

## Migration of multiple tables from onprem mysql into Azure SQL Database : Use Case (1) ->

Services Required :

- Mysql
- Azure Data factory
- Azure SQL Database

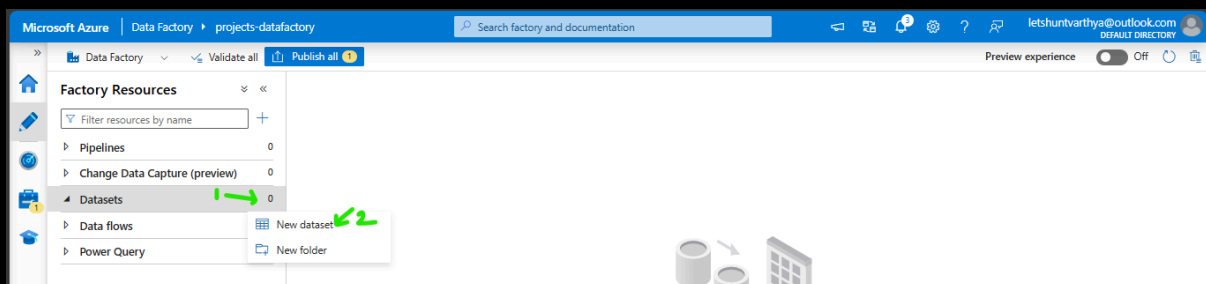
Assuming there are multiple tables in mysql on prem

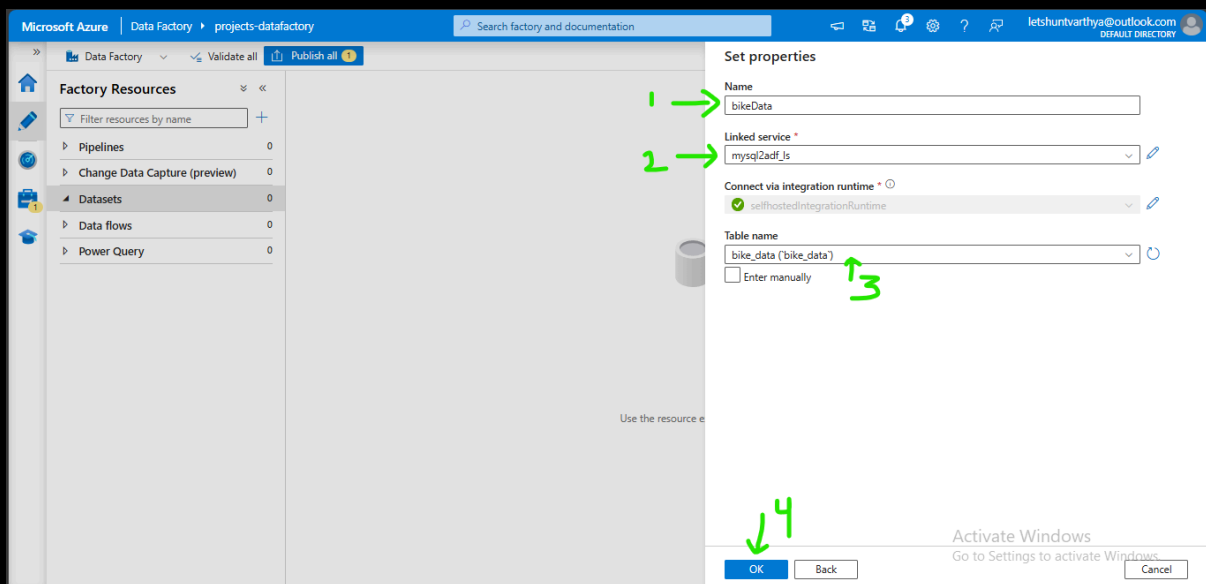
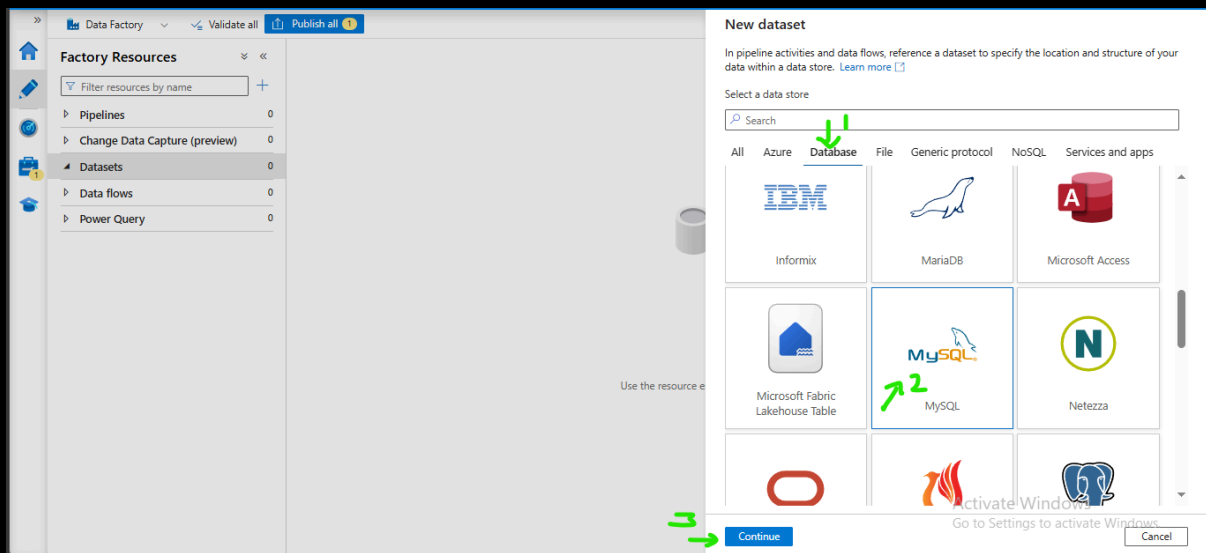
Azure SQL Database creation :

- Creation of the azure sql database is shown in the document below.
- [https://docs.google.com/document/d/16iB1EsGKHc6-bcgTPSfqkK6BVf3n8\\_fpbot42uNOvXc/edit?usp=sharing](https://docs.google.com/document/d/16iB1EsGKHc6-bcgTPSfqkK6BVf3n8_fpbot42uNOvXc/edit?usp=sharing)

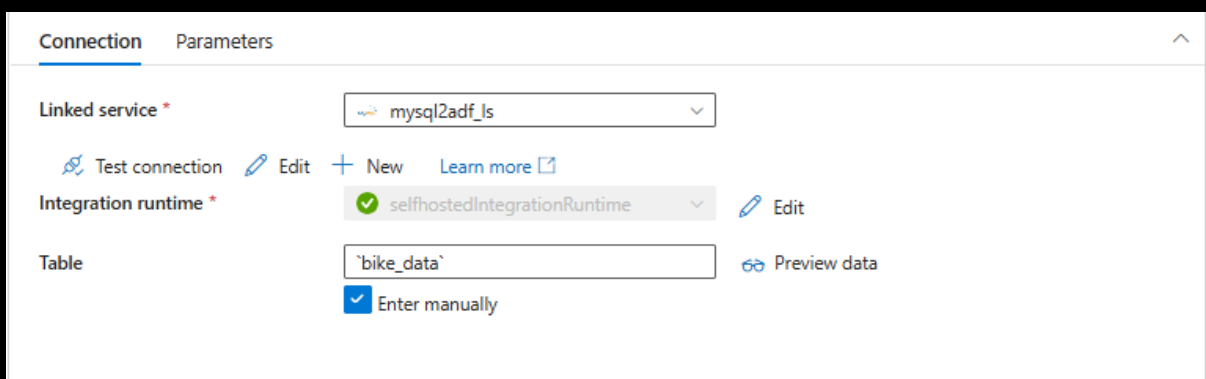
Azure Datafactory Creation :

- Creation of the azure data factory is shown in the document below.
- [https://docs.google.com/document/d/1lpvA7XumJjbIP0wPWWUlfd\\_gdvh6jTn\\_0a12HWv0jcM/edit?usp=sharing](https://docs.google.com/document/d/1lpvA7XumJjbIP0wPWWUlfd_gdvh6jTn_0a12HWv0jcM/edit?usp=sharing)





Create a linked service for mysql using self Hosted IR.  
Create datasets for other tables as well.



Dataset name : electronicStoreData

Connection

Parameters

Linked service \*

mysql2adf\_ls

Test connection

Edit

New

Learn more

Integration runtime \*

selfhostedIntegrationRuntime

Edit

Table

`elec\_store`

Preview data

Enter manually

Dataset name : trainingData

Connection

Parameters

Linked service \*

mysql2adf\_ls

Test connection

Edit

New

Learn more

Integration runtime \*

selfhostedIntegrationRuntime

Edit

Table

2669407-training ('2669407-training')

Refresh

Preview data

Enter manually

Dataset name : customerData

Connection

Parameters

Linked service \*

mysql2adf\_ls

Test connection

Edit

New

Learn more

Integration runtime \*

selfhostedIntegrationRuntime

Edit

Table

`2669409-cust\_data`

Preview data

Enter manually

Microsoft Azure | Data Factory | projects-datafactory

Factory Resources

- Pipelines
- Change Data Capture (preview)
- Datasets
- bikeData
- customerData
- ElectronicStoreData
- trainingData
- Data flows
- Power Query

Activities

- New pipeline
- Pipeline from template
- New folder
- Synapse
- Azure Data Explorer
- Azure Function
- Batch Service
- Databricks
- Data Lake Analytics
- General
- HDInsight
- Iteration & conditionals
- Machine Learning
- Power Query

Copy data

Copy data1

Source dataset \*

bikeData

Use query

Table Query

Additional columns

Properties

General

Name \*

bikeData\_PL

Description

Annotations

+ New

Activate Windows  
Go to Settings to activate Windows.

Microsoft Azure | Data Factory | projects-datafactory

Activities

- Move and transform
- Copy data
- Data flow
- Synapse
- Azure Data Explorer
- Azure Function
- Batch Service
- Databricks
- Data Lake Analytics
- General
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- Power Query

Copy data

Copy data1

Sink dataset \*

Select...

New dataset

In pipeline activities and data flows, reference a dataset to specify the location and structure of your data within a data store. Learn more

Select a data store

Search

All Azure Database File Generic protocol NoSQL Services and apps

Azure Database for MySQL

Azure Database for PostgreSQL

Azure Databricks Delta Lake

Azure File Storage

Azure SQL Database

Azure SQL Database Managed Instance

Continue

Cancel

Activate Windows  
Go to Settings to activate Windows.

Microsoft Azure | Data Factory | projects-datafactory

Factory Resources

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- Change Data Capture (preview)
- Datasets
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- Power Query

Activities

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- Copy data
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Copy data

Copy data1

Sink dataset \*

Select...

Set properties

Name

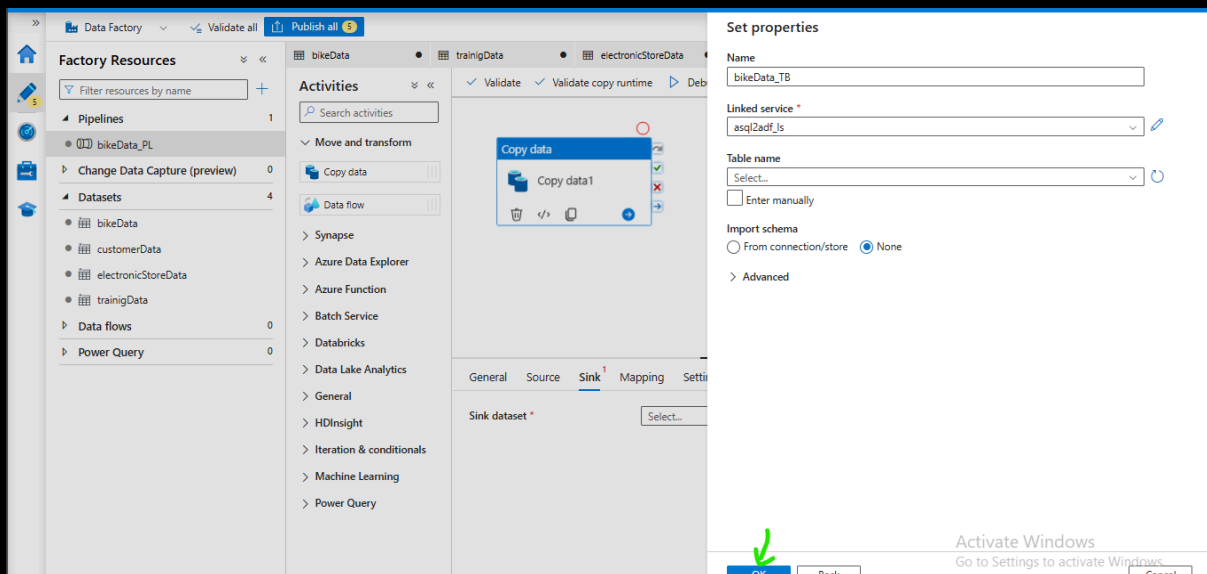
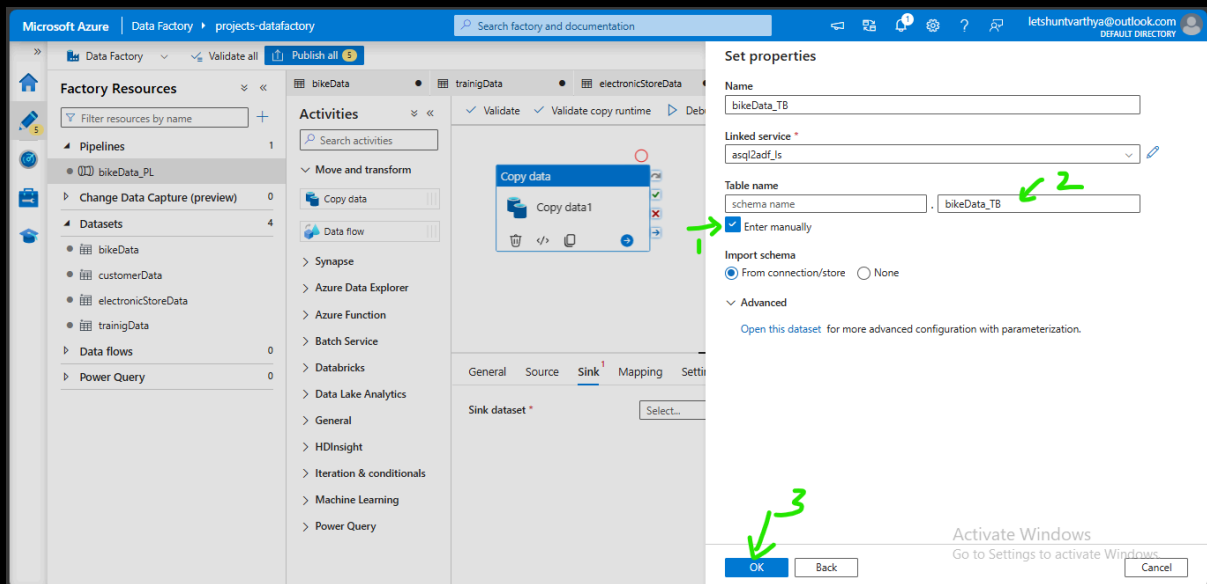
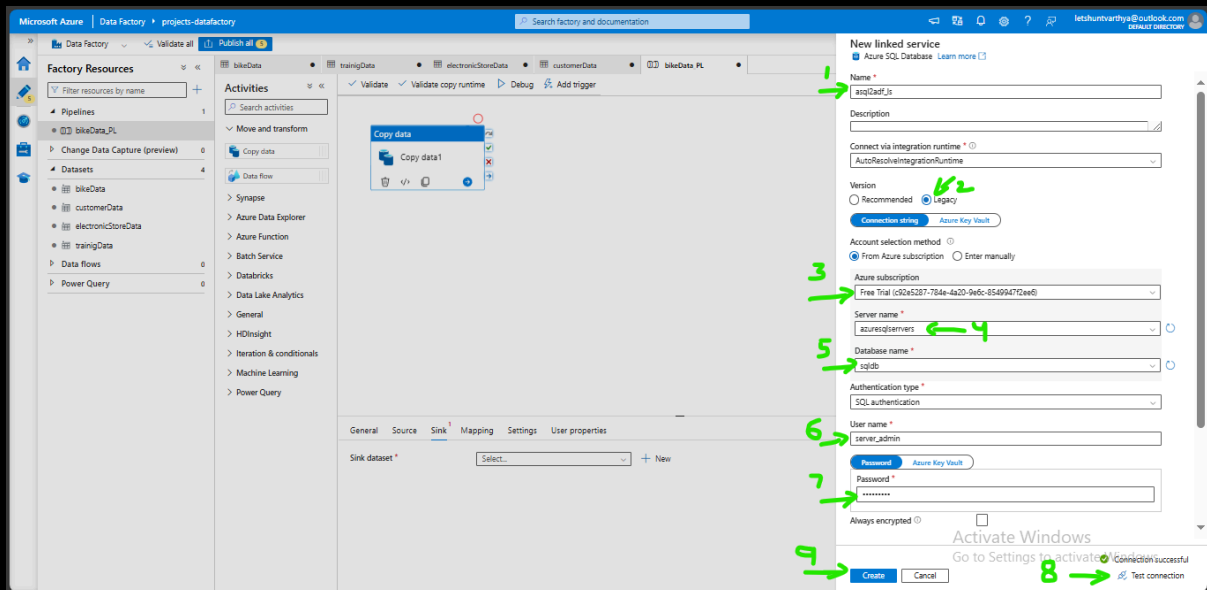
bikeData\_TB

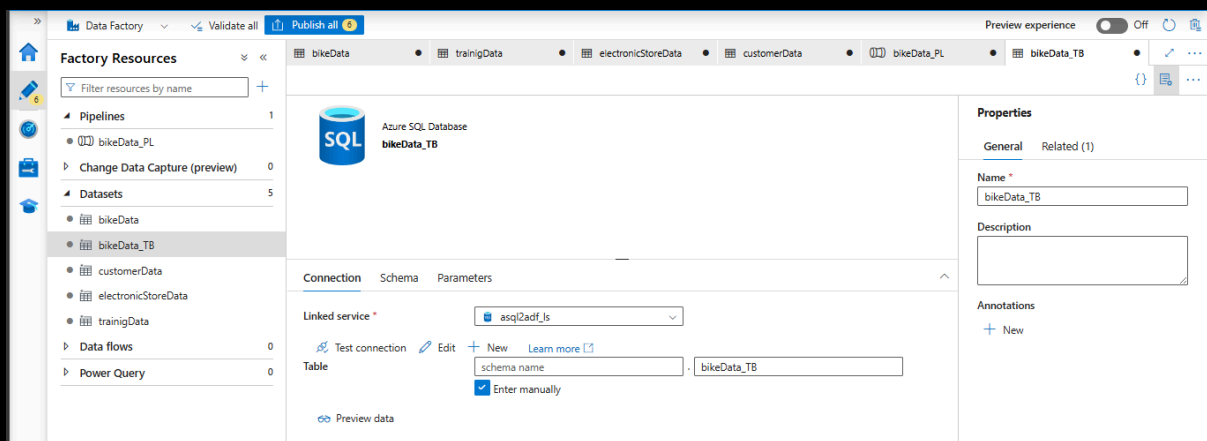
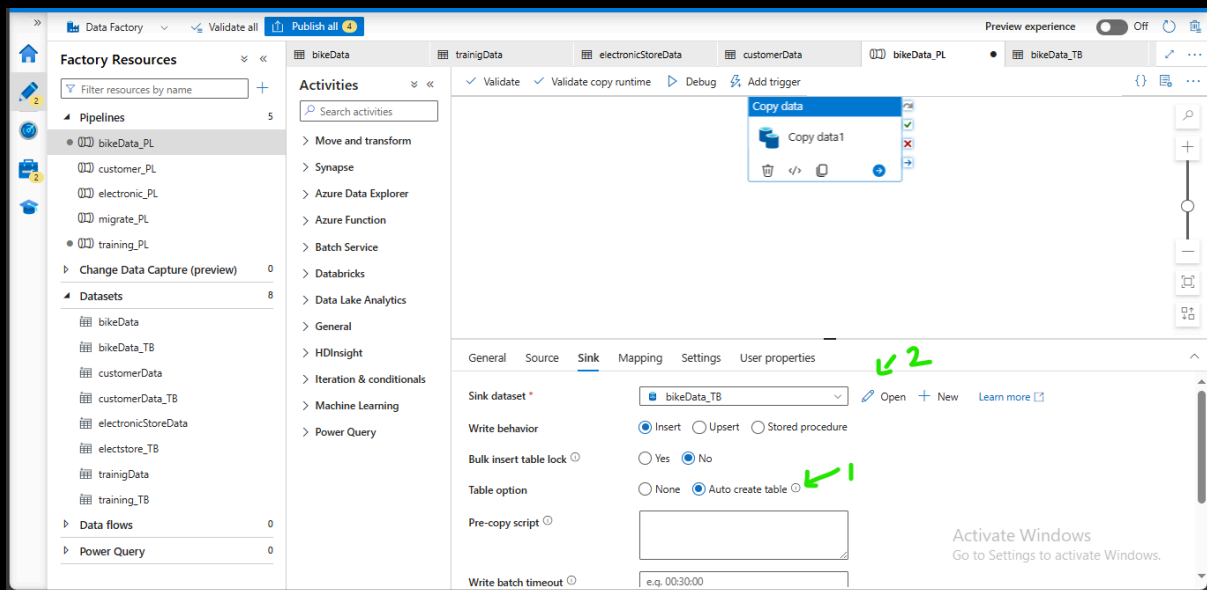
Linked service \*

Select...

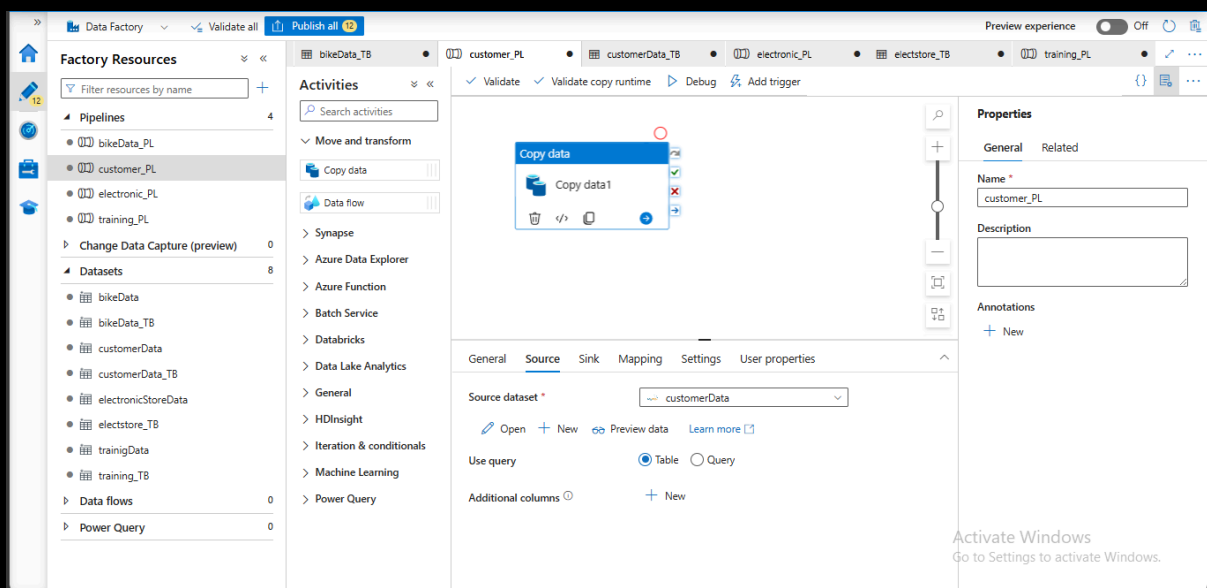
Filter...

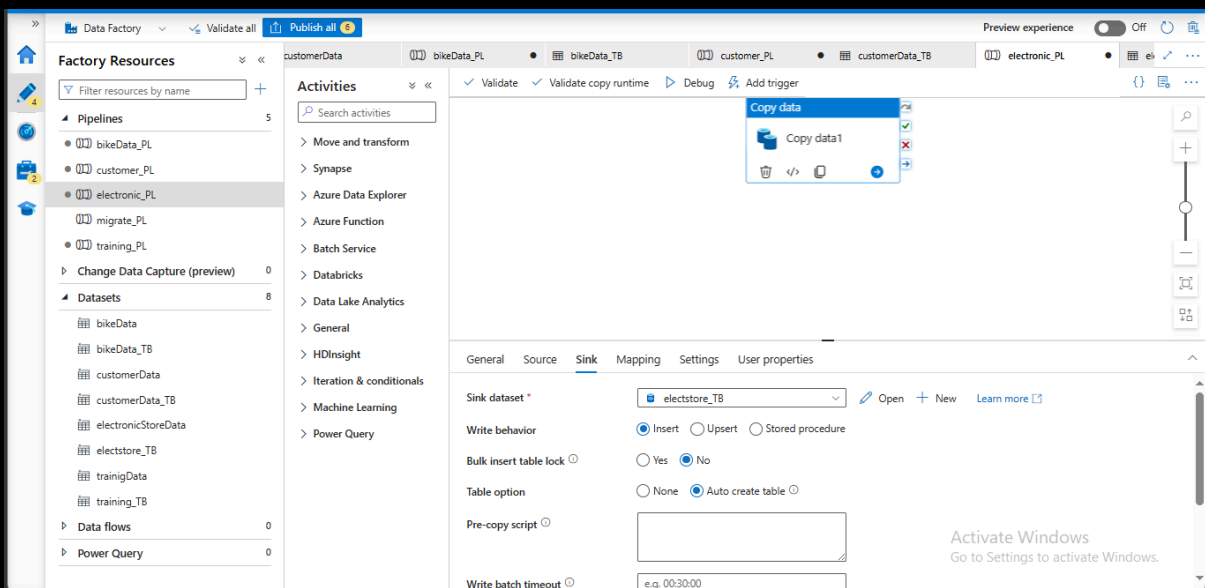
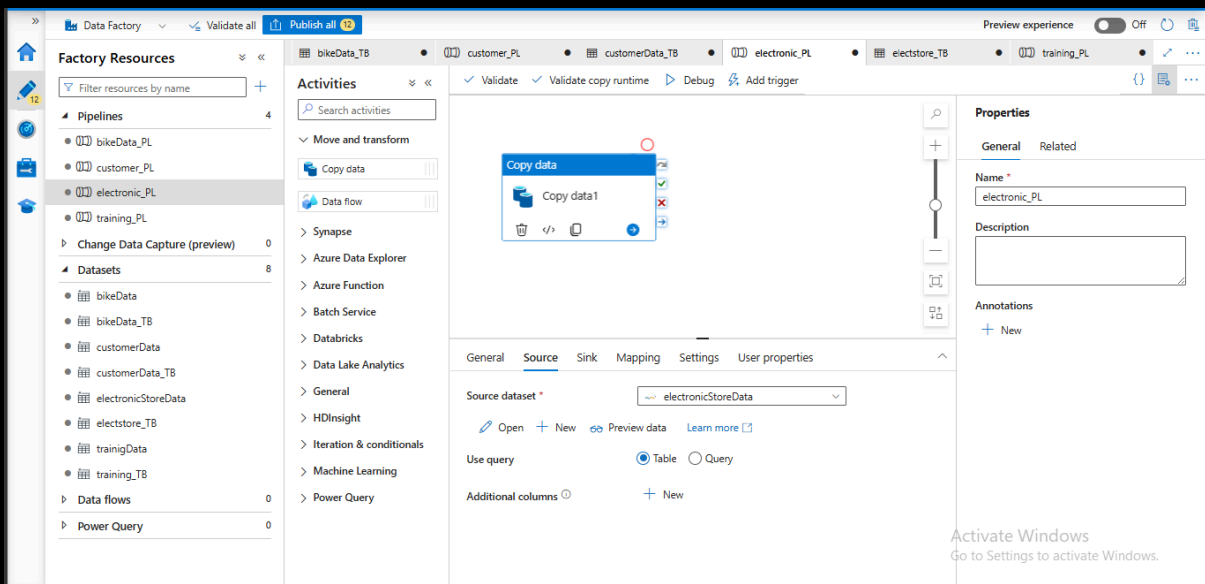
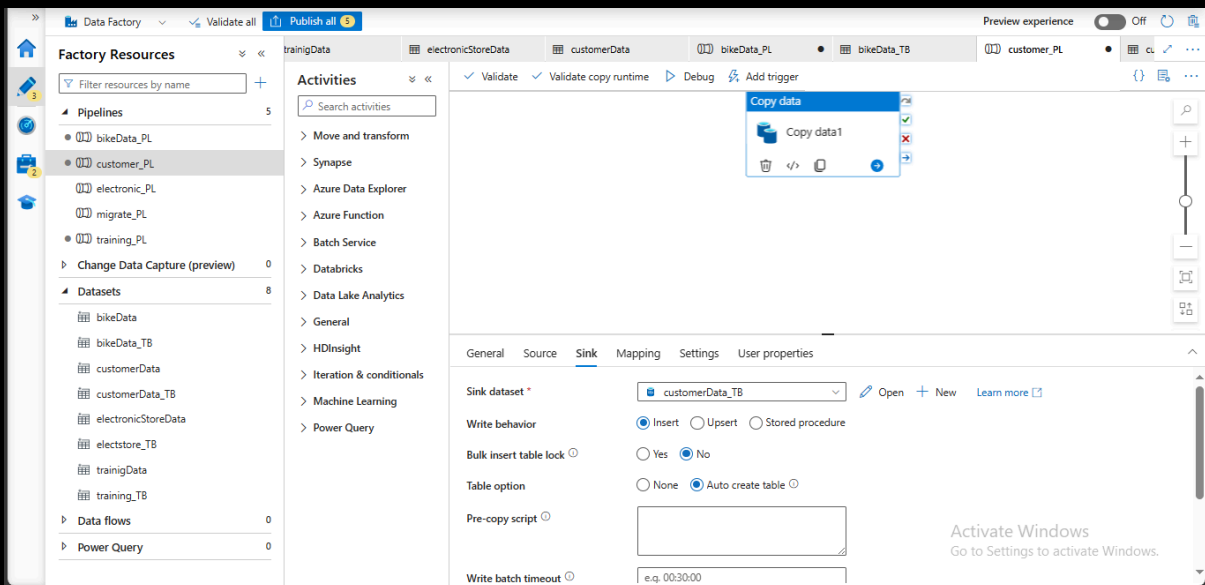
+ New

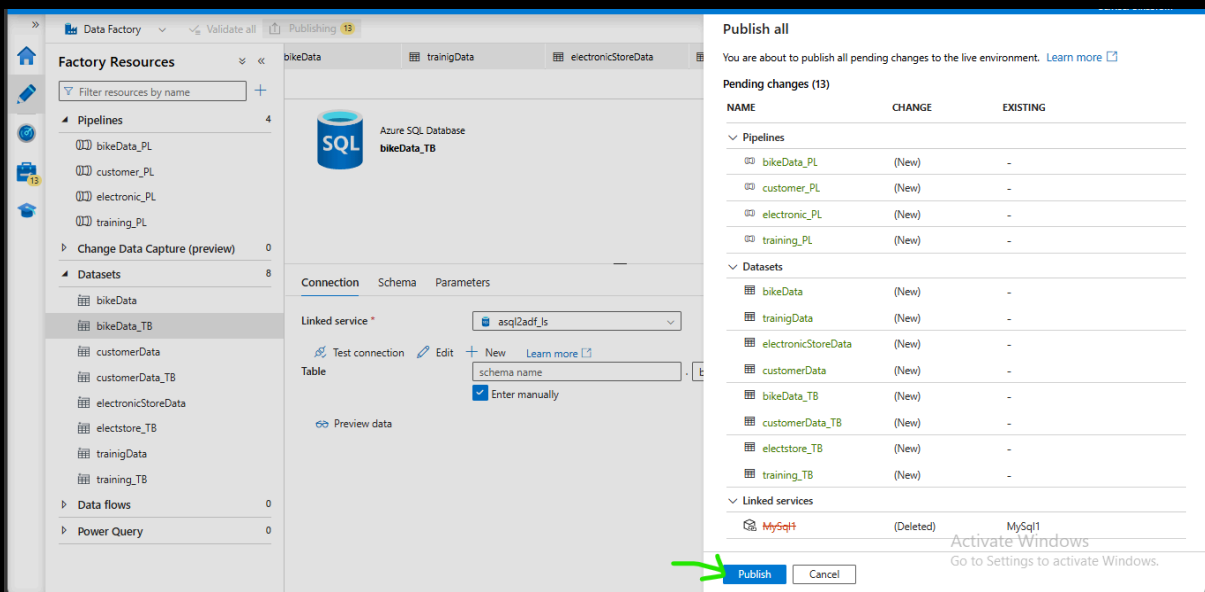
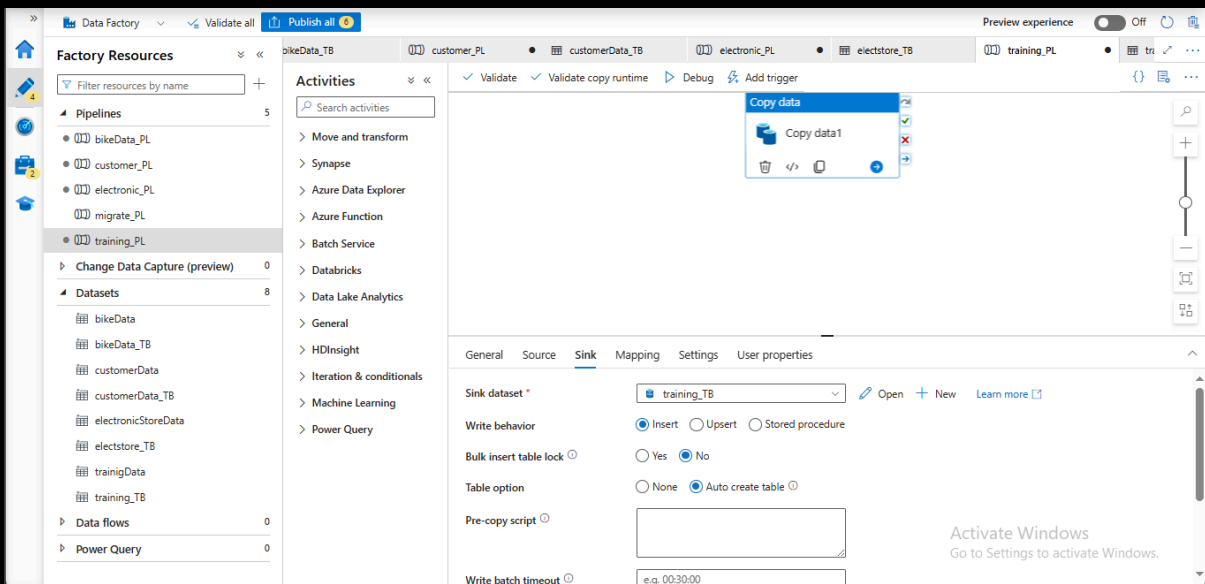
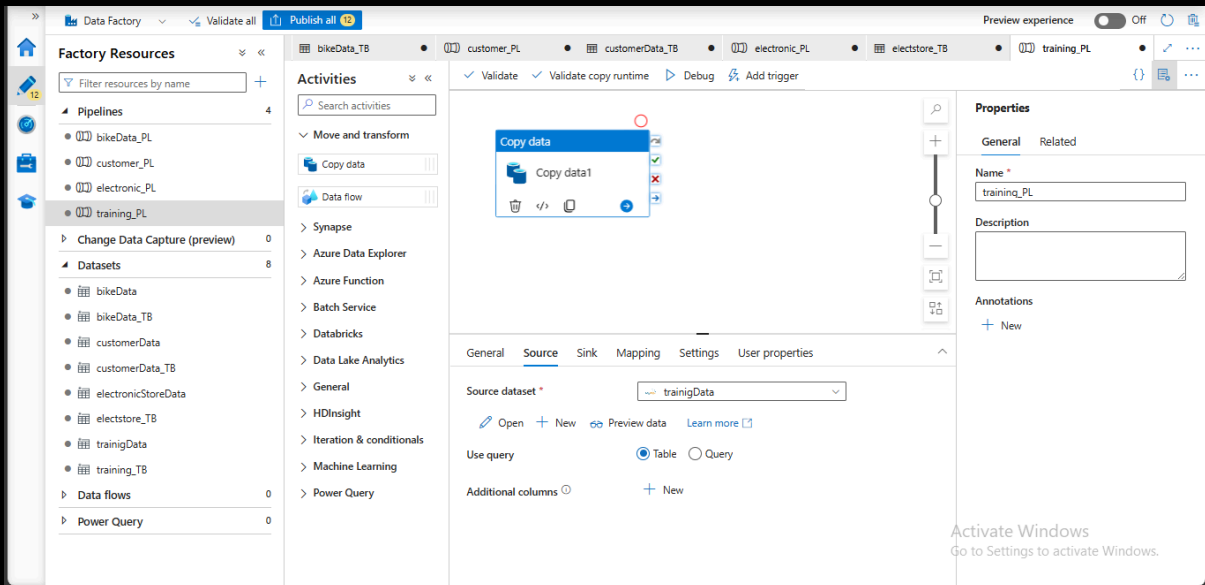




Create other pipelines as well

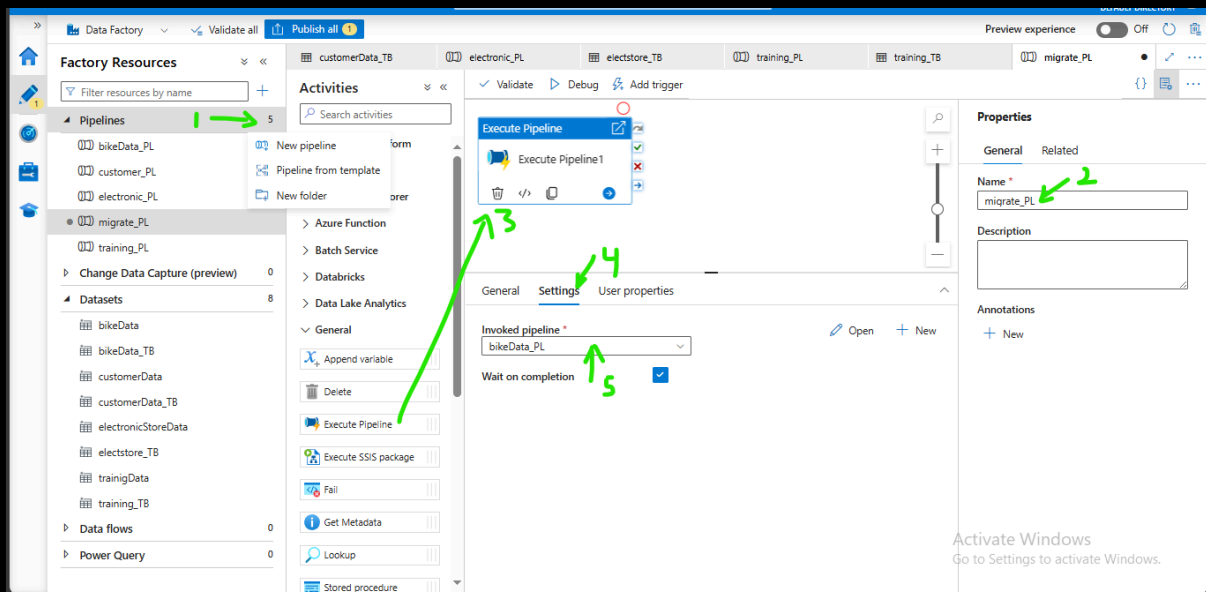




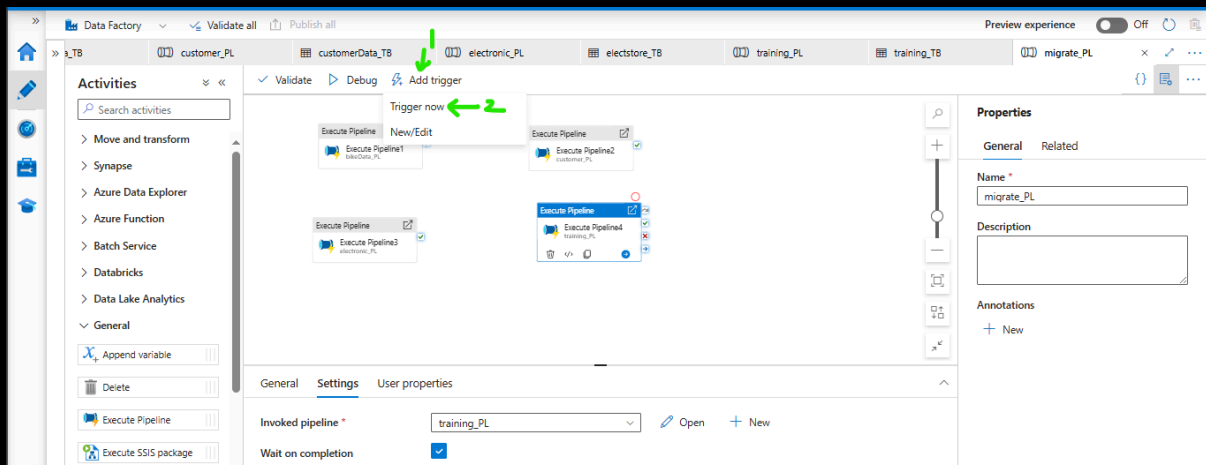
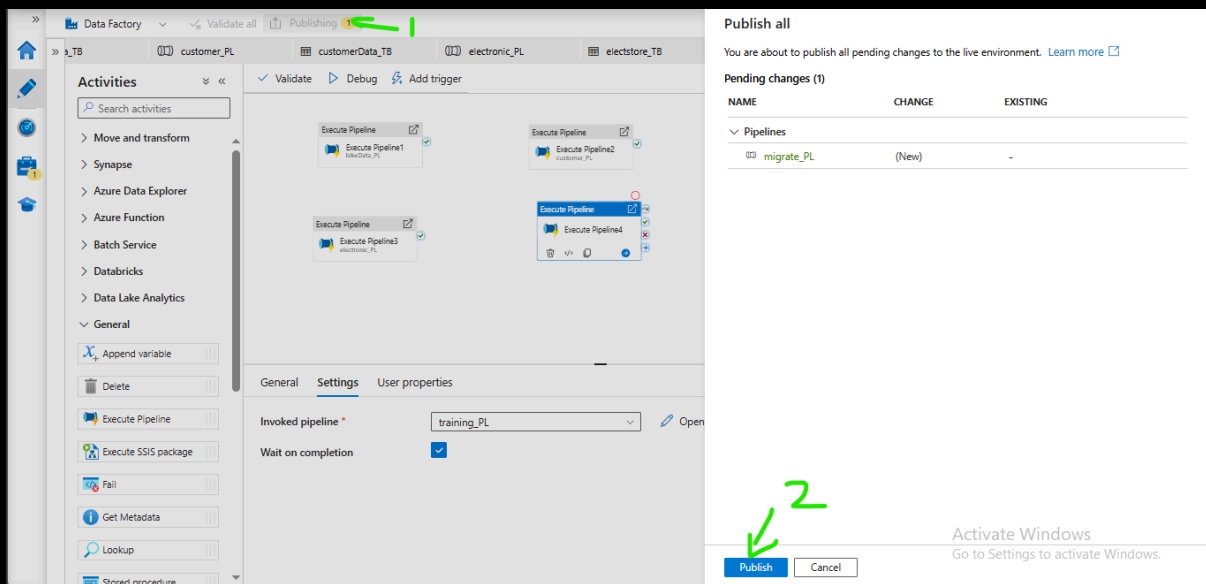




Create a pipeline , drag and drop the execute pipeline activity to the field.



Drag and drop execute pipeline activity to the field for other pipelines as well.



Microsoft Azure Data Factory interface showing the 'Execute Pipeline' activity configuration. The 'Invoke pipeline' dropdown is set to 'training\_PL'. The 'Wait on completion' checkbox is checked. The 'Pipeline run' panel on the right shows a warning: 'Trigger pipeline now using last published configuration.' Below this, the 'Parameters' table is empty. At the bottom right, there is an 'Activate Windows' watermark and a green arrow pointing to the 'OK' button.

**Pipeline run**

Trigger pipeline now using last published configuration.

Parameters

Name	Type	Value
No records found		

OK Cancel

Activate Windows  
Go to Settings to activate Windows.

Microsoft Azure Data Factory interface showing the 'migrate\_PL - Activity runs' view. The 'Activity runs' table lists four successful pipeline runs.

All pipeline runs > migrate\_PL - Activity runs

Re-run Cancel Refresh Update pipeline List Gantt

Execute Pipeline Execute Pipeline Execute Pipeline Execute Pipeline

Execute Pipeline1 bikeData\_PL Execute Pipeline2 customer\_PL Execute Pipeline3 electronic\_PL Execute Pipeline4 training\_PL

**Activity runs**

Pipeline run ID 9909bd81-beca-44ad-99cb-06b0dc292e93

All status Monitor in Azure Metrics Export to CSV

Showing 1 - 4 items

Activity name	Activity status	Activity type	Run start	Duration	Integration runtime	User properties	Activity run ID
Execute Pipeline4	Succeeded	Execute Pipeline	5/31/2024, 10:23:14 AM	48s			bc5be377-5606-42a1-f...
Execute Pipeline1	Succeeded	Execute Pipeline	5/31/2024, 10:23:14 AM	1m 4s			b6cc63ac-36b7-45b9-b...
Execute Pipeline2	Succeeded	Execute Pipeline	5/31/2024, 10:23:14 AM	40s			c3224884-1438-4a68-b...
Execute Pipeline3	Succeeded	Execute Pipeline	5/31/2024, 10:23:14 AM	43s			1590298f-228c-4f0a-9...

Microsoft SQL Database Query Editor (preview) interface. The 'SQL server authentication' section shows the 'Login' field set to 'server\_admin' and the 'Password' field masked with asterisks. A green arrow points to the 'Password' field, and another green arrow points to the 'OK' button. The 'Microsoft Entra authentication' section shows a 'Continue as letshuntvarthya@outlook.com...' button.

Home > Microsoft.SQLDatabase.newDatabaseNewServer\_adba52a672ab40d6a6c4b | Overview > sqldb (azuresqlservers/sqldb)

sqldb (azuresqlservers/sqldb) | Query editor (preview)

Search Login + New Query Open query Feedback Getting started

Overview Activity log Tags Diagnose and solve problems Query editor (preview) Settings Compute + storage Connection strings Properties Locks Data management Replicas Sync to other databases

Query editor (preview) is a tool to run SQL queries against Azure SQL Database in the Azure portal. It is designed for lightweight querying and object exploration in your database. For more information and troubleshooting, [Learn more](#)

Welcome to SQL Database Query Editor

SQL server authentication

Login \* server\_admin

Password \* [masked]

OK

Microsoft Entra authentication

Continue as letshuntvarthya@outlook.com...

Home > Microsoft.SqlDatabase.newDatabaseNewServer\_8e7ed797a57c4379ba133 | Overview > sqldb (azureservers/sqldb)

### sqldb (azureservers/sqldb) | Query editor (preview)

SQL database

Login + New Query Open query Feedback Getting started

sqldb (server\_admin)

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables

- dbo.bikeData\_TB
- dbo.customer\_TB
- dbo.electstore\_TB
- dbo.training\_TB

Views

Stored Procedures

Query 1 Query 2

Run Cancel query Save query Export data as Show only Editor

```
1 SELECT TOP (1000) * FROM [dbo].[bikeData_TB]
```

Select Top 1000 Rows  
Edit Data (Preview)  
Rename

Results Messages

Search to filter items...

Region	Country	Customer	Business Segment	Category	Model
North America	United States	Advanced Bike Components	Components	Road Frames	LL Road Frame
North America	United States	Central Discount Store	Bikes	Mountain Bikes	Mountain-100
North America	United States	Leading Sales & Repair	Clothing	Jerseys	Long-Sleeve Log
North America	United States	Paint Supply	Components	Mountain Frames	HL Mountain Fra

Query succeeded | 1s

Home > Microsoft.SqlDatabase.newDatabaseNewServer\_8e7ed797a57c4379ba133 | Overview > sqldb (azureservers/sqldb)

### sqldb (azureservers/sqldb) | Query editor (preview)

SQL database

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Stored Procedures

Query 1 Query 2 Query 3

Run Cancel query Save query Export data as Show only Editor

```
1 SELECT TOP (1000) * FROM [dbo].[customer_TB]
```

Results Messages

Search to filter items...

CustID	CustName	CustLoc	CustAge
1	Kiran	Pune	29
1	Kiran	Pune	29
2	Sathish	Chennai	30
5	Santhosh	Maldives	30
6	Maresh	Tirupati	32

Query succeeded | 0s

Home > Microsoft.SqlDatabase.newDatabaseNewServer\_8e7ed797a57c4379ba133 | Overview > sqldb (azureservers/sqldb)

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Views

Stored Procedures

Query 1 Query 2 Query 3 Query 4

Run Cancel query Save query Export data as Show only Editor

```
1 SELECT TOP (1000) * FROM [dbo].[electstore_TB]
```

Results Messages

Search to filter items...

OrderID	OrderDate	UnitCost	Price	OrderQty	CostofSales
7077	9/13/2017	76.09496775	304	9	684.8547097
117	9/14/2017	7.491752798	12.99	4	29.96701119
7018	9/15/2017	10.12233768	159.99	9	91.10103916
140	9/16/2017	0.576153263	25.69	18	10.37075874

Query succeeded | 1s

Home > Microsoft.SQLDatabase.newDatabaseNewServer\_8e7ed797a57c4379ba133 | Overview > sqlsdb (azureservers/sqlsdb)

sqlsdb (azureservers/sqlsdb) | Query editor (preview) ☆ ...

SQL database

» Login + New Query ↗ Open query ↗ Feedback ⓘ Getting started

sqlsdb (server\_admin) 🔄

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables

- dbo.bikeData\_TB ...
- dbo.customer\_TB ...
- dbo.electstore\_TB ...
- dbo.training\_TB ...

Views

Stored Procedures

Query 1 × Query 2 × Query 3 × Query 4 × Query 5 ×

▶ Run ☐ Cancel query ⬇ Save query ⬇ Export data as ▾ ⚙ Show only Editor

1 SELECT TOP (1000) \* FROM [dbo].[training\_TB]

Results Messages

🔍 Search to filter items...

Start Date	Course Code	Course Name	Employee_ID	Cost	Supplier
9/18/2015	1	Communication Workshop	1	1300	Communication Experts
9/18/2015	1	Communication Workshop	4	1300	Communication Experts
9/18/2015	1	Communication Workshop	25	1300	Communication Experts
9/18/2015	1	Communication Workshop	33	1300	Communication Experts
9/18/2015	1	Communication Workshop	44	1300	Communication Experts

🟢 Query succeeded | 2s