

## Copy Selective Tables with Selective Columns from One Database to Another

- Firstly, Lets drop all our tables from destination database which we used in previous task(task3):

The screenshot shows the Microsoft Azure portal interface for the 'companydb-dst' (mahiwal-sql-dst/companydb-dst) SQL database. The 'Query editor (preview)' is open, displaying a query to drop the 'dbo.Employees' table. The left sidebar shows the 'Object Explorer' with a tree view containing 'Tables', 'Views', and 'Stored Procedures'. The 'dbo.Employees' table is highlighted under 'Tables'. The 'Messages' pane at the bottom indicates 'Query succeeded: Affected rows: 0'.

```
1 DROP TABLE dbo.Employees
```

The screenshot shows the Microsoft Azure portal interface for the 'companydb-dst' (mahiwal-sql-dst/companydb-dst) SQL database. The 'Query editor (preview)' is open, displaying a query to drop the 'dbo.Projects' table. The left sidebar shows the 'Object Explorer' with a tree view containing 'Tables', 'Views', and 'Stored Procedures'. The 'dbo.Projects' table is highlighted under 'Tables'. The 'Messages' pane at the bottom indicates 'Query succeeded: Affected rows: 0'.

```
1 DROP TABLE dbo.Projects
```

- As we can see in our source dataset, We will copy following columns from following tables:
  - “EmployeeID” and “Name” from Table “Employees” .
  - “DepartmentName” and “Number\_of\_Employees” from Table “Departments” .

The screenshot shows the Microsoft Azure portal interface for the 'companydb-src' (mahiwal-sql-src/companydb-src) SQL database. The 'Query editor (preview)' is open, displaying a table view of the 'dbo.Employees' table. The table has columns 'EmployeeID', 'Name', and 'DepartmentID'. The data is as follows:

EmployeeID	Name	DepartmentID
1	Arihant	101
2	Bharat	102
3	Cheshta	103
4	Dinesh	102
5	Ekansh	101
6	Farukh	104
7	Gukesh	103

The screenshot shows the Microsoft Azure portal interface for the 'companydb-src' (mahiwal-sql-src/companydb-src) SQL database. The 'Query editor (preview)' is open, displaying a table view of the 'dbo.Departments' table. The table has columns 'DepartmentID', 'DepartmentName', and 'Number\_of\_Employees'. The data is as follows:

DepartmentID	DepartmentName	Number_of_Employees
101	Human Resources	16
102	Engineering	31
103	Marketing	14
104	Finance	18

- Lets go to our data factory, we use the same linked services from task3 which link to our source&destination **Databases**.

- And create source and destination **dataset** for our first table “Employees” .

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' pane is expanded to 'Datasets', showing a list of datasets including 'AzureSqlTable1', 'DS\_Lookup\_GetTables', 'DS\_SQL\_Sink', 'DS\_SQL\_Source', 'EmployeeAvro', 'EmployeeCSV', and 'EmployeeParquet'. The main area displays a 'Select an item' prompt. On the right, the 'Set properties' dialog is open, showing the following fields: Name (DS\_Source\_Employee\_Selected), Linked service (LS\_SQL\_Source), Table name (dbo.Employees), and Import schema (From connection/store).

The screenshot shows the Microsoft Azure Data Factory interface. The main area displays the 'DS\_Dest\_Employees\_Selected' dataset, which is an Azure SQL Database. The 'Properties' pane on the right is open, showing the 'General' tab with the following fields: Name (DS\_Dest\_Employees\_Selected), Description, and Annotations. The 'Connection' tab is also visible, showing the 'Linked service' (LS\_SQL\_Destination) and 'Table' (dbo.Employees).

- And create source and destination **dataset** for our first table “Departments” .

The screenshot shows the Microsoft Azure Data Factory interface. On the left, the 'Factory Resources' pane is expanded to 'Datasets', showing a list of datasets including 'AzureSqlTable1', 'DS\_Lookup\_GetTables', 'DS\_Source\_Employee\_Selected', 'DS\_SQL\_Sink', 'DS\_SQL\_Source', 'EmployeeAvro', 'EmployeeCSV', and 'EmployeeParquet'. The main area displays the 'DS\_Source\_Employee\_Selected' dataset. On the right, the 'Set properties' dialog is open, showing the following fields: Name (DS\_Source\_Departments\_Selected), Linked service (LS\_SQL\_Source), Table name (dbo.Departments), and Import schema (From connection/store).

The screenshot shows the Microsoft Azure Data Factory interface. The main area displays the 'DS\_Dest\_Departments\_Selected' dataset, which is an Azure SQL Database. The 'Properties' pane on the right is open, showing the 'General' tab with the following fields: Name (DS\_Dest\_Departments\_Selected), Description, and Annotations. The 'Connection' tab is also visible, showing the 'Linked service' (LS\_SQL\_Destination) and 'Table' (dbo.Departments).

- Create a new pipeline named “PL\_CopySelectiveTables” ;
- Drag a copy activity for the employees table into the canvas
- In the Source of the copy activity take our source dataset for “Employees” table and use query to select the desired columns from our table

The screenshot shows the Azure Data Factory portal with a pipeline named 'PL\_CopySelectiveT...'. The 'Copy data' activity is selected, and the 'Source' tab is active. The configuration is as follows:

- Source dataset:** DS\_Source\_Employee\_Selected
- Use query:** ☒ Query
- Query:** `SELECT EmployeeID, Name FROM dbo.Employees`
- Query timeout (minutes):** 120
- Isolation level:** Select...
- Partition option:** ☒ None

- In the sink we select our destination dataset for employee table and checkmark autocreate table option.

The screenshot shows the 'Sink' tab configuration for the 'Copy data' activity. The configuration is as follows:

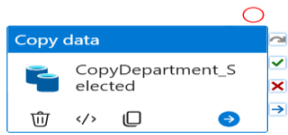
- Sink dataset:** DS\_Dest\_Employees\_Selected
- Write behavior:** ☒ Insert
- Bulk insert table lock:** ☒ No
- Table option:** ☒ Auto create table
- Pre-copy script:** (Empty text box)
- Write batch timeout:** e.g. 00:30:00

- Now drag another copy activity for our “Departments” table.
- In the Source of the copy activity take our source dataset for “Departments” table and use query to select the desired columns from our table

The screenshot shows the Azure Data Factory portal with the pipeline 'PL\_CopySelectiveT...'. A second 'Copy data' activity is added to the canvas. The 'Source' tab is active for this activity. The configuration is as follows:

- Source dataset:** DS\_Source\_Departments\_Selected
- Use query:** ☒ Query
- Query:** `SELECT DepartmentName, Number_of_Employees FROM dbo.Departments`
- Query timeout (minutes):** 120
- Isolation level:** Select...
- Partition option:** ☒ None

- In the sink we select our destination dataset for “Departments” table and checkmark autocreate table option.



General Source **Sink** Mapping Settings User properties

**Sink dataset \*** DS\_Dest\_Departments\_Selected [Open](#) [+ New](#) [Learn more](#)

**Write behavior** ☒ Insert ☐ Upsert ☐ Stored procedure

**Bulk insert table lock** ☐ Yes ☒ No

**Table option** ☐ Use existing ☒ Auto create table

**Pre-copy script**

**Write batch timeout**

**Write batch size**

- Now we trigger the pipeline and it is executed successfully

Celebrati Search factory and documentation mahiwalvaishnav619@gmail.com

### Pipeline runs

Triggered Debug Rerun Cancel options Refresh Edit columns List Gantt

Filter by run ID or name Chennai, Kolkata, Mu... : Last 24 hours Pipeline name : All Status : All Runs : Latest runs Triggered by : Manual trigger

Add filter X

Showing 1 - 1 items Last refreshed 0 minutes ago

Pipeline name	Run start	Run end	Duration	Triggered by	Status	Run	Parameters	Annotations	Run
PL_CopySelectiveTables	7/4/2025, 10:25:37 AM	7/4/2025, 10:25:54 AM	17s	Manual trigger	Succeeded	Original			1a

- Finally in the destination database we can see Both the selective tables and the columns we selected from each one:
- Employees table with Columns EmployeeID and Name.

companydb-dst (mahivalvaishnav619@...)

Query 1

```
SELECT * FROM Employees;
```

Results

EmployeeID	Name
1	Arihant
2	Bharat
3	Cheshta
4	Dinesh
5	Ekansh
6	Farukh

Query succeeded | 0s

2.) Departments table with columns DepartmentName and Number\_of\_Employees

ade

Search resources, services, and docs (G+)

Copilot

mahiwalvaishnav619@g...  
DEFAULT DIRECTORY (MAHIWAL...)

dst/companydb-dst

mahiwal-sql-dst/companydb-dst | Query editor (preview) ☆ ...

Login + New Query ↑ Open query Feedback Getting started

companydb-dst (mahiwalvaishnav619@...)

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

Tables

- dbo.Departments ...
- dbo.Employees ...

ViewsStored Procedures

Query 1 × Query 2 ×

Run Cancel query Save query Export data as Show only Editor

1 SELECT \* FROM Departments;  
2

Results Messages

Search to filter items...

DepartmentName	Number_of_Employees
Human Resources	16
Engineering	31
Marketing	14
Finance	18

Query succeeded | 0s

- We have successfully completed our task.