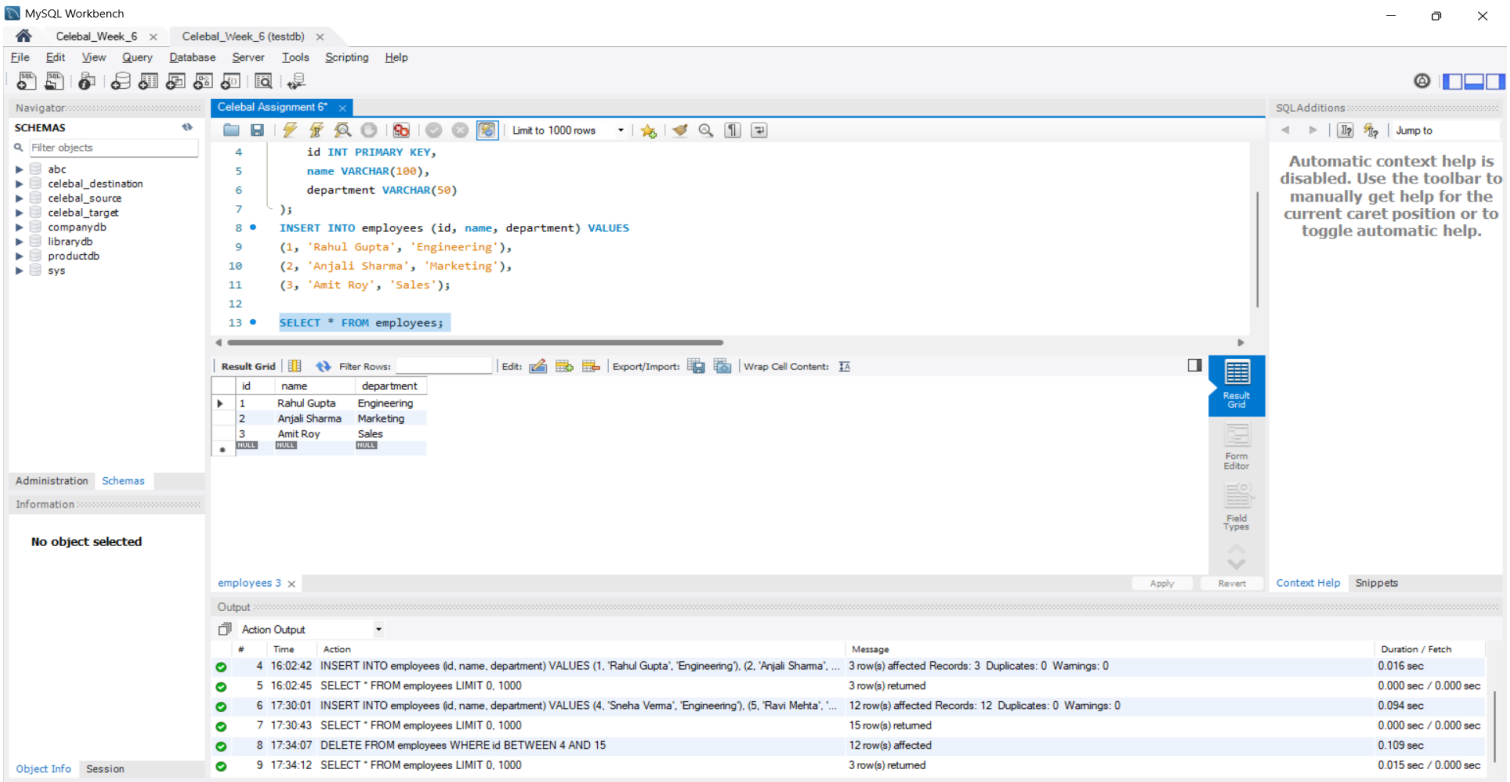
Azure Data Factory Project: Copy Data from Local MySQL to Azure SQL using SHIR

Step 1: Prepare the Local MySQL Source

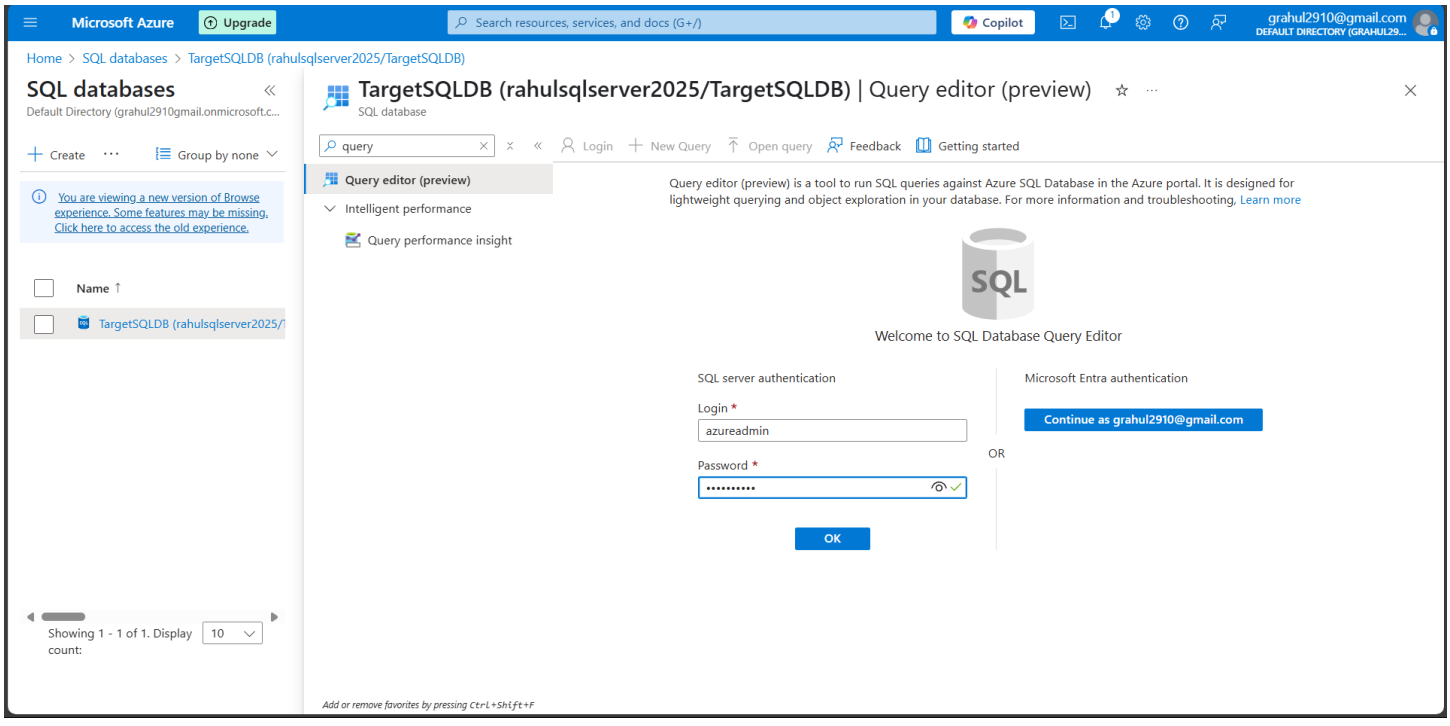
- Created a local MySQL database and table using **MySQL Workbench**.



- Installed **MySQL ODBC Driver** and configured a **System DSN** via **ODBC Data Sources (64-bit)**.

Step 2: Set Up Azure SQL Database (Sink)

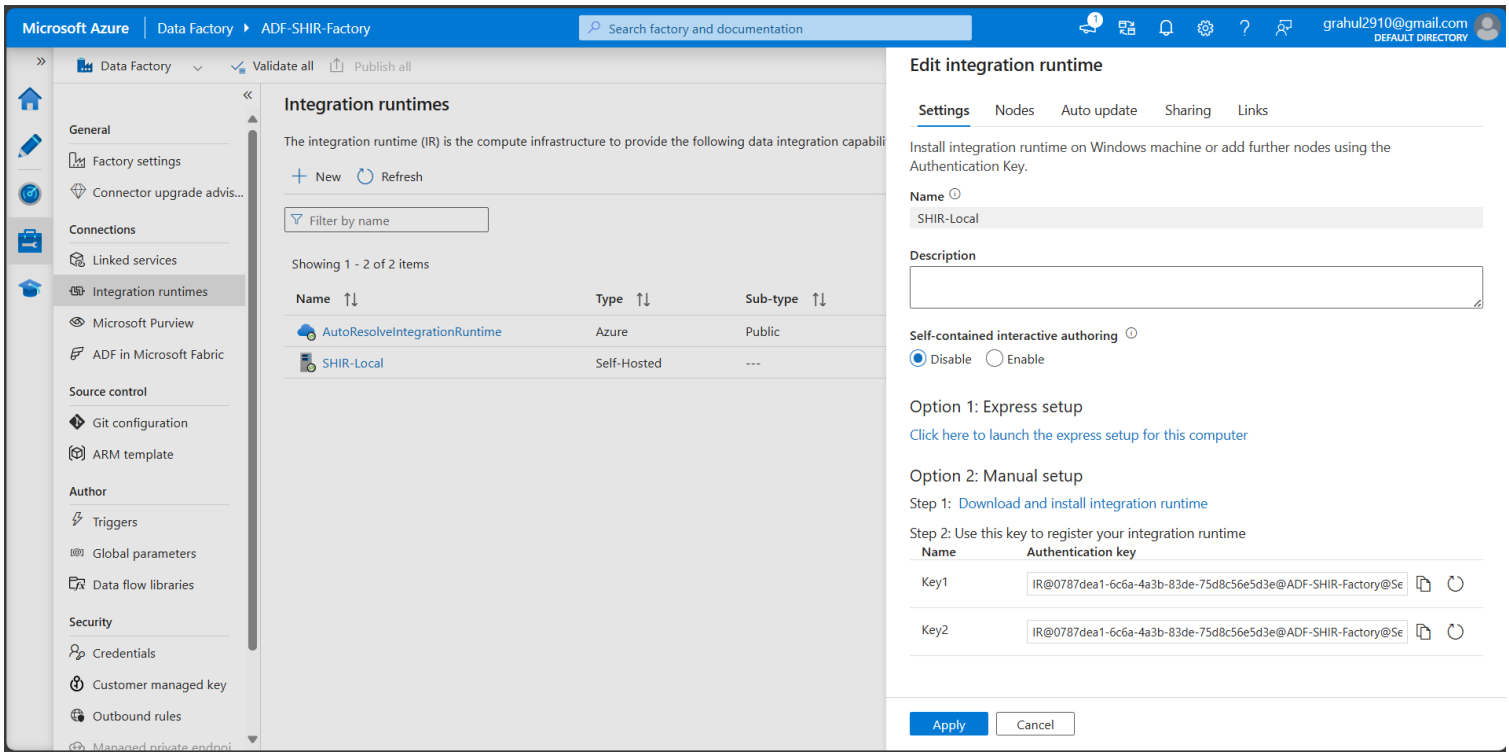
- Created an **Azure SQL Database** and **SQL Server** on Azure Portal.



- Enabled public access and SQL authentication.

Step 3: Configure Azure Data Factory

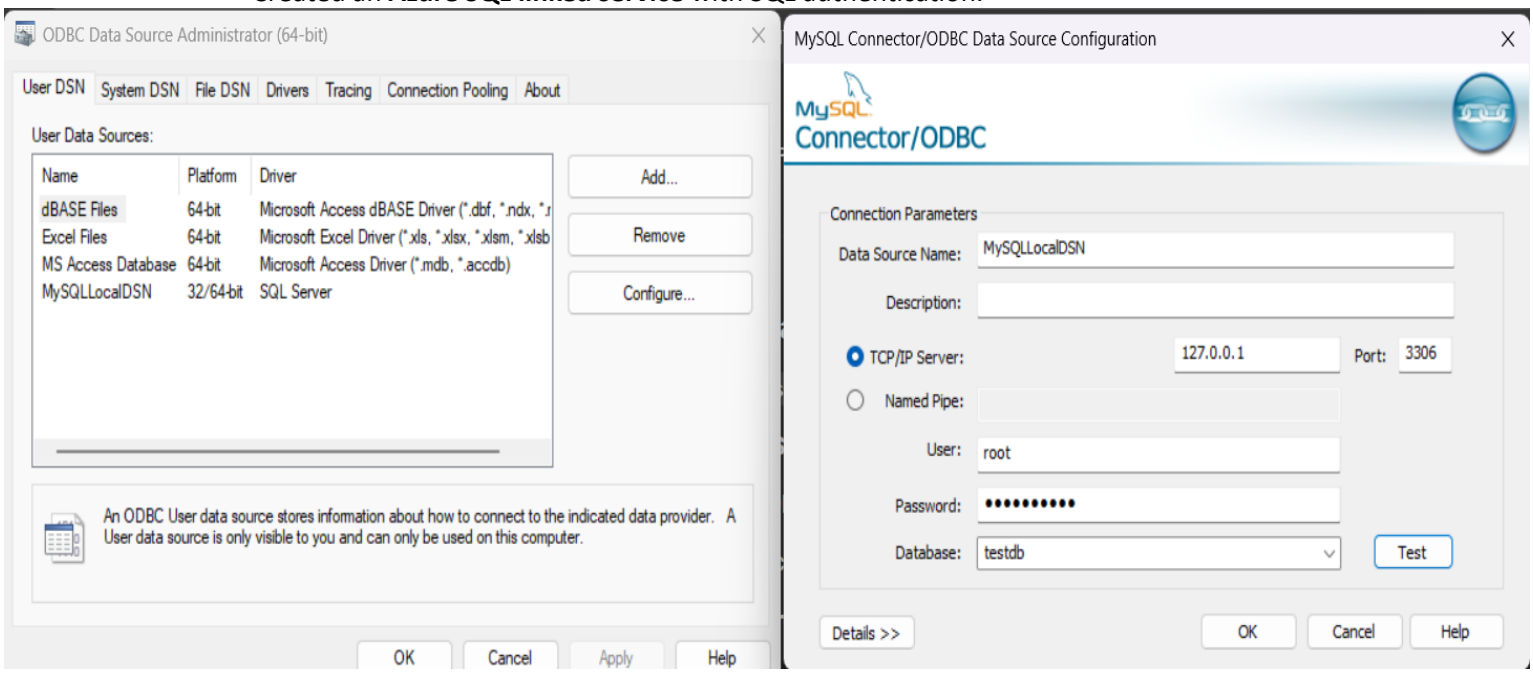
- Created a new **Azure Data Factory** instance.
- Downloaded and installed **Self-hosted Integration Runtime (SHIR)** on the local machine.



- Registered SHIR using the authentication key from ADF.

Step 4: Create Linked Services

- Created an **ODBC linked service** using DSN for MySQL and SHIR.
- Created an **Azure SQL linked service** with SQL authentication.

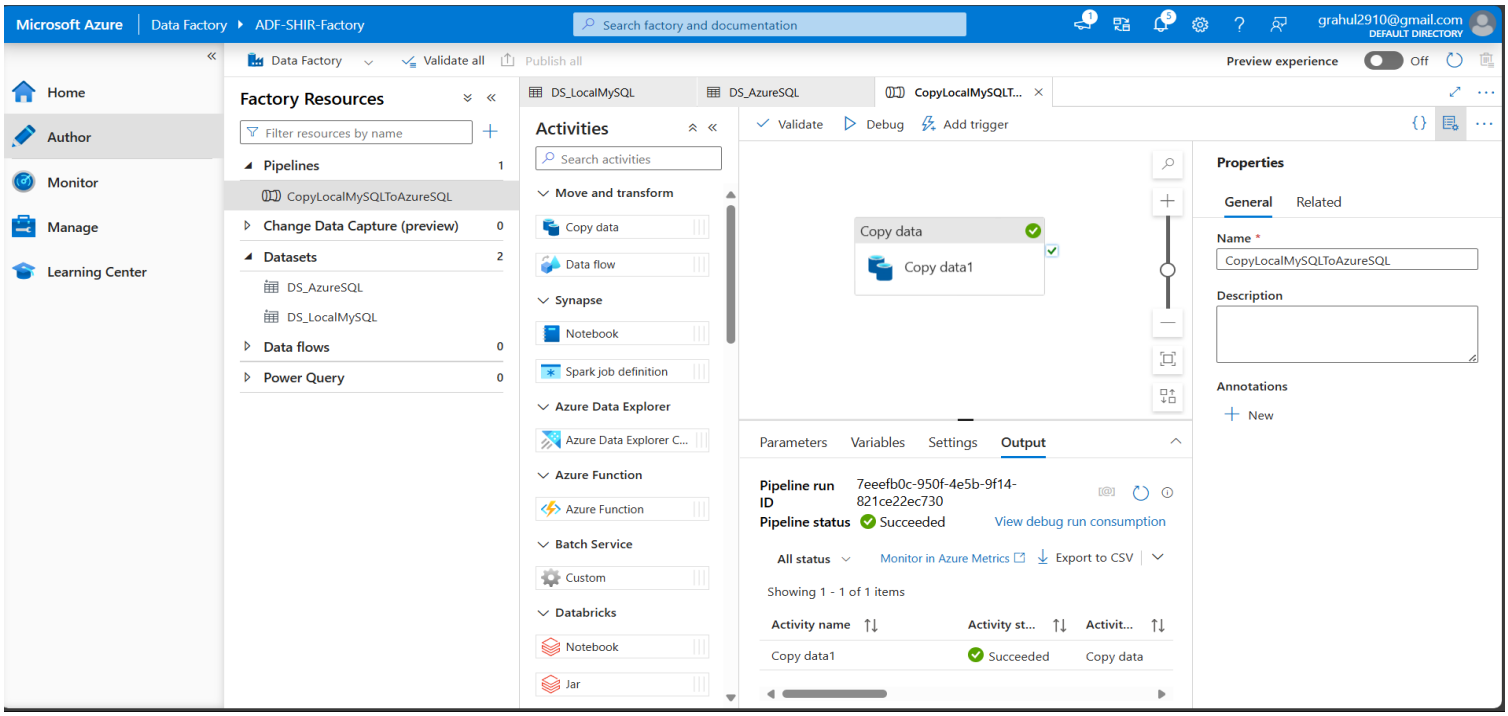


Step 5: Create Datasets

- Created **ODBC dataset** for the source (local MySQL).
- Created **Azure SQL dataset** for the sink (cloud database).
- Manually entered table name and schema in sink dataset (dbo, employees).

Step 6: Build and Run Pipeline

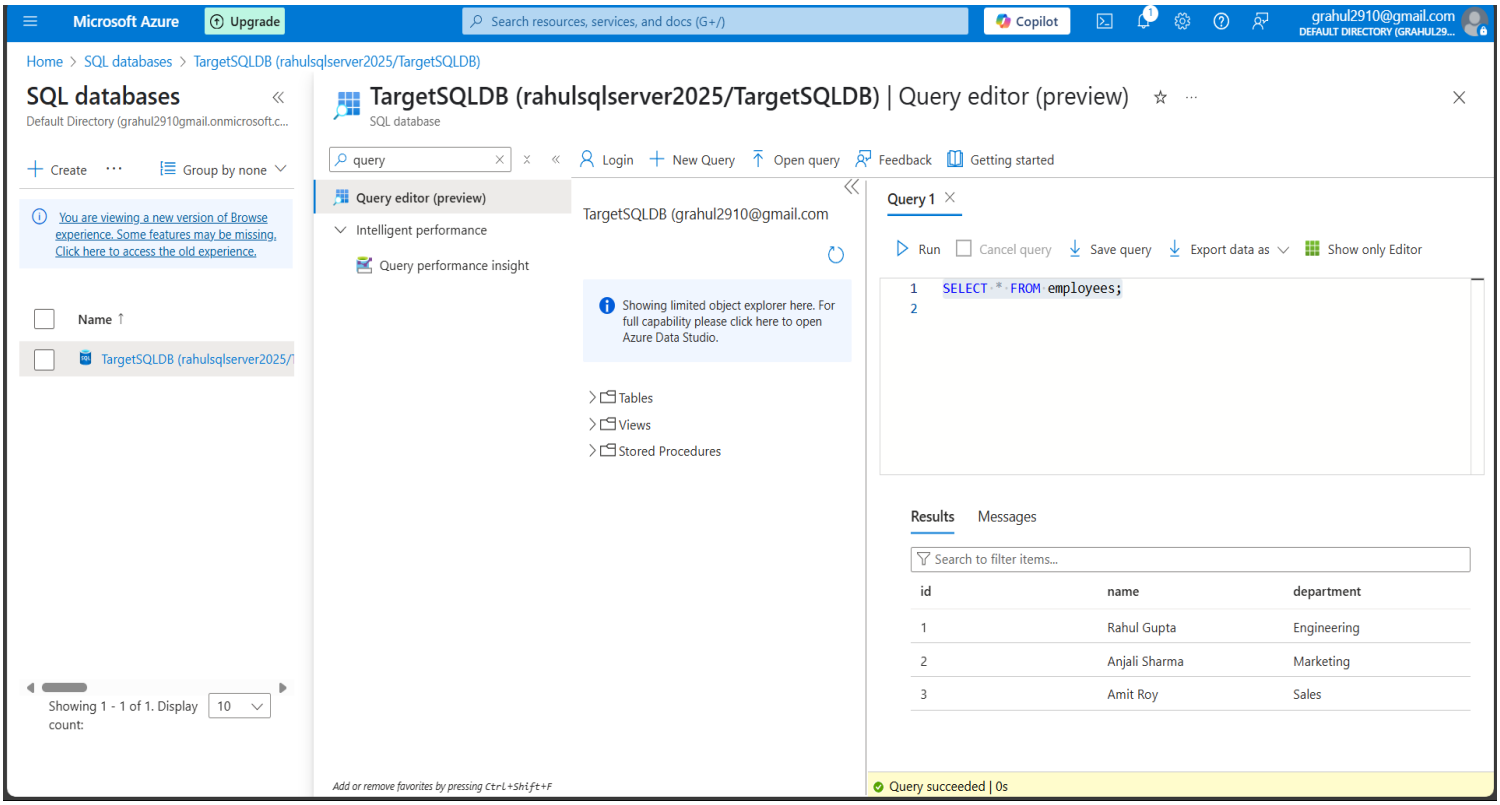
- Created a **Copy Data pipeline** linking source and sink datasets.



- In the **Sink > Settings**, added a **pre-copy script** to auto-create the destination table.
- Ran the pipeline using **Debug**, and verified successful execution.

Step 7: Validate Results

- Queried Azure SQL Database via **Query Editor (Preview)** to verify data was copied.
- Confirmed rows from local MySQL were visible in Azure SQL.


Microsoft Azure
Upgrade
Search resources, services, and docs (G+/)
Copilot
grahul2910@gmail.com
DEFAULT DIRECTORY (GRAHUL29...
Home > SQL databases > TargetSQLDB (rahulsqlserver2025/TargetSQLDB)
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Login
New Query
Open query
Feedback
Getting started
Query editor (preview)
Intelligent performance
Query performance insight
TargetSQLDB (grahul2910@gmail.com
Showing limited object explorer here. For full capability please click here to open Azure Data Studio.
Tables
Views
Stored Procedures
Add or remove favorites by pressing Ctrl+Shift+F
Query 1
Run
Cancel query
Save query
Export data as
Show only Editor
1 SELECT * FROM employees;
2
Results
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