

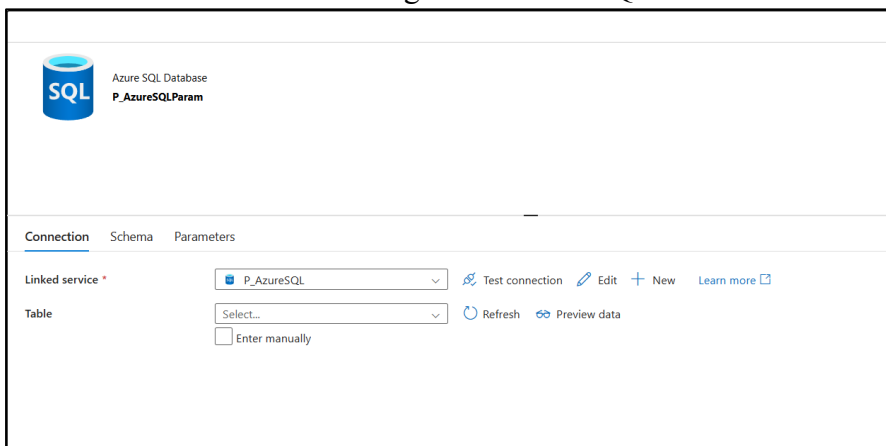
STATEMENT 3

Create a pipeline name 'Foreach_Example2' to copy the below information using just one copy activity. (a) All the product table data where productid > 100 (b) All the customer table data where Customer id>100 and Customer id <1000

We need to use only one **Copy Data** activity, to copy data from product and customer table based on their IDs to ADLS(Azure Data Lake Storage) location in JSON format.

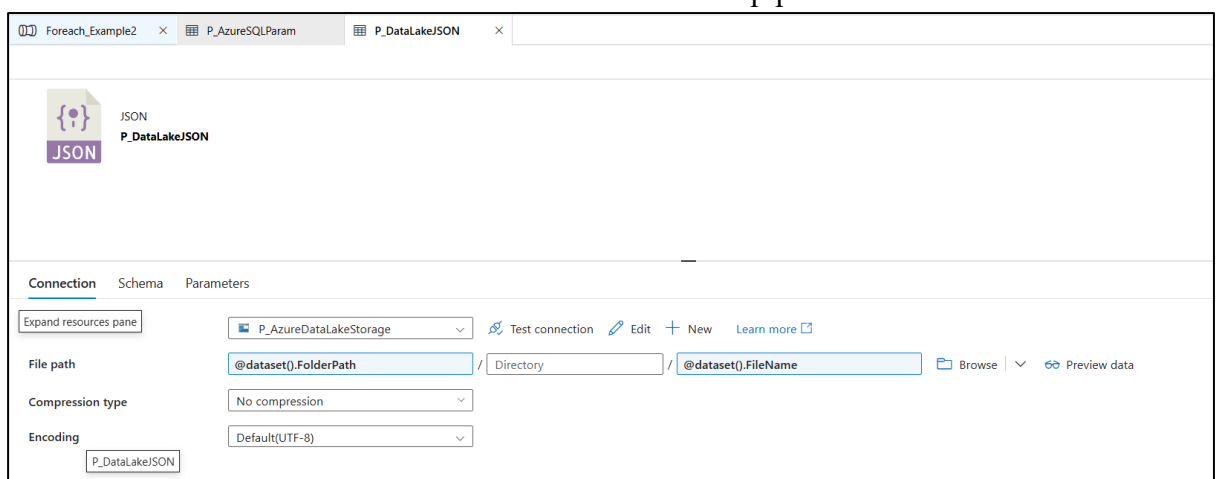
Create Datasets:

1. Create a new dataset referencing to the Azure SQL linked service



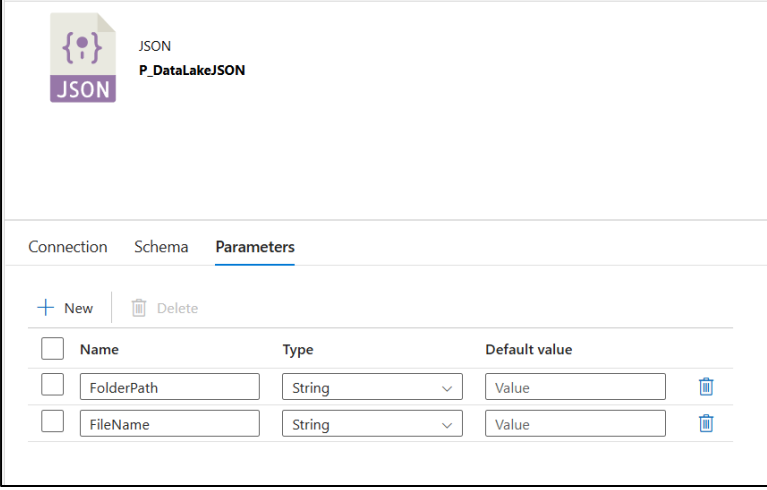
Do not provide any table name.

2. Create target dataset to save data as JSON file
The dataset was also used in Statement 1 and Statement 2 pipelines.



Set File System and File Name as @dataset().FolderPath and @dataset().FileName respectively(as shown in the image above).

Set parameters:



The screenshot shows the 'Parameters' tab in the Azure Data Lake Studio interface. At the top, there is a JSON icon and the text 'JSON P_DataLakeJSON'. Below this, there are tabs for 'Connection', 'Schema', and 'Parameters', with 'Parameters' being the active tab. Under the 'Parameters' tab, there are buttons for '+ New' and 'Delete'. A table lists the parameters:

<input type="checkbox"/>	Name	Type	Default value	<input type="checkbox"/>
<input type="checkbox"/>	FolderPath	String	Value	<input type="checkbox"/>
<input type="checkbox"/>	FileName	String	Value	<input type="checkbox"/>

3. The Customer dataset has been created in previous statements, the SQL Scripts are present in **customerTable.sql** and **insertCustomers.sql**. (in Azure SQL)
4. Create Product table and insert data (in Azure SQL)

```
CREATE TABLE Product (  
    ProductID INT PRIMARY KEY,  
    ProductName VARCHAR(100),  
    Category VARCHAR(50),  
    Price DECIMAL(10,2),  
    CreatedDate DATE  
);  
  
-- Insert sample data  
INSERT INTO Product VALUES  
(1, 'Notebook', 'Stationery', 3.50, '2025-07-01'),  
(55, 'Pen', 'Stationery', 1.20, '2025-07-02'),  
(101, 'Laptop', 'Electronics', 800.00, '2025-07-03'),  
(102, 'Smartphone', 'Electronics', 600.00, '2025-07-04'),  
(205, 'Office Chair', 'Furniture', 120.00, '2025-07-05'),  
(307, 'Standing Desk', 'Furniture', 300.00, '2025-07-06');
```

The script is present in **insertProduct.sql**

Step-Wise Guidelines:

1. Create a pipeline named: Foreach_Example2
2. Create pipeline parameter
Name: Queries
Type: Array
Value: [

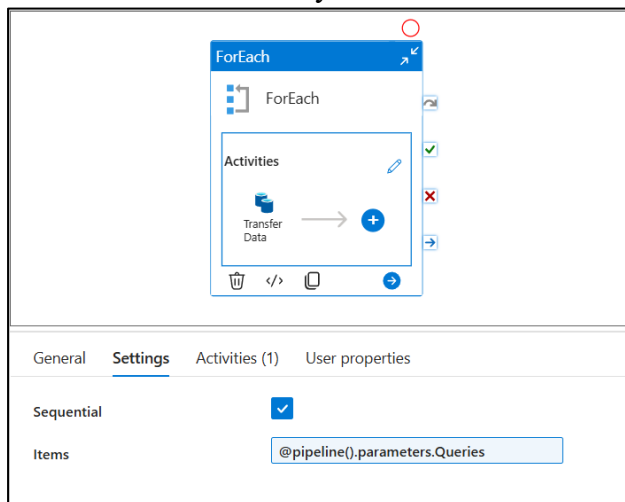
```
{
  "tableName": "product",
  "query": "SELECT * FROM Product WHERE ProductID > 100"
},
{
  "tableName": "customer",
  "query": "SELECT * FROM customer WHERE customer_id > 100 AND
customer_id < 1000"
}
]
```

]

The queries can be viewed in **queries.sql** script

The value contains the SQL table name and their corresponding SQL query to be performed.

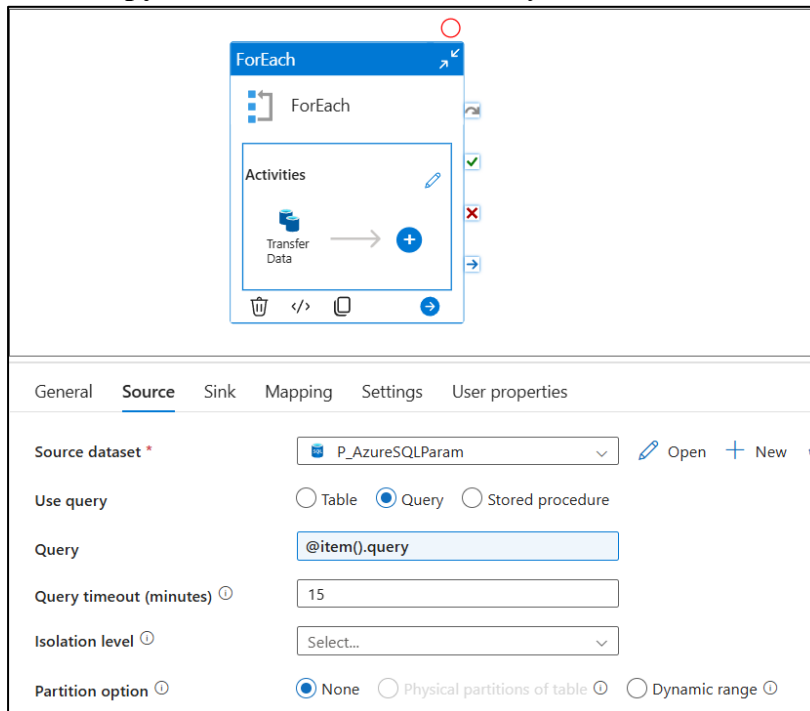
3. Insert a **ForEach** activity



Specify **Items**: @pipeline().parameters.Queries

The **"Items"** property in a **ForEach** activity defines the **collection of items** that the activity will iterate over. It acts as the input array for the loop, and ADF will execute the inner activities **once for each item** in that collection.

4. Insert **Copy Data** within ForEach activity

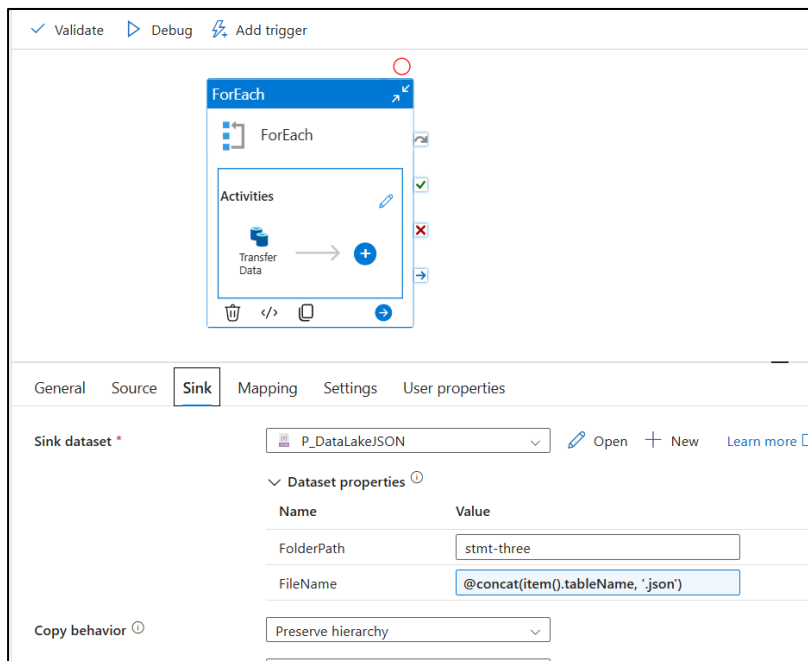


Where,

Source Dataset is the dataset we created(see [Page 1](#))

Query: @item().query

In each iteration we are accessing the query from the parameter values and running on source dataset



Where,

Sink Dataset is the JSON format dataset we created on [Page 1](#)

Provide parameter values:

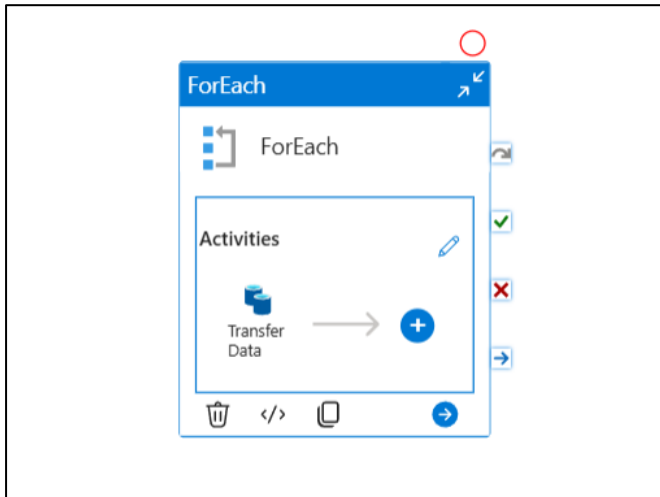
FolderPath: stmt-three (Directory in which data will be copied)

FileName: @concat(item().tableName, '.json')

We are dynamically creating file name based on the tableName present in the Queries parameter

Use **preserve hierarchy** as copy behaviour and file pattern must be **Array of objects**.

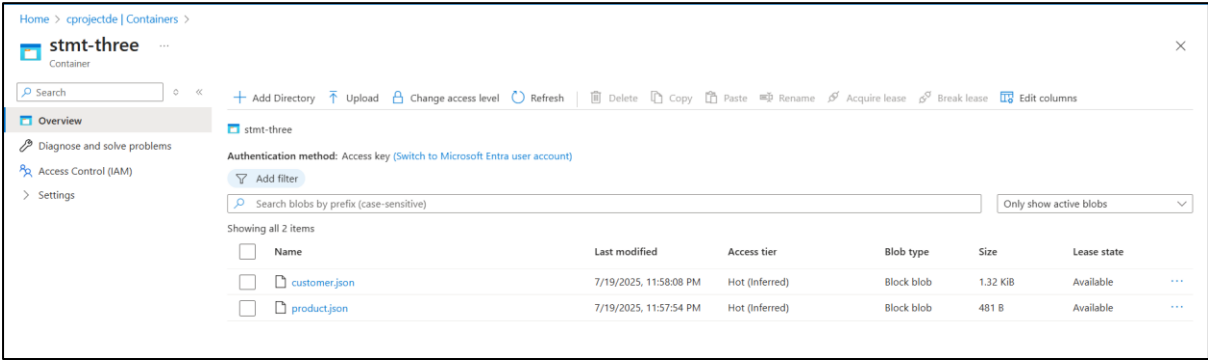
Final Pipeline:



Pipeline Execution:

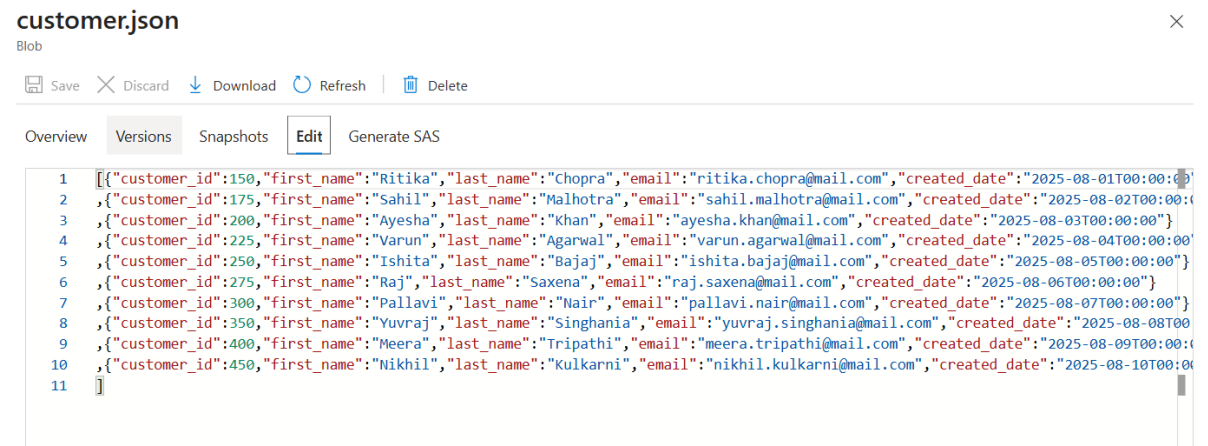
Activity runs						
Pipeline run ID 18559d08-eea3-460e-8560-b4db6efc5401						
All status ▼ Monitor in Azure Metrics 📊 ⬇						
Showing 1 - 3 of 3 items						
Activity name ↑↓	Activity st... ↑↓	Activit... ↑↓	Run start ↑↓	Duration ↑↓	Integration runtime ↑↓	User prop... ↑↓
Transfer Data	✔ Succeeded	Copy data	7/19/2025, 11:57:57 PM	13s	AutoResolveIntegrationRuntime (Central India)	
Transfer Data	✔ Succeeded	Copy data	7/19/2025, 11:57:43 PM	13s	AutoResolveIntegrationRuntime (Central India)	
ForEach	✔ Succeeded	ForEach	7/19/2025, 11:57:42 PM	29s		

Data Copied as JSON:



Data is transferred to their respective JSON files in stmt-three directory present in cprojectde storage account.

customer.json



Product.json

