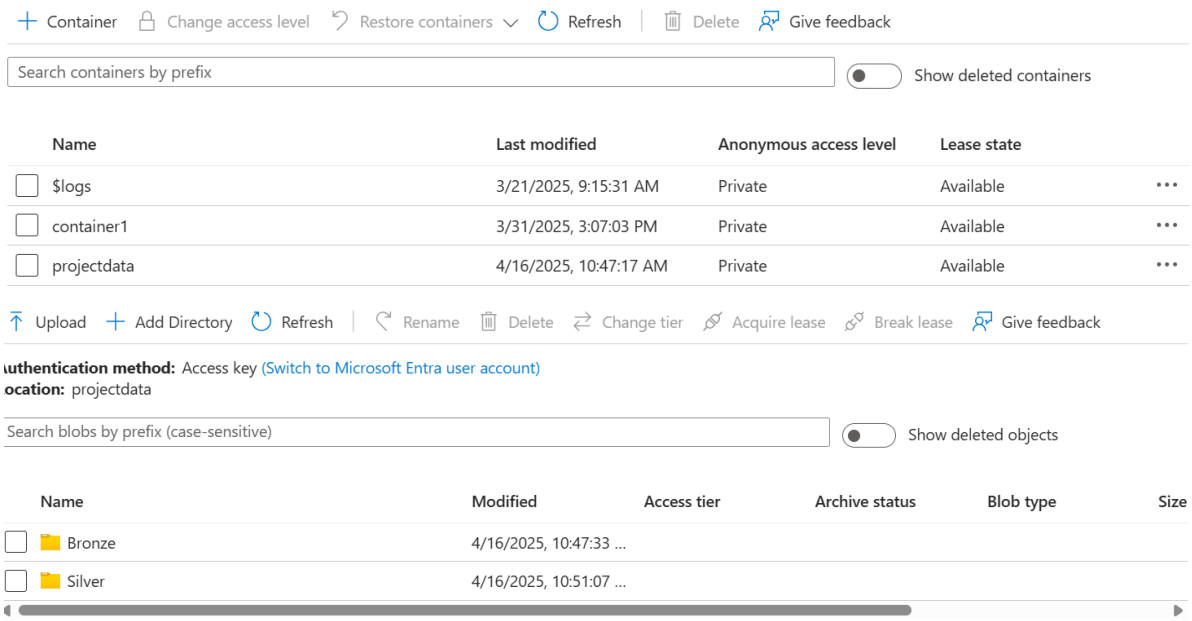

Microsoft Integration Runtime Configuration Manager
Register Integration Runtime (Self-hosted)
Welcome to Microsoft Integration Runtime Configuration Manager. Before you start, register your Integration Runtime (Self-hosted) node using a valid Authentication Key.
Show Authentication Key
Learn how to find the Authentication Key
HTTP Proxy
Current Proxy:
No proxy
Change
Diagnostic Tool
Troubleshoot problems (preview)
Register
Cancel



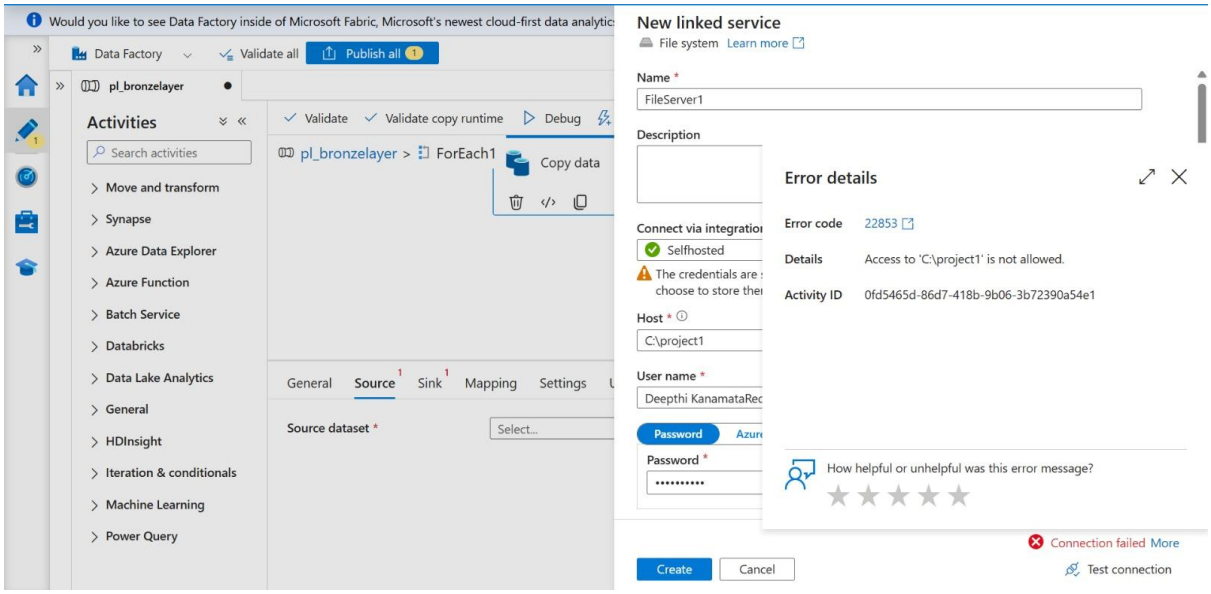

- Selfhosted integration runtime is successfully installed and registered in local system
- This is where files in local system are located.



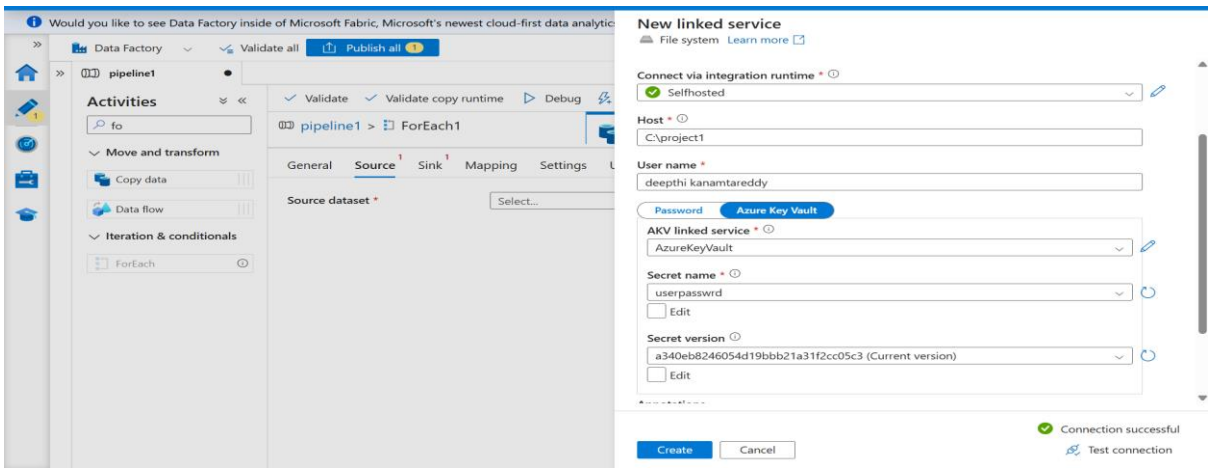

- Now created a container and folders in ADLS gen 2.



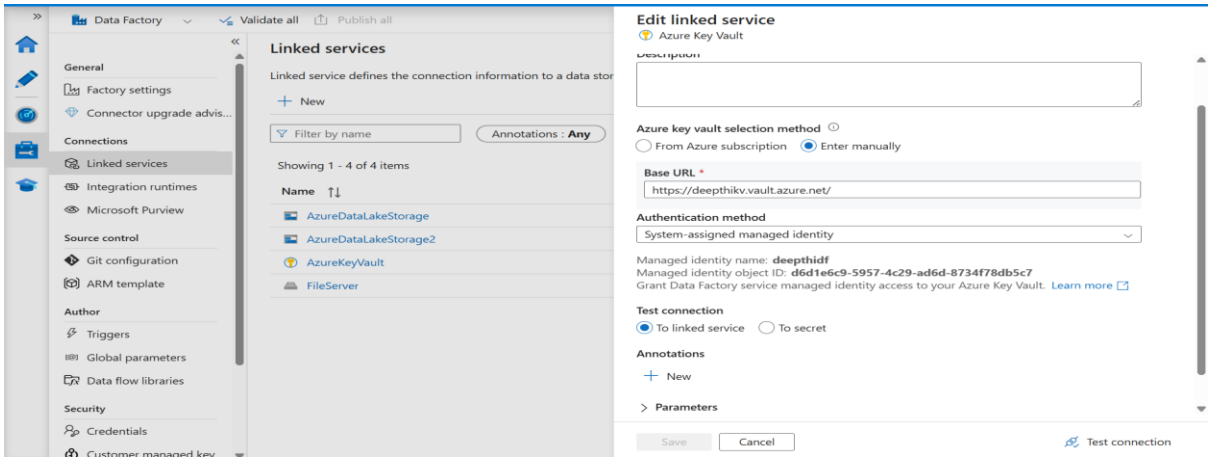

- Now try to create a linked service between local system and Azure cloud.



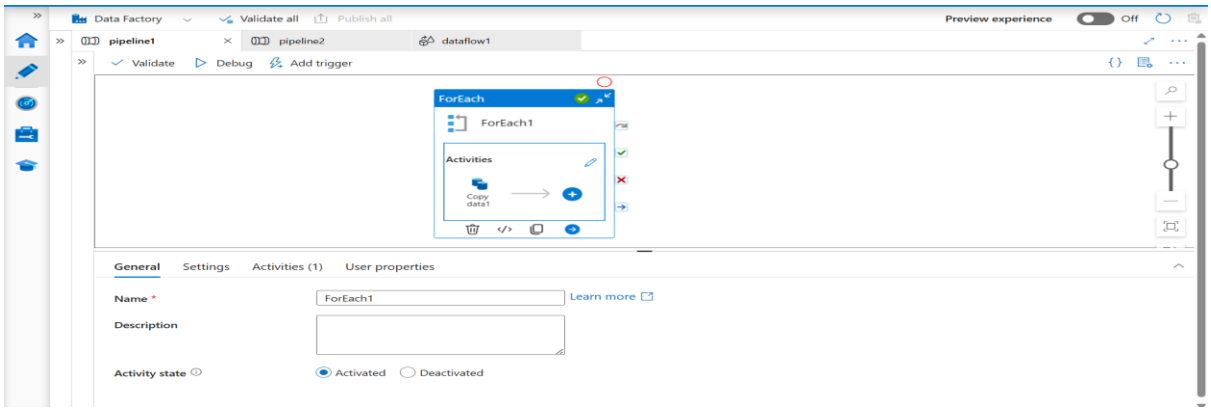

- Faced a connection error while trying to connect to local system, resolved it by using below commands in window power shell.
- First changed directory in power shell using command cd "C:\Program Files\Microsoft Integration Runtime\5.0\Shared".
- Once directory is changed ran command .\dmgcmd.exe -DisableLocalFolderPathValidation, which gave access for selfhosted run time to access local system files.

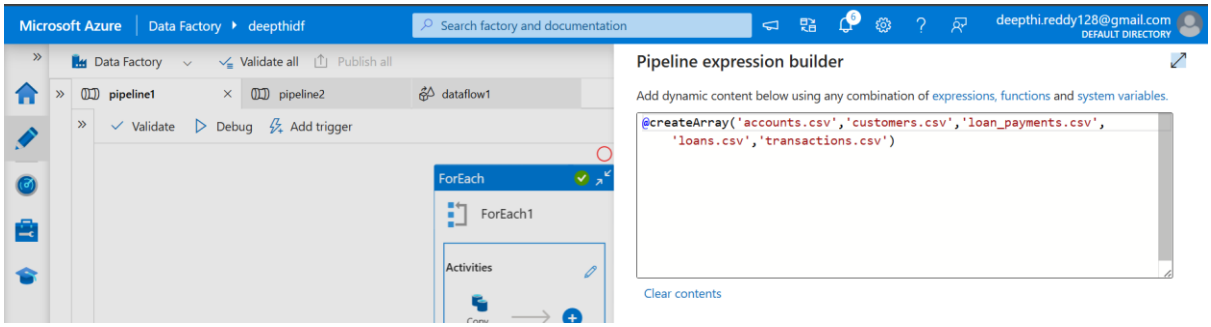



- Connection created successfully.
- Created a linked service for key vault where I stored system password as a secret.

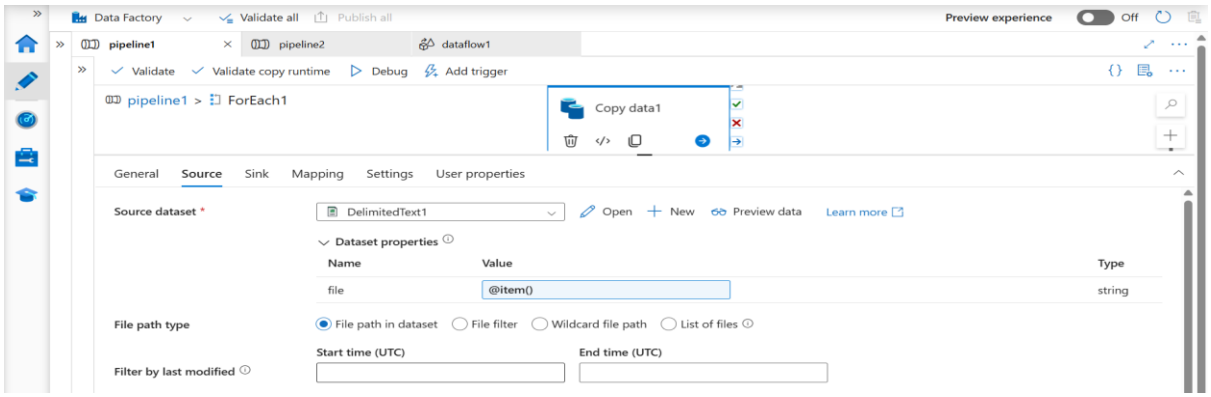



- Created a pipeline with foreach activity, which will loop through an array of file names and will give input to copy activity.

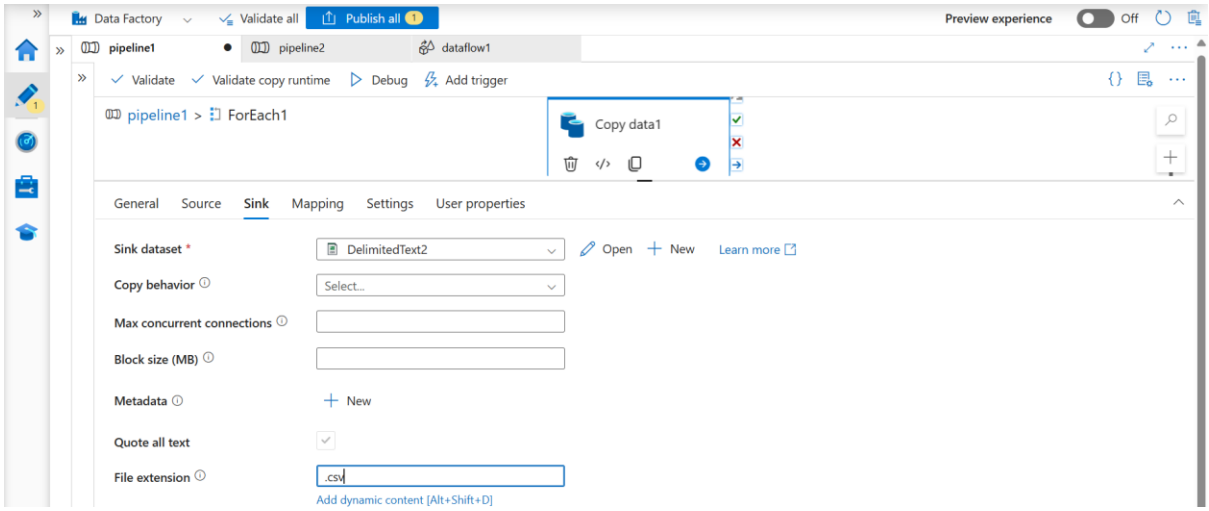


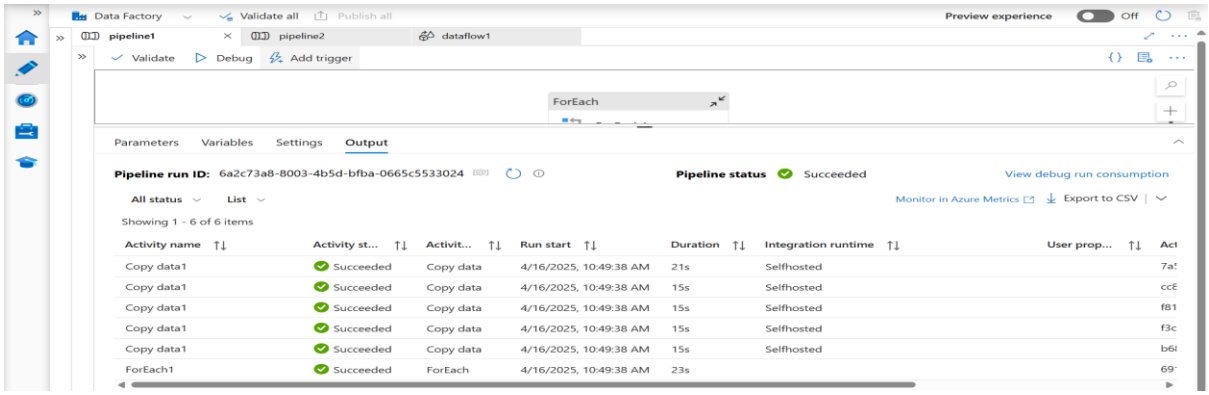

- Copy activity source.



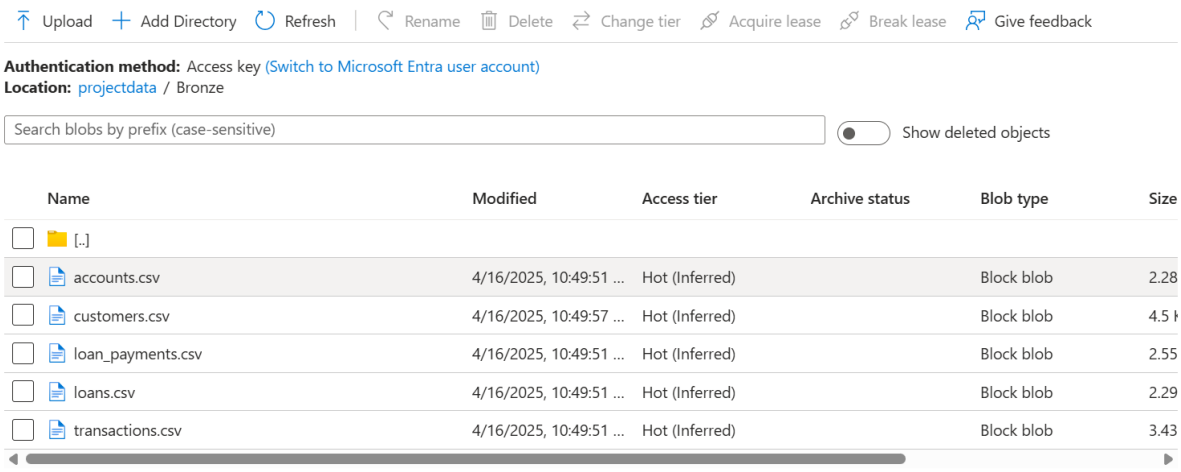

- Copy activity sink.



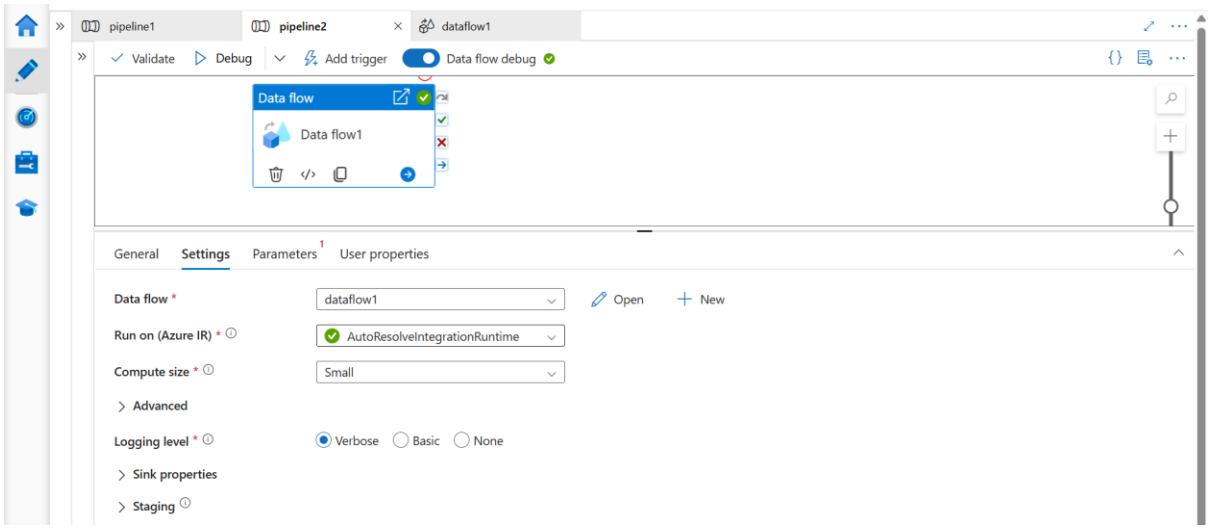

- Ran pipeline.



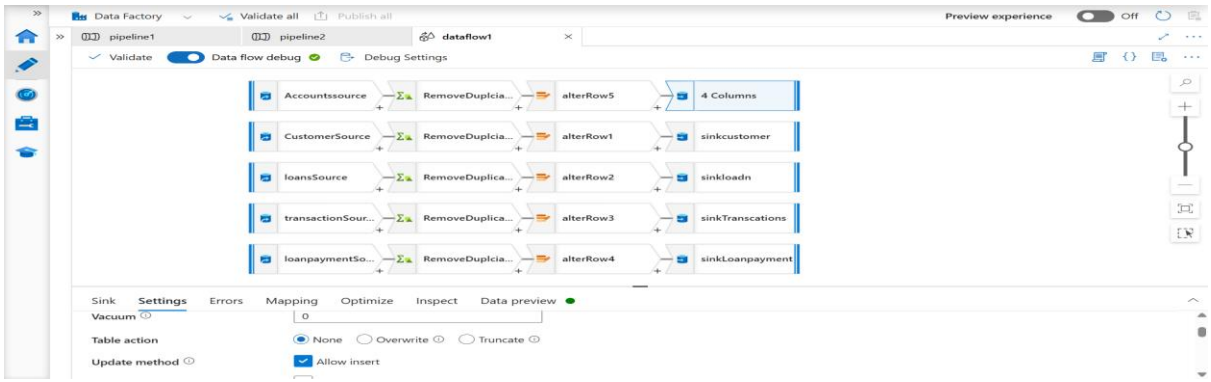

- Pipeline ran successfully and data from on premise is copied to Bronze layer in ADLS.



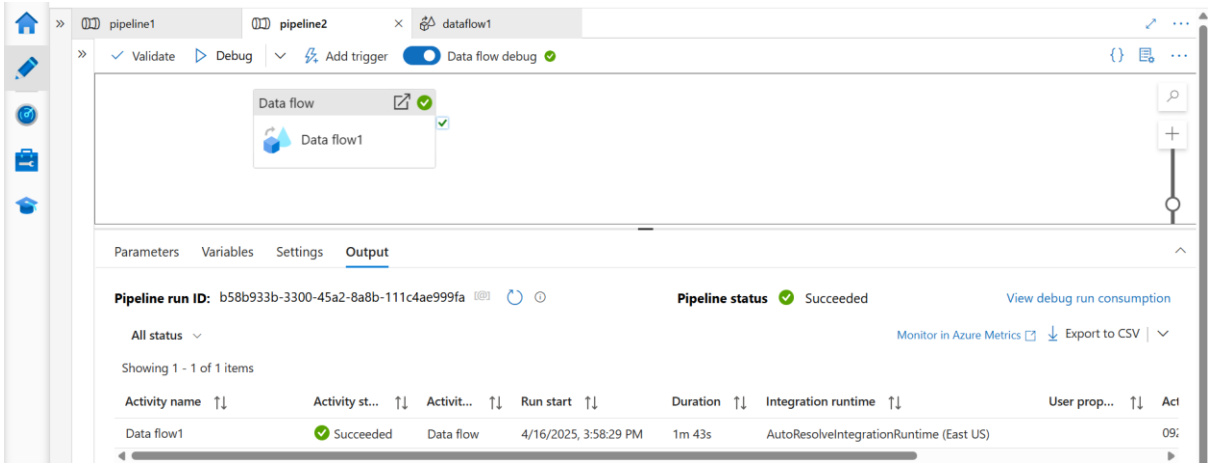

2. Create second pipeline for silver layer, where we have to clean the data, which involves removing duplicates.
   - Create a pipeline, with a dataflow



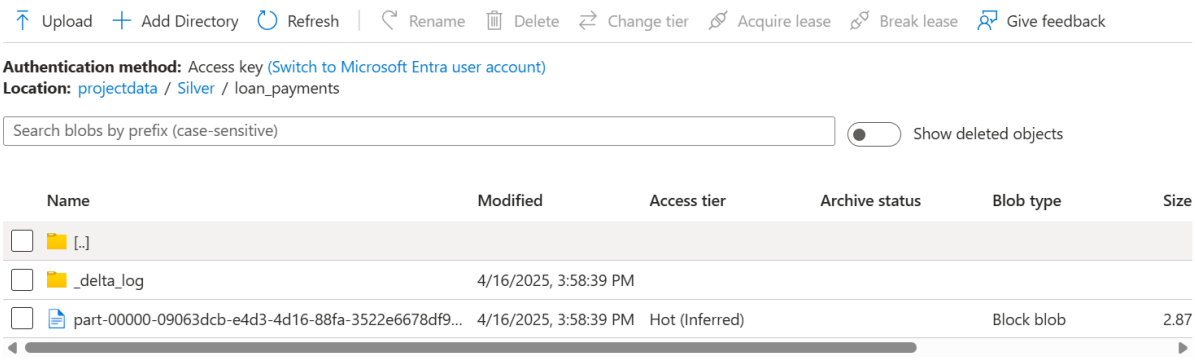

- Inside dataflow, we will have source, Aggregate transformation, alter row transformation and sink for all 5 files.
- Here we are using groupBy(), to remove duplicates by grouping them with specific ID's and then aggregating all other columns by using first() which return first not null values.
- Alter row transformation is used to perform upsert operation.




- Run pipeline successfully and data is loaded in silver folder in ADLS.




- Data is loaded to specific folders in Silver Directory for each file.

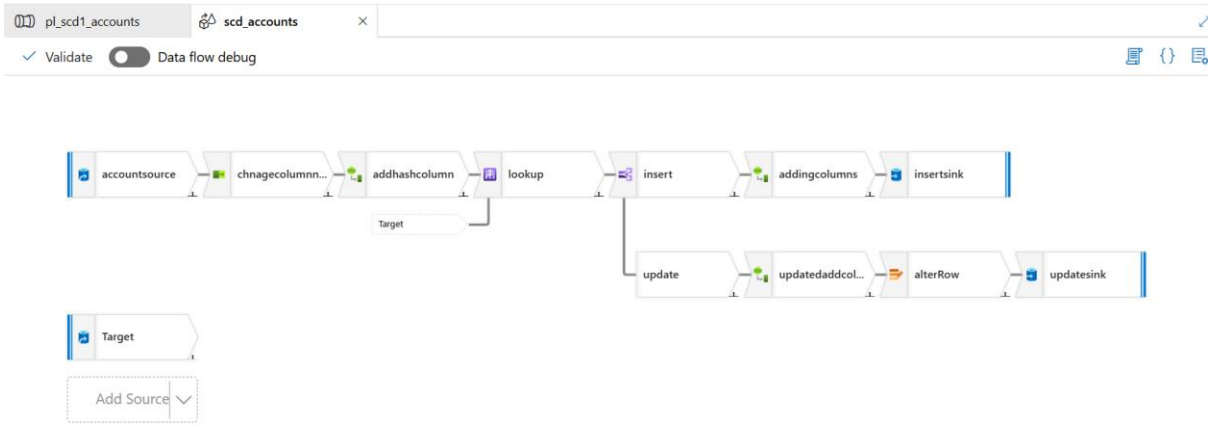



3. Now we have to create 5 different pipelines to perform SCD type 1 and 2 on 5 different tables.

Here we are performing SCD 1 on accounts file, transactions file, customer file.

SCD type 2 on loans and loan_payment file.

- SCD Type 1 on accounts file.




Here we are using a dataflow to perform SCD type 1 on accounts file,

**1. Source Transformation**

- Data is ingested from the **Silver Layer**.
- Acts as the initial source for the pipeline.

**2. Select Transformation**

- Used to **rename columns** as per the desired naming convention or schema requirements.

**3. Derived Column Transformation (Hash Column)**

- A new column is added using the **crc32 hash function**.
- The hash column helps in identifying data changes for comparison and update logic.

**4. Target Setup – Azure SQL Database**

- An **Accounts table** is created in the target SQL database.

- The table includes all columns from the source data, plus additional metadata columns (created_by, created_date, updated_by, updated_date).

**5. Lookup Transformation**

- Performs a **Left Join** between the **source data** and the **target SQL table**.
- Used to check if a record already exists in the target.

**6. Conditional Split Transformation**

- Segregates records into **Insert** and **Update** branches:
    - **Insert**: Records not found in the target.
    - **Update**: Records found with differences (based on hash comparison or existing logic).

**7. Derived Column Transformation (Metadata Columns)**

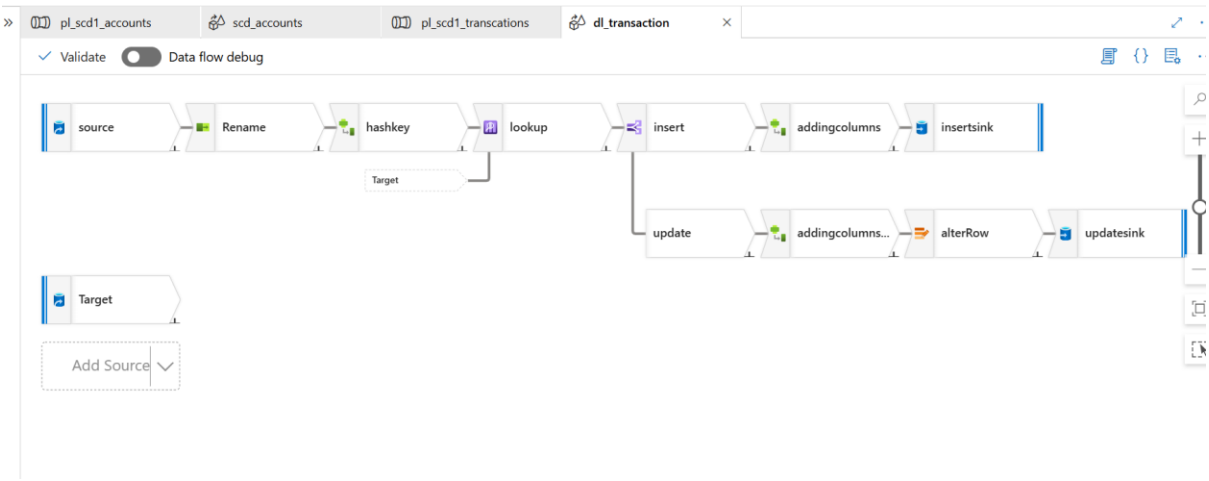
- **Insert Path:**
    - Adds values to created_by, created_date, updated_by, and updated_date.
- **Update Path:**
    - Updates only the updated_by and updated_date fields.

**8. Alter Row Transformation (for Update Path)**

- Adds update conditions:
    - Sets rows to **update if 1==1** (always true) as condition has already been logically filtered in the Conditional Split.

**9. Sink Transformation**

- Final data write operation:
    - **Insert Path Sink** writes new records to the Azure SQL Accounts table.
    - **Update Path Sink** updates existing records based on the Alter Row configuration.
- SCD type 1 on transaction table.



**1. Source Transformation**

- Data is ingested from the **Silver Layer**.
- Acts as the initial source for the pipeline.

**2. Select Transformation**

- Used to **rename columns** as per the desired naming convention or schema requirements.

**3. Derived Column Transformation (Hash Column)**

- A new column is added using the **crc32 hash function**.
- The hash column helps in identifying data changes for comparison and update logic.

**4. Target Setup – Azure SQL Database**

- An **Transaction table** is created in the target SQL database.
- The table includes all columns from the source data, plus additional metadata columns (created_by, created_date, updated_by, updated_date).

**5. Lookup Transformation**

- Performs a **Left Join** between the **source data** and the **target SQL table**.
- Used to check if a record already exists in the target.

**6. Conditional Split Transformation**

- Segregates records into **Insert** and **Update** branches:
    - **Insert**: Records not found in the target.
    - **Update**: Records found with differences (based on hash comparison or existing logic).

**7. Derived Column Transformation (Metadata Columns)**

- **Insert Path:**
    - Adds values to created_by, created_date, updated_by, and updated_date.
- **Update Path:**
    - Updates only the updated_by and updated_date fields.

**8. Alter Row Transformation (for Update Path)**

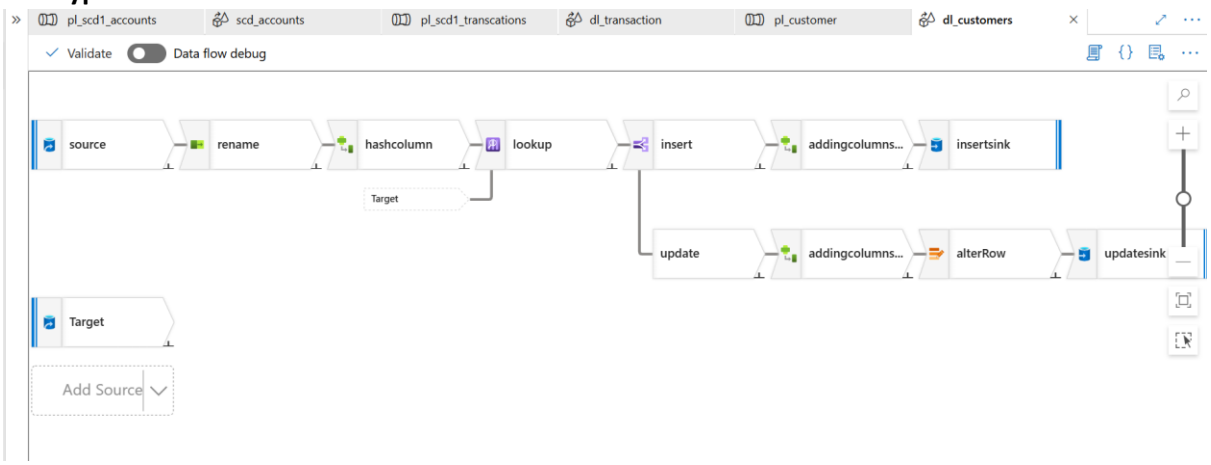
- Adds update conditions:
    - Sets rows to **update if 1==1** (always true) as condition has already been logically filtered in the Conditional Split.

**9. Sink Transformation**

- Final data write operation:
    - **Insert Path Sink** writes new records to the Azure SQL Accounts table.

- **Update Path Sink** updates existing records based on the Alter Row configuration.

- **SCD type 1 on Customers table.**




**1. Source Transformation**

- Data is ingested from the **Silver Layer**.
- Acts as the initial source for the pipeline.

**2. Select Transformation**

- Used to **rename columns** as per the desired naming convention or schema requirements.

**3. Derived Column Transformation (Hash Column)**

- A new column is added using the **crc32 hash function**.
- The hash column helps in identifying data changes for comparison and update logic.

**4. Target Setup – Azure SQL Database**

- A **Customer table** is created in the target SQL database.
- The table includes all columns from the source data, plus additional metadata columns (created_by, created_date, updated_by, updated_date).

**5. Lookup Transformation**

- Performs a **Left Join** between the **source data** and the **target SQL table**.
- Used to check if a record already exists in the target.

**6. Conditional Split Transformation**

- Segregates records into **Insert** and **Update** branches:
    - **Insert**: Records not found in the target.
    - **Update**: Records found with differences (based on hash comparison or existing logic).

**7. Derived Column Transformation (Metadata Columns)**

- **Insert Path:**
    - Adds values to created_by, created_date, updated_by, and updated_date.
- **Update Path:**
    - Updates only the updated_by and updated_date fields.

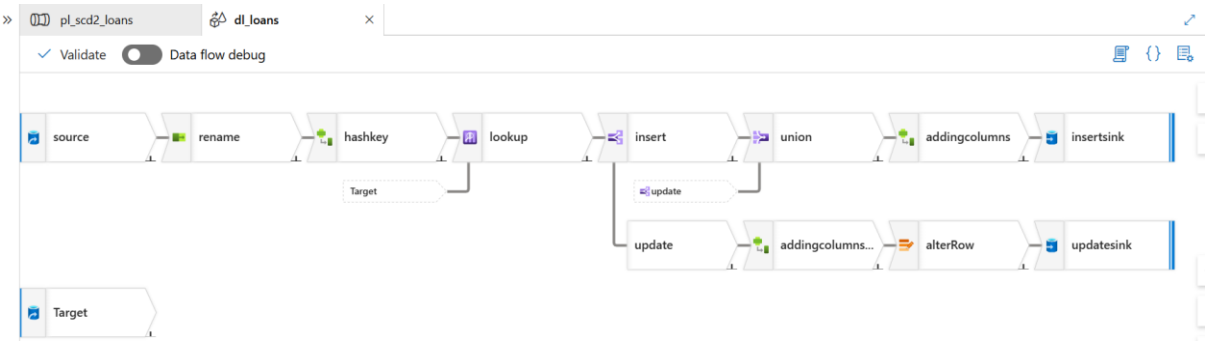
**8. Alter Row Transformation (for Update Path)**

- Adds update conditions:
    - Sets rows to **update if 1==1** (always true) as condition has already been logically filtered in the Conditional Split.

**9. Sink Transformation**

- Final data write operation:
    - **Insert Path Sink** writes new records to the Azure SQL Accounts table.
    - **Update Path Sink** updates existing records based on the Alter Row configuration.

- SCD type 2 on Loans File




**1. Source Transformation**

- **Source Layer:** Silver Layer (Azure Data Lake or similar).
- **Action:** Ingest source data into the data flow pipeline.

---

**2. Select Transformation**

- **Purpose:** Rename columns from the source as needed.
- **Action:** Standardize column names to align with the target schema.

---

**3. Derived Column Transformation (Hash Column)**

- **Purpose:** Add a new column to help with change detection.
- **Action:**

- Add a **hash column** using the crc32() hash function.
- This will act as a unique fingerprint for each record.

---

**4. Target Configuration**

- **Target:** Azure SQL Database.
- **Table:** accounts (contains all columns from the source).
- **Purpose:** Compare incoming records with existing ones.

---

**5. Lookup Transformation**

- **Join Type:** Left Join.
- **Purpose:** Compare source records with the target table (loans) based on business key(s).
- **Output:** Helps identify whether a record is new or has changed.

---

**6. Conditional Split Transformation**

- **Purpose:** Classify records into:
  - **Insert:** New records not found in the target.
  - **Update:** Records with changed hash value.

---

**7. Update Path**

**a. Derived Column Transformation (for Update)**

- **Add Columns:**
  - updated_by
  - updated_date
  - isActive (set to **0**, marking the old record as inactive).

**b. Alter Row Transformation**

- **Action:** Use UpsertIf(1==1) to handle updates.

**c. Sink Transformation**

- **Target Table:** loans (Azure SQL Database).
- **Action:** Load the updated records.

---

**8. Insert Path**

**a. Union Transformation**

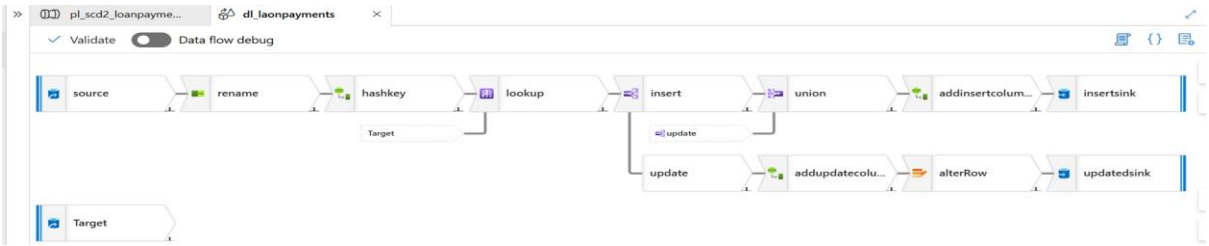
- **Action:** Combine outputs of:
    - Split@Insert
    - Split@Update
      (We do this because updated records will be inserted as new rows with updated values.)

**b. Derived Column Transformation (for Insert)**

- **Add Columns:**
    - created_by
    - created_date
    - updated_by
    - updated_date
    - isActive (set to **1** for active records)

**c. Sink Transformation**

- **Target Table:** loans (Azure SQL Database).
- **Action:** Load all new/inserted records.
- SCD Type for loans_payment file.




**1. Source Transformation**

- **Source Layer:** Silver Layer (Azure Data Lake or similar).
- **Action:** Ingest source data into the data flow pipeline.

---

**2. Select Transformation**

- **Purpose:** Rename columns from the source as needed.
- **Action:** Standardize column names to align with the target schema.

---

**3. Derived Column Transformation (Hash Column)**

- **Purpose:** Add a new column to help with change detection.

- **Action:**
    - Add a **hash column** using the crc32() hash function.
    - This will act as a unique fingerprint for each record.

---

**4. Target Configuration**

- **Target:** Azure SQL Database.
- **Table:** accounts (contains all columns from the source).
- **Purpose:** Compare incoming records with existing ones.

---

**5. Lookup Transformation**

- **Join Type:** Left Join.
- **Purpose:** Compare source records with the target table (loans_payment) based on business key(s).
- **Output:** Helps identify whether a record is new or has changed.

---

**6. Conditional Split Transformation**

- **Purpose:** Classify records into:
    - **Insert:** New records not found in the target.
    - **Update:** Records with changed hash value.

---

**7. Update Path**

**a. Derived Column Transformation (for Update)**

- **Add Columns:**
    - updated_by
    - updated_date
    - isActive (set to **0**, marking the old record as inactive).

**b. Alter Row Transformation**

- **Action:** Use UpsertIf(1==1) to handle updates.

**c. Sink Transformation**

- **Target Table:** loans_payment (Azure SQL Database).
- **Action:** Load the updated records.

**8. Insert Path**

**a. Union Transformation**

- **Action:** Combine outputs of:
    - Split@Insert
    - Split@Update
      (We do this because updated records will be inserted as new rows with updated values.)

**b. Derived Column Transformation (for Insert)**

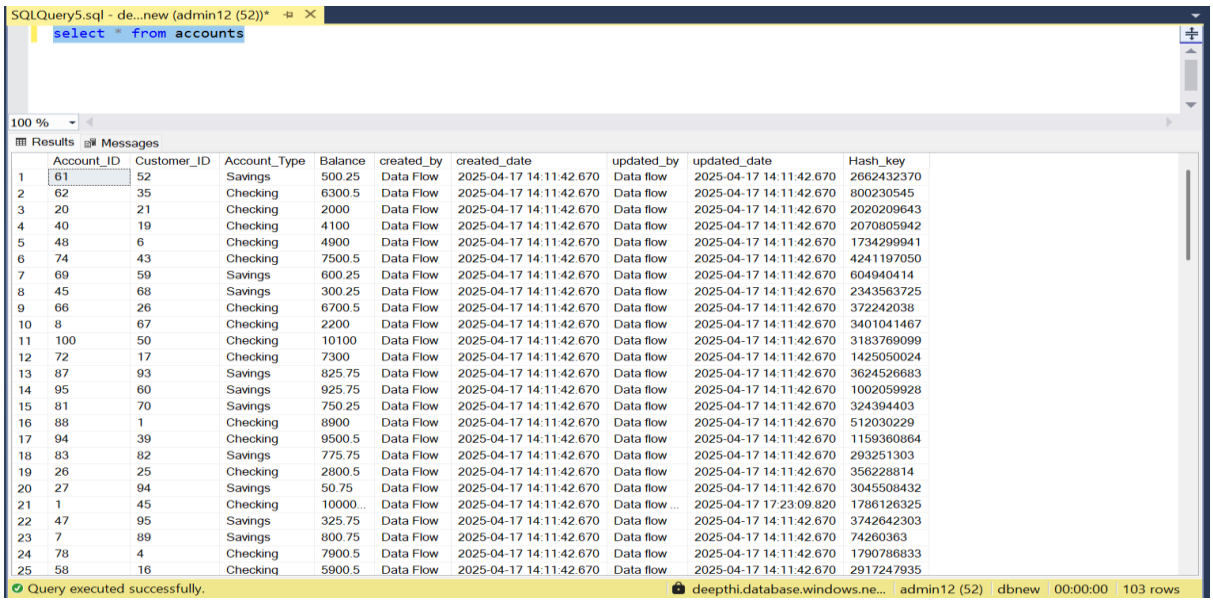
- **Add Columns:**
    - created_by
    - created_date
    - updated_by
    - updated_date
    - isActive (set to **1** for active records)

**c. Sink Transformation**

- **Target Table:** loans (Azure SQL Database).
- **Action:** Load all new/inserted records.

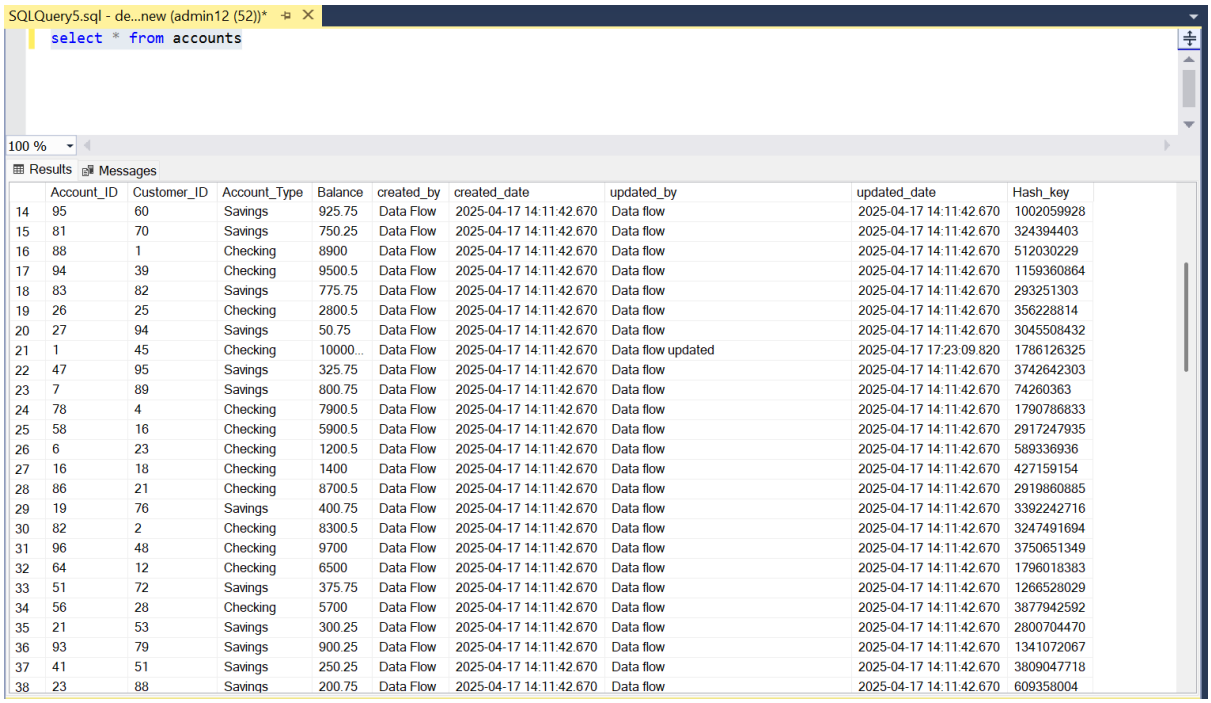
Tables output:

Accounts table output before update



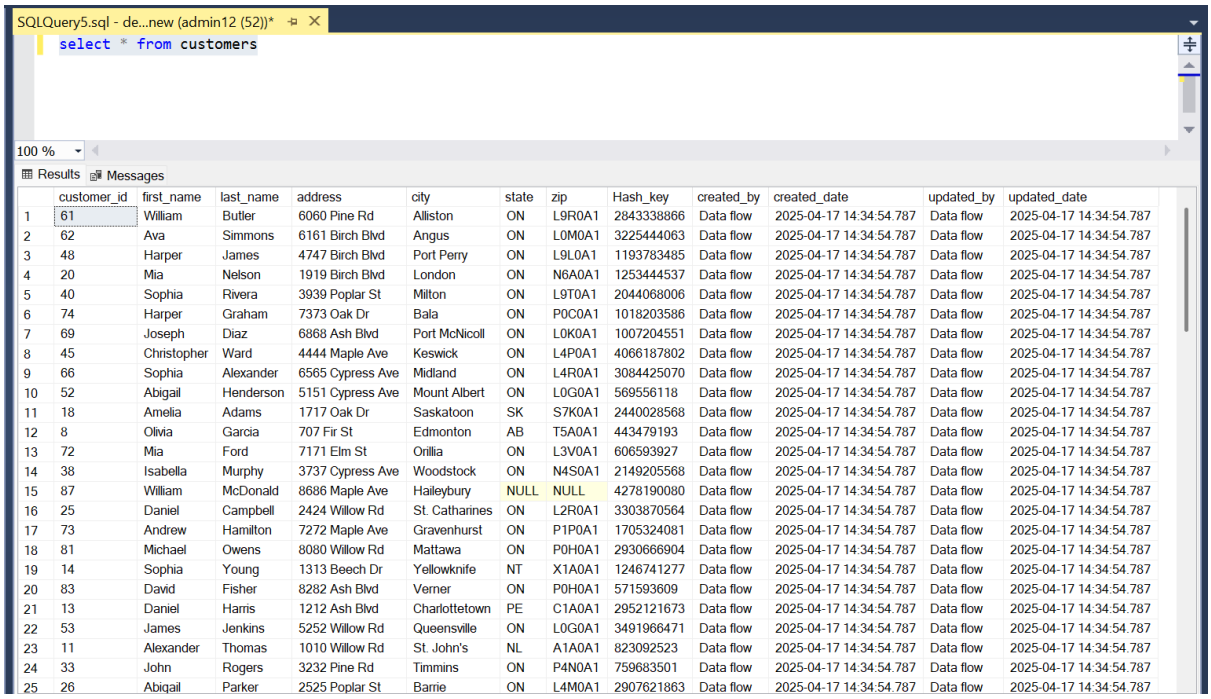

| | Account_ID | Customer_ID | Account_Type | Balance | created_by | created_date | updated_by | updated_date | Hash_key |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 61 | 52 | Savings | 500.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2662432370 |
| 2 | 62 | 35 | Checking | 6300.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 800230545 |
| 3 | 20 | 21 | Checking | 2000 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2020209643 |
| 4 | 40 | 19 | Checking | 4100 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2070805942 |
| 5 | 48 | 6 | Checking | 4900 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1734299941 |
| 6 | 74 | 43 | Checking | 7500.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 4241197050 |
| 7 | 69 | 59 | Savings | 600.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 604940414 |
| 8 | 45 | 68 | Savings | 300.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2343563725 |
| 9 | 66 | 26 | Checking | 6700.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 372242038 |
| 10 | 8 | 67 | Checking | 2200 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3401041467 |
| 11 | 100 | 50 | Checking | 10100 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3183769099 |
| 12 | 72 | 17 | Checking | 7300 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1425050024 |
| 13 | 87 | 93 | Savings | 825.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3624526683 |
| 14 | 95 | 60 | Savings | 925.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1002059928 |
| 15 | 81 | 70 | Savings | 750.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 324394403 |
| 16 | 88 | 1 | Checking | 8900 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 512030229 |
| 17 | 94 | 39 | Checking | 9500.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1159360864 |
| 18 | 83 | 82 | Savings | 775.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 293251303 |
| 19 | 26 | 25 | Checking | 2800.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 356228814 |
| 20 | 27 | 94 | Savings | 50.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3045508432 |
| 21 | 1 | 45 | Checking | 10000... | Data Flow | 2025-04-17 14:11:42.670 | Data flow ... | 2025-04-17 17:23:09.820 | 1786126325 |
| 22 | 47 | 95 | Savings | 325.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3742642303 |
| 23 | 7 | 89 | Savings | 800.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 74260363 |
| 24 | 78 | 4 | Checking | 7900.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1790786833 |
| 25 | 58 | 16 | Checking | 5900.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2917247935 |

Accounts output after update




| | Account_ID | Customer_ID | Account_Type | Balance | created_by | created_date | updated_by | updated_date | Hash_key |
|---|---|---|---|---|---|---|---|---|---|
| 14 | 95 | 60 | Savings | 925.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1002059928 |
| 15 | 81 | 70 | Savings | 750.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 324394403 |
| 16 | 88 | 1 | Checking | 8900 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 512030229 |
| 17 | 94 | 39 | Checking | 9500.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1159360864 |
| 18 | 83 | 82 | Savings | 775.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 293251303 |
| 19 | 26 | 25 | Checking | 2800.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 356228814 |
| 20 | 27 | 94 | Savings | 50.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3045508432 |
| 21 | 1 | 45 | Checking | 10000... | Data Flow | 2025-04-17 14:11:42.670 | Data flow updated | 2025-04-17 17:23:09.820 | 1786126325 |
| 22 | 47 | 95 | Savings | 325.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3742642303 |
| 23 | 7 | 89 | Savings | 800.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 74260363 |
| 24 | 78 | 4 | Checking | 7900.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1790786833 |
| 25 | 58 | 16 | Checking | 5900.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2917247935 |
| 26 | 6 | 23 | Checking | 1200.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 589336936 |
| 27 | 16 | 18 | Checking | 1400 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 427159154 |
| 28 | 86 | 21 | Checking | 8700.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2919860885 |
| 29 | 19 | 76 | Savings | 400.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3392242716 |
| 30 | 82 | 2 | Checking | 8300.5 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3247491694 |
| 31 | 96 | 48 | Checking | 9700 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3750651349 |
| 32 | 64 | 12 | Checking | 6500 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1796018383 |
| 33 | 51 | 72 | Savings | 375.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1266528029 |
| 34 | 56 | 28 | Checking | 5700 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3877942592 |
| 35 | 21 | 53 | Savings | 300.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 2800704470 |
| 36 | 93 | 79 | Savings | 900.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 1341072067 |
| 37 | 41 | 51 | Savings | 250.25 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 3809047718 |
| 38 | 23 | 88 | Savings | 200.75 | Data Flow | 2025-04-17 14:11:42.670 | Data flow | 2025-04-17 14:11:42.670 | 609358004 |

Customers Output before update




| | customer_id | first_name | last_name | address | city | state | zip | Hash_key | created_by | created_date | updated_by | updated_date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 61 | William | Butler | 6060 Pine Rd | Alliston | ON | L9R0A1 | 2843338866 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 2 | 62 | Ava | Simmons | 6161 Birch Blvd | Angus | ON | L0M0A1 | 3225444063 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 3 | 48 | Harper | James | 4747 Birch Blvd | Port Perry | ON | L9L0A1 | 1193783485 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 4 | 20 | Mia | Nelson | 1919 Birch Blvd | London | ON | N6A0A1 | 1253444537 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 5 | 40 | Sophia | Rivera | 3939 Poplar St | Milton | ON | L9T0A1 | 2044068006 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 6 | 74 | Harper | Graham | 7373 Oak Dr | Bala | ON | P0C0A1 | 1018203586 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 7 | 69 | Joseph | Diaz | 6868 Ash Blvd | Port McNicoll | ON | L0K0A1 | 1007204551 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 8 | 45 | Christopher | Ward | 4444 Maple Ave | Keswick | ON | L4P0A1 | 4066187802 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 9 | 66 | Sophia | Alexander | 6565 Cypress Ave | Midland | ON | L4R0A1 | 3084425070 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 10 | 52 | Abigail | Henderson | 5151 Cypress Ave | Mount Albert | ON | L0G0A1 | 569556118 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 11 | 18 | Amelia | Adams | 1717 Oak Dr | Saskatoon | SK | S7K0A1 | 2440028568 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 12 | 8 | Olivia | Garcia | 707 Fir St | Edmonton | AB | T5A0A1 | 443479193 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 13 | 72 | Mia | Ford | 7171 Elm St | Orillia | ON | L3V0A1 | 606593927 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 14 | 38 | Isabella | Murphy | 3737 Cypress Ave | Woodstock | ON | N4S0A1 | 2149205568 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 15 | 87 | William | McDonald | 8686 Maple Ave | Haileybury | NULL | NULL | 4278190080 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 16 | 25 | Daniel | Campbell | 2424 Willow Rd | St. Catharines | ON | L2R0A1 | 3303870564 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 17 | 73 | Andrew | Hamilton | 7272 Maple Ave | Gravenhurst | ON | P1P0A1 | 1705324081 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 18 | 81 | Michael | Owens | 8080 Willow Rd | Mattawa | ON | P0H0A1 | 2930666904 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 19 | 14 | Sophia | Young | 1313 Beech Dr | Yellowknife | NT | X1A0A1 | 1246741277 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 20 | 83 | David | Fisher | 8282 Ash Blvd | Verner | ON | P0H0A1 | 571593609 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 21 | 13 | Daniel | Harris | 1212 Ash Blvd | Charlottetown | PE | C1A0A1 | 2952121673 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 22 | 53 | James | Jenkins | 5252 Willow Rd | Queensville | ON | L0G0A1 | 3491966471 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 23 | 11 | Alexander | Thomas | 1010 Willow Rd | St. John's | NL | A1A0A1 | 823092523 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 24 | 33 | John | Rogers | 3232 Pine Rd | Timmins | ON | P4N0A1 | 759683501 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |
| 25 | 26 | Abigail | Parker | 2525 Poplar St | Barrie | ON | L4M0A1 | 2907621863 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-04-17 14:34:54.787 |

After update

SQLQuery5.sql - de...new (admin12 (52))*

```
select * from customers
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100 %

Results Messages

| | customer_id | first_name | last_name | address | city | state | zip | Hash_key | created_by | created_date | updated_by | update |
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| 24 | 33 | John | Rogers | 3232 Pine Rd | Timmins | ON | P4N0A1 | 759683501 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 25 | 26 | Abigail | Parker | 2525 Poplar St | Barrie | ON | L4M0A1 | 2907621863 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 26 | 27 | James | Evans | 2626 Ash Blvd | Guelph | ON | N1H0A1 | 2772220524 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 27 | 1 | John | Doe | 365 Douglas Str... | Sudbury | On | M4B1... | 849929893 | Data flow | 2025-04-17 14:34:54.787 | Data flow updated | 2025-( |
| 28 | 68 | Charlotte | Griffin | 6767 Poplar St | Victoria Har... | ON | L0K0A1 | 3360600281 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 29 | 71 | Christopher | Myers | 7070 Cedar Ln | Coldwater | ON | L0K0A1 | 2774108813 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 30 | 54 | Emily | Perry | 5353 Poplar St | Sharon | ON | L0G0A1 | 438595883 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 31 | 7 | James | Martinez | 606 Spruce Ln | Winnipeg | MB | R3C0A1 | 4278935663 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 32 | 42 | Charlotte | Richards... | 4141 Beech Dr | Newmarket | ON | L3Y0A1 | 2954704707 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 33 | 65 | Daniel | Bryant | 6464 Redwood Dr | Elmvale | ON | L0L0A1 | 2240443872 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 34 | 6 | Emma | Clark | 505 Cedar St | Halifax | NS | B3H0A1 | 4268191859 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 35 | 16 | Charlotte | Scott | 1515 Elm St | Iqaluit | NU | X0A0A1 | 3041710806 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 36 | 86 | Olivia | Gibson | 8585 Elm St | New Liskeard | ON | P0J0A1 | 3211827869 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 37 | 37 | Alexander | Bell | 3636 Redwood Dr | Stratford | ON | N5A0A1 | 2227707500 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 38 | 70 | Amelia | Hayes | 6969 Beech Dr | Waubaushe... | ON | L0K0A1 | 3394946189 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 39 | 3 | Michael | Johnson | 24 lormal gate | Bramptopn | ON | L1K0B9 | 3078958275 | Data flow | 2025-04-17 14:34:54.787 | Data flow updated | 2025-( |
| 40 | 15 | Matthew | King | 1414 Cedar Ln | Whitehorse | YT | Y1A0A1 | 2616855931 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 41 | 43 | Joseph | Cox | 4242 Cedar Ln | Aurora | ON | L4G0A1 | 1577555620 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 42 | 10 | Ava | Anderson | 909 Cypress Ave | Quebec City | QC | G1A0... | 980781681 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 43 | 77 | Daniel | Woods | 7676 Spruce Ln | Burks Falls | ON | P0A0A1 | 982036174 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 44 | 85 | John | Harrison | 8484 Cedar Ln | Temagami | ON | P0H0A1 | 1599281831 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 45 | 47 | Andrew | Gray | 4646 Pine Rd | Uxbridge | ON | L9P0A1 | 2520758040 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 46 | 78 | Abigail | Cole | 7777 Fir St | Sundridge | ON | P0A0A1 | 3332988847 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |
| 47 | 58 | Sophia | Hughes | 5757 Elm St | Nobleton | ON | L0G0A1 | 738663141 | Data flow | 2025-04-17 14:34:54.787 | Data flow | 2025-( |

Transaction output before update

SQLQuery5.sql - de...new (admin12 (52))*

```
select * from transcations
```

100 %

Results Messages

| | transaction_id | account_id | transaction_date | transaction_amount | transaction_type | hash_key | created_by | created_date | updated_by | updated_date |
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| 1 | 61 | 52 | 2024-03-01 | 100.5 | Deposit | 2246730977 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 2 | 62 | 35 | 2024-03-02 | 200.75 | Withdrawal | 332076340 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 3 | 20 | 21 | 2024-01-20 | 375.25 | Withdrawal | 1996273466 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 4 | 40 | 19 | 2024-02-09 | 375.25 | Withdrawal | 4096364083 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 5 | 48 | 6 | 2024-02-17 | 275.75 | Withdrawal | 1280373336 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 6 | 74 | 43 | 2024-03-14 | 300.25 | Withdrawal | 2016898905 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 7 | 66 | 26 | 2024-03-06 | 175 | Withdrawal | 1913875452 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 8 | 19 | 76 | 2024-01-19 | 325 | Deposit | 4067890410 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 9 | 82 | 2 | 2024-03-22 | 200.75 | Withdrawal | 3196733283 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 10 | 96 | 48 | 2024-04-05 | 175 | Withdrawal | 2616276368 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 11 | 12 | 81 | 2024-01-12 | 200.75 | Withdrawal | 3980785899 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 12 | 21 | 53 | 2024-01-21 | 100.5 | Deposit | 1388575013 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 13 | 41 | 51 | 2024-02-10 | 100.5 | Deposit | 146063313 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 14 | 34 | 41 | 2024-02-03 | 300.25 | Withdrawal | 4262142999 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 15 | 97 | 90 | 2024-04-06 | 225.5 | Deposit | 2081911181 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 16 | 89 | 54 | 2024-03-29 | 325 | Deposit | 2402255007 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 17 | 80 | 30 | 2024-03-20 | 375.25 | Withdrawal | 2478637051 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 18 | 69 | 59 | 2024-03-09 | 325 | Deposit | 2669722718 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 19 | 45 | 68 | 2024-02-14 | 250 | Deposit | 3192778672 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 20 | 91 | 77 | 2024-03-31 | 100.5 | Deposit | 913674472 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 21 | 52 | 10 | 2024-02-21 | 200.75 | Withdrawal | 1759883603 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 22 | 18 | 5 | 2024-01-18 | 275.75 | Withdrawal | 2726697585 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 23 | 8 | 67 | 2024-01-08 | 275.75 | Withdrawal | 1426350130 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 24 | 100 | 50 | 2024-04-09 | 375.25 | Withdrawal | 2772979164 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |
| 25 | 72 | 17 | 2024-03-12 | 200.75 | Withdrawal | 512396389 | Data flow | 2025-04-17 16:02:37.493 | Data flow | 2025-04-17 16:02:37.493 |

After update

SQLQuery5.sql - de...new (admin12 (52))*

```
select * from transcations
```

100 %

Results | Messages

| | transaction_id | account_id | transaction_date | transaction_amount | transaction_type | hash_key | created_by | created_date | updated_by |
|---|---|---|---|---|---|---|---|---|---|
| 81 | 90 | 38 | 2024-03-30 | 375.25 | Withdrawal | 2181856408 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 82 | 28 | 7 | 2024-01-28 | 275.75 | Withdrawal | 806394621 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 83 | 36 | 27 | 2024-02-05 | 175 | Withdrawal | 1598898740 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 84 | 24 | 11 | 2024-01-24 | 300.25 | Withdrawal | 1340511348 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 85 | 5 | 56 | 2024-01-05 | 250 | Deposit | 725694063 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 86 | 2 | 12 | 2025-01-15 | 250 | Deposit | 3332805669 | Data flow | 2025-04-17 16:02:37.493 | Data flow updated |
| 87 | 79 | 55 | 2024-03-19 | 325 | Deposit | 3856079114 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 88 | 76 | 22 | 2024-03-16 | 175 | Withdrawal | 3156668229 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 89 | 9 | 14 | 2024-01-09 | 325 | Deposit | 3060435398 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 90 | 17 | 99 | 2024-01-17 | 225.5 | Deposit | 2285113382 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 91 | 57 | 97 | 2024-02-26 | 225.5 | Deposit | 3354197768 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 92 | 23 | 88 | 2024-01-23 | 150 | Deposit | 3611063752 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 93 | 39 | 74 | 2024-02-08 | 325 | Deposit | 1677328493 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 94 | 49 | 57 | 2024-02-18 | 325 | Deposit | 2313711375 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 95 | 63 | 84 | 2024-03-03 | 150 | Deposit | 2609111149 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 96 | 31 | 71 | 2024-01-31 | 100.5 | Deposit | 477929762 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 97 | 50 | 31 | 2024-02-19 | 375.25 | Withdrawal | 3874682730 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 98 | 22 | 37 | 2024-01-22 | 200.75 | Withdrawal | 4031427225 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 99 | 46 | 24 | 2024-02-15 | 175 | Withdrawal | 3638193458 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 100 | 67 | 96 | 2024-03-07 | 225.5 | Deposit | 1012429981 | Data flow | 2025-04-17 16:02:37.493 | Data flow |
| 101 | 567 | 63 | 2025-01-18 | 275.75 | Withdrawal | 3128895001 | Data flow | 2025-04-17 17:20:07.633 | Data flow updated |
| 102 | 123 | 45 | 2025-01-17 | 225.5 | Deposit | 1433409585 | Data flow | 2025-04-17 17:20:07.633 | Data flow updated |
| 103 | 345 | 23 | 2025-01-16 | 175 | Withdrawal | 1102372133 | Data flow | 2025-04-17 17:20:07.633 | Data flow updated |

Loans output before update

SQLQuery5.sql - de...new (admin12 (52))*

```
select * from loans
```

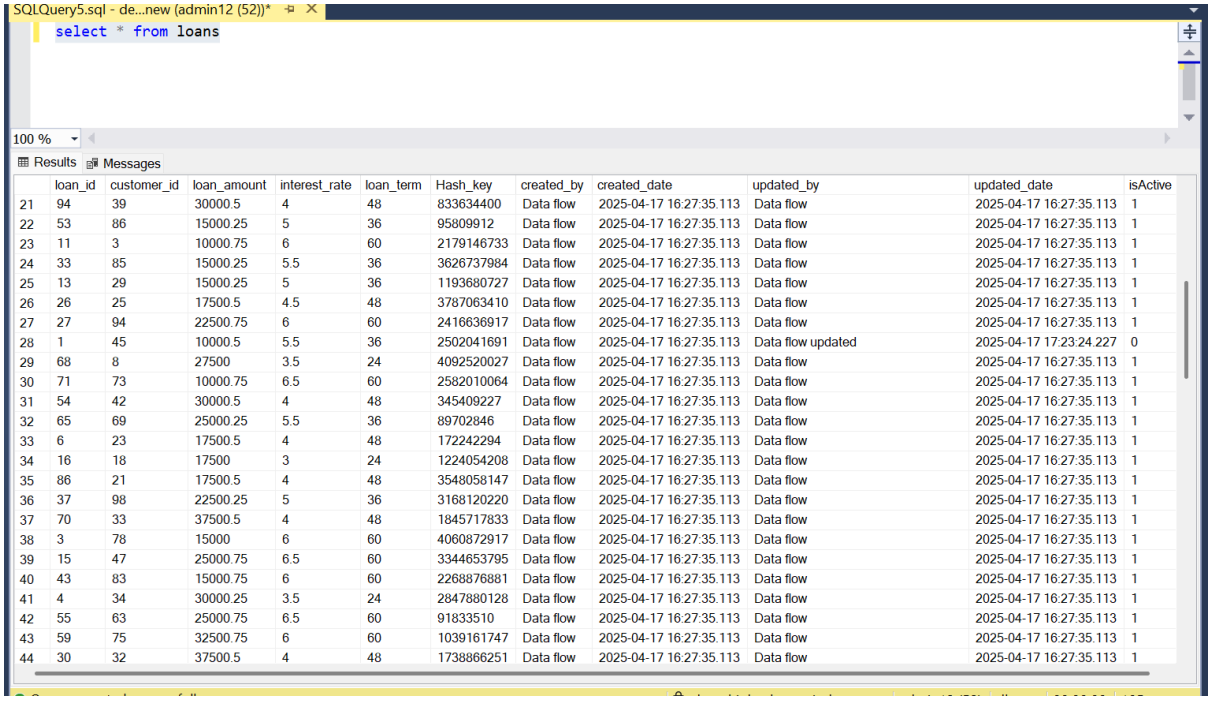
100 %

Results | Messages

| | loan_id | customer_id | loan_amount | interest_rate | loan_term | Hash_key | created_by | created_date | updated_by | updated_date | isActive |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 61 | 52 | 10000.25 | 5 | 36 | 2894988696 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 2 | 62 | 35 | 20000.5 | 4 | 48 | 2629764668 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 3 | 48 | 6 | 27500 | 3 | 24 | 2806356369 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 4 | 20 | 21 | 37500 | 3.5 | 24 | 1388545671 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 5 | 40 | 19 | 37500 | 3 | 24 | 570153790 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 6 | 74 | 43 | 30000.5 | 4.5 | 48 | 1215019206 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 7 | 69 | 59 | 32500.25 | 5 | 36 | 1838491308 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 8 | 45 | 68 | 25000.25 | 5 | 36 | 1252029156 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 9 | 66 | 26 | 17500.5 | 4.5 | 48 | 2285969467 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 10 | 52 | 10 | 20000 | 3.5 | 24 | 4076642709 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 11 | 18 | 5 | 27500.5 | 4.5 | 48 | 2462199601 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 12 | 8 | 67 | 27500 | 3 | 24 | 4106075248 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 13 | 100 | 50 | 37500 | 3.5 | 24 | 4130867853 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 14 | 38 | 15 | 27500.5 | 4 | 48 | 2945825878 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 15 | 87 | 93 | 22500.75 | 6.5 | 60 | 3240117383 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 16 | 95 | 60 | 25000.75 | 6.5 | 60 | 3959425324 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 17 | 98 | 49 | 27500.5 | 4.5 | 48 | 1140069127 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 18 | 81 | 70 | 10000.25 | 5.5 | 36 | 2726906585 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 19 | 14 | 64 | 30000.5 | 4 | 48 | 2167198012 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 20 | 83 | 82 | 15000.75 | 6 | 60 | 2402015606 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 21 | 94 | 39 | 30000.5 | 4 | 48 | 833634400 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 22 | 53 | 86 | 15000.25 | 5 | 36 | 95809912 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 23 | 11 | 3 | 10000.75 | 6 | 60 | 2179146733 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 24 | 33 | 85 | 15000.25 | 5.5 | 36 | 3626737984 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 25 | 13 | 29 | 15000.25 | 5 | 36 | 1193680727 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |

Query executed successfully. | deepthi.database.windows.ne... | admin12 (52) | dbnew | 00:00:00 | 105 rows

After update



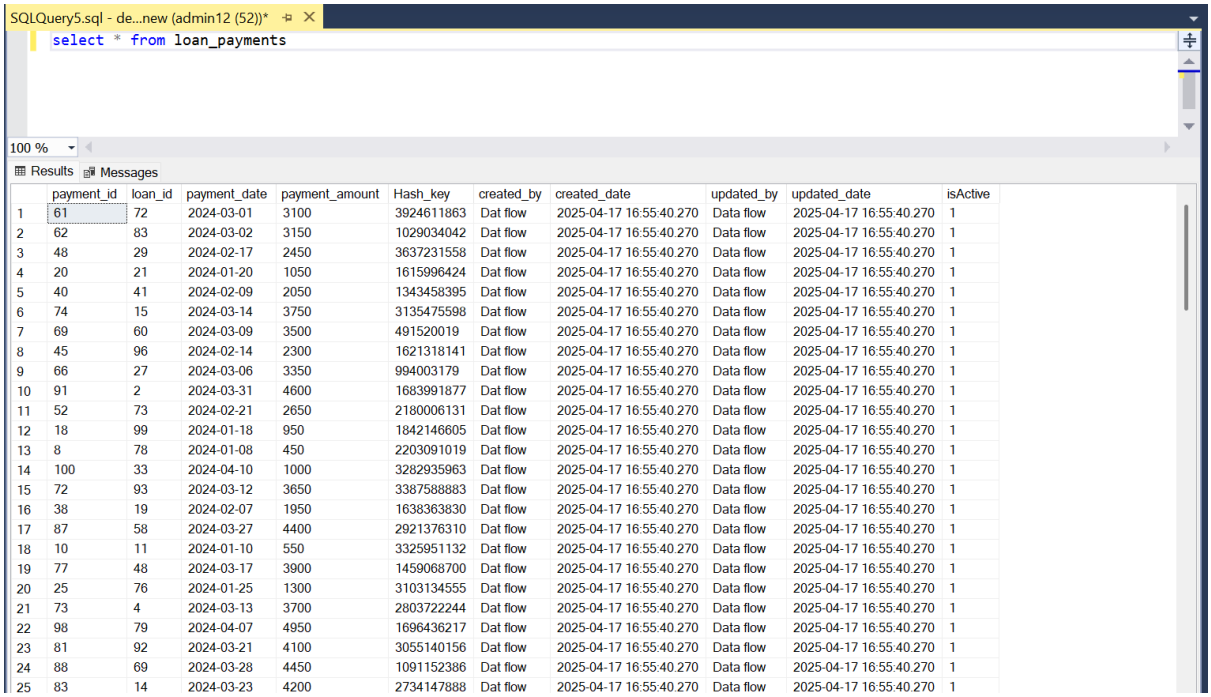
```
select * from loans
```

100 %

Results | Messages

| | loan_id | customer_id | loan_amount | interest_rate | loan_term | Hash_key | created_by | created_date | updated_by | updated_date | isActive |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 21 | 94 | 39 | 30000.5 | 4 | 48 | 833634400 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 22 | 53 | 86 | 15000.25 | 5 | 36 | 95809912 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 23 | 11 | 3 | 10000.75 | 6 | 60 | 2179146733 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 24 | 33 | 85 | 15000.25 | 5.5 | 36 | 3626737984 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 25 | 13 | 29 | 15000.25 | 5 | 36 | 1193680727 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 26 | 26 | 25 | 17500.5 | 4.5 | 48 | 3787063410 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 27 | 27 | 94 | 22500.75 | 6 | 60 | 2416636917 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 28 | 1 | 45 | 10000.5 | 5.5 | 36 | 2502041691 | Data flow | 2025-04-17 16:27:35.113 | Data flow updated | 2025-04-17 17:23:24.227 | 0 |
| 29 | 68 | 8 | 27500 | 3.5 | 24 | 4092520027 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 30 | 71 | 73 | 10000.75 | 6.5 | 60 | 2582010064 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 31 | 54 | 42 | 30000.5 | 4 | 48 | 345409227 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 32 | 65 | 69 | 25000.25 | 5.5 | 36 | 89702846 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 33 | 6 | 23 | 17500.5 | 4 | 48 | 172242294 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 34 | 16 | 18 | 17500 | 3 | 24 | 1224054208 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 35 | 86 | 21 | 17500.5 | 4 | 48 | 3548058147 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 36 | 37 | 98 | 22500.25 | 5 | 36 | 3168120220 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 37 | 70 | 33 | 37500.5 | 4 | 48 | 1845717833 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 38 | 3 | 78 | 15000 | 6 | 60 | 4060872917 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 39 | 15 | 47 | 25000.75 | 6.5 | 60 | 3344653795 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 40 | 43 | 83 | 15000.75 | 6 | 60 | 2268876881 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 41 | 4 | 34 | 30000.25 | 3.5 | 24 | 2847880128 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 42 | 55 | 63 | 25000.75 | 6.5 | 60 | 91833510 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 43 | 59 | 75 | 32500.75 | 6 | 60 | 1039161747 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |
| 44 | 30 | 32 | 37500.5 | 4 | 48 | 1738866251 | Data flow | 2025-04-17 16:27:35.113 | Data flow | 2025-04-17 16:27:35.113 | 1 |

Loans_payment output



```
select * from loan_payments
```

100 %

Results | Messages

| | payment_id | loan_id | payment_date | payment_amount | Hash_key | created_by | created_date | updated_by | updated_date | isActive |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 61 | 72 | 2024-03-01 | 3100 | 3924611863 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 2 | 62 | 83 | 2024-03-02 | 3150 | 1029034042 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 3 | 48 | 29 | 2024-02-17 | 2450 | 3637231558 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 4 | 20 | 21 | 2024-01-20 | 1050 | 1615996424 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 5 | 40 | 41 | 2024-02-09 | 2050 | 1343458395 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 6 | 74 | 15 | 2024-03-14 | 3750 | 3135475598 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 7 | 69 | 60 | 2024-03-09 | 3500 | 491520019 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 8 | 45 | 96 | 2024-02-14 | 2300 | 1621318141 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 9 | 66 | 27 | 2024-03-06 | 3350 | 994003179 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 10 | 91 | 2 | 2024-03-31 | 4600 | 1683991877 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 11 | 52 | 73 | 2024-02-21 | 2650 | 2180006131 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 12 | 18 | 99 | 2024-01-18 | 950 | 1842146605 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 13 | 8 | 78 | 2024-01-08 | 450 | 2203091019 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 14 | 100 | 33 | 2024-04-10 | 1000 | 3282935963 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 15 | 72 | 93 | 2024-03-12 | 3650 | 3387588883 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 16 | 38 | 19 | 2024-02-07 | 1950 | 1638363830 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 17 | 87 | 58 | 2024-03-27 | 4400 | 2921376310 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 18 | 10 | 11 | 2024-01-10 | 550 | 3325951132 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 19 | 77 | 48 | 2024-03-17 | 3900 | 1459068700 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 20 | 25 | 76 | 2024-01-25 | 1300 | 3103134555 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 21 | 73 | 4 | 2024-03-13 | 3700 | 2803722244 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 22 | 98 | 79 | 2024-04-07 | 4950 | 1696436217 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 23 | 81 | 92 | 2024-03-21 | 4100 | 3055140156 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 24 | 88 | 69 | 2024-03-28 | 4450 | 1091152386 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 25 | 83 | 14 | 2024-03-23 | 4200 | 2734147888 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |

After update

SQLQuery5.sql - de...new (admin12 (52))*

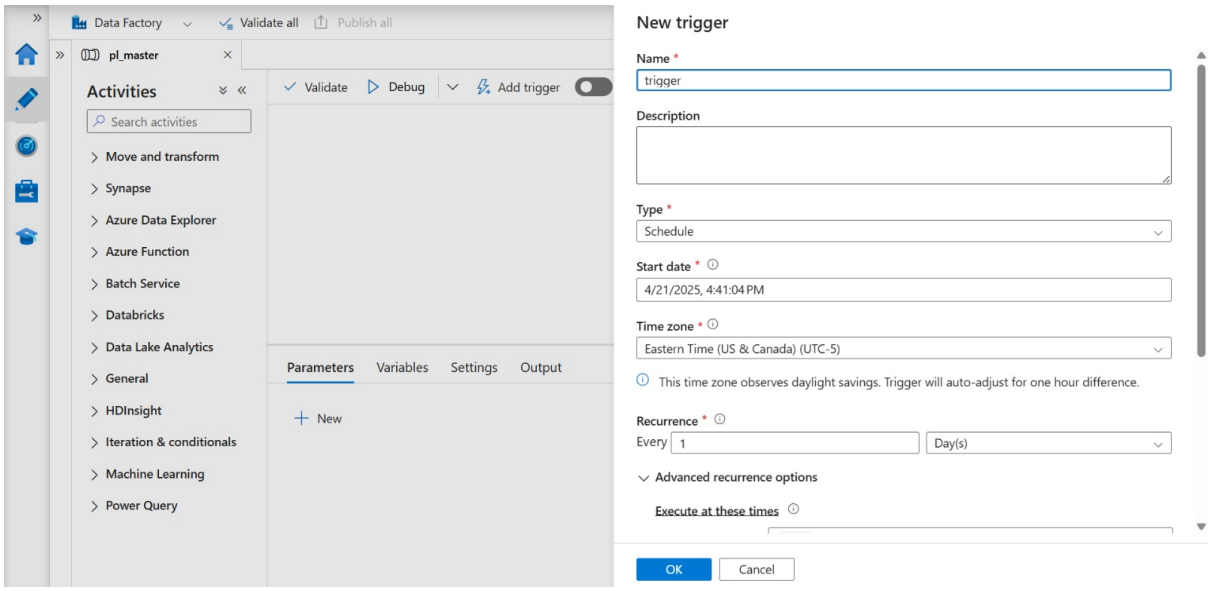
```
select * from loan_payments
```

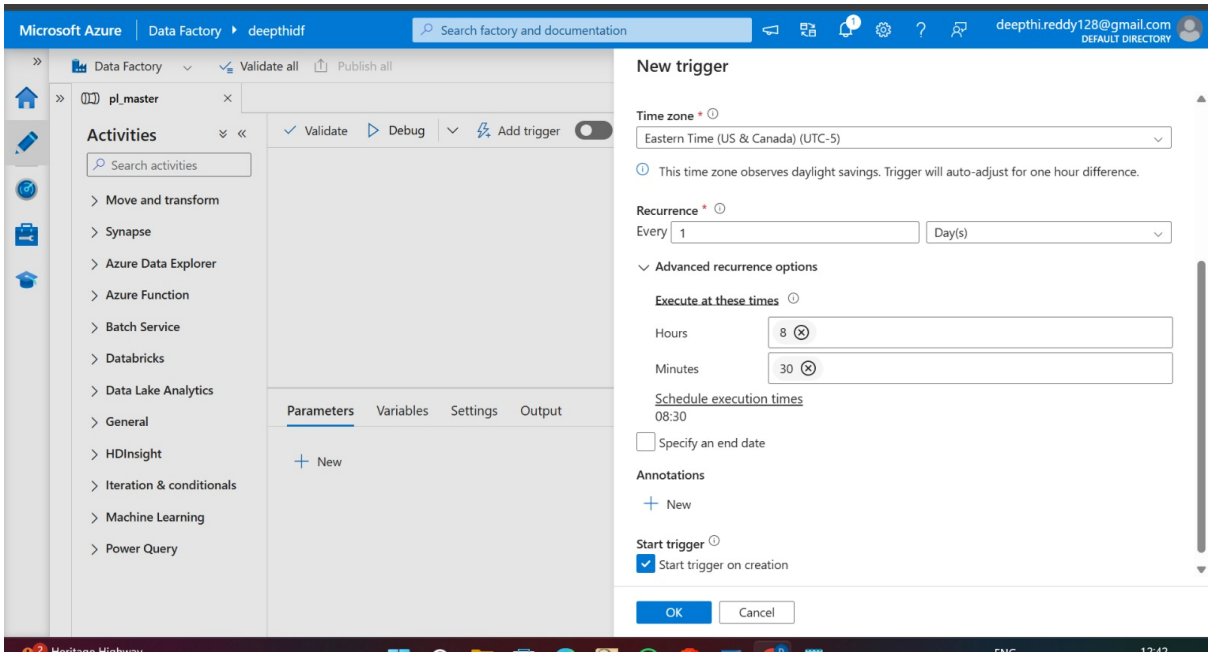
100 %

Results | Messages

| | payment_id | loan_id | payment_date | payment_amount | Hash_key | created_by | created_date | updated_by | updated_date | isActive |
|---|---|---|---|---|---|---|---|---|---|---|
| 27 | 11 | 22 | 2024-01-11 | 600 | 3894410316 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 28 | 33 | 64 | 2024-02-02 | 1700 | 3793101080 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 29 | 13 | 44 | 2024-01-13 | 700 | 1774633368 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 30 | 1 | 45 | 2024-01-01 | 100 | 4189237233 | Dat flow | 2025-04-17 16:55:40.270 | Data flow updated | 2025-04-17 20:34:21.197 | 0 |
| 31 | 47 | 18 | 2024-02-16 | 2400 | 1742587055 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 32 | 42 | 63 | 2024-02-11 | 2150 | 929699495 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 33 | 65 | 16 | 2024-03-05 | 3300 | 4085199564 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 34 | 78 | 59 | 2024-03-18 | 3950 | 3154834603 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 35 | 58 | 39 | 2024-02-27 | 2950 | 618787123 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 36 | 37 | 8 | 2024-02-06 | 1900 | 1399685596 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 37 | 70 | 71 | 2024-03-10 | 3550 | 2691722837 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 38 | 3 | 67 | 2024-01-03 | 200 | 2777852429 | Dat flow | 2025-04-17 16:55:40.270 | Data flow updated | 2025-04-17 20:34:21.197 | 0 |
| 39 | 96 | 57 | 2024-04-05 | 4850 | 527381219 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 40 | 15 | 66 | 2024-01-15 | 800 | 1613741173 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 41 | 43 | 74 | 2024-02-12 | 2200 | 1860095018 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 42 | 4 | 89 | 2024-01-04 | 250 | 264335070 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 43 | 55 | 6 | 2024-02-24 | 2800 | 3826209936 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 44 | 59 | 50 | 2024-02-28 | 3000 | 2601744444 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 45 | 64 | 5 | 2024-03-04 | 3250 | 3762579497 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 46 | 12 | 33 | 2024-01-12 | 650 | 2585655648 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 47 | 92 | 13 | 2024-04-01 | 4650 | 3319289274 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 48 | 21 | 32 | 2024-01-21 | 1100 | 2813434115 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 49 | 35 | 86 | 2024-02-04 | 1800 | 1398475438 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 50 | 44 | 85 | 2024-02-13 | 2250 | 3297825740 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |
| 51 | 93 | 24 | 2024-04-02 | 4700 | 3816339412 | Dat flow | 2025-04-17 16:55:40.270 | Data flow | 2025-04-17 16:55:40.270 | 1 |

Created a trigger to run pipeline at 8:30 every day




Microsoft Azure
Data Factory
deepthidf
Search factory and documentation
deepthi.reddy128@gmail.com
DEFAULT DIRECTORY
Data Factory
Validate all
Publish all
pl_master
Activities
Search activities
Move and transform
Synapse
Azure Data Explorer
Azure Function
Batch Service
Databricks
Data Lake Analytics
General
HDInsight
Iteration & conditionals
Machine Learning
Power Query
Validate
Debug
Add trigger
Parameters
Variables
Settings
Output
New
New trigger
Time zone *
Eastern Time (US & Canada) (UTC-5)
This time zone observes daylight savings. Trigger will auto-adjust for one hour difference.
Recurrence *
Every
1
Day(s)
Advanced recurrence options
Execute at these times
Hours
8
Minutes
30
Schedule execution times
08:30
Specify an end date
Annotations
New
Start trigger
Start trigger on creation
OK
Cancel