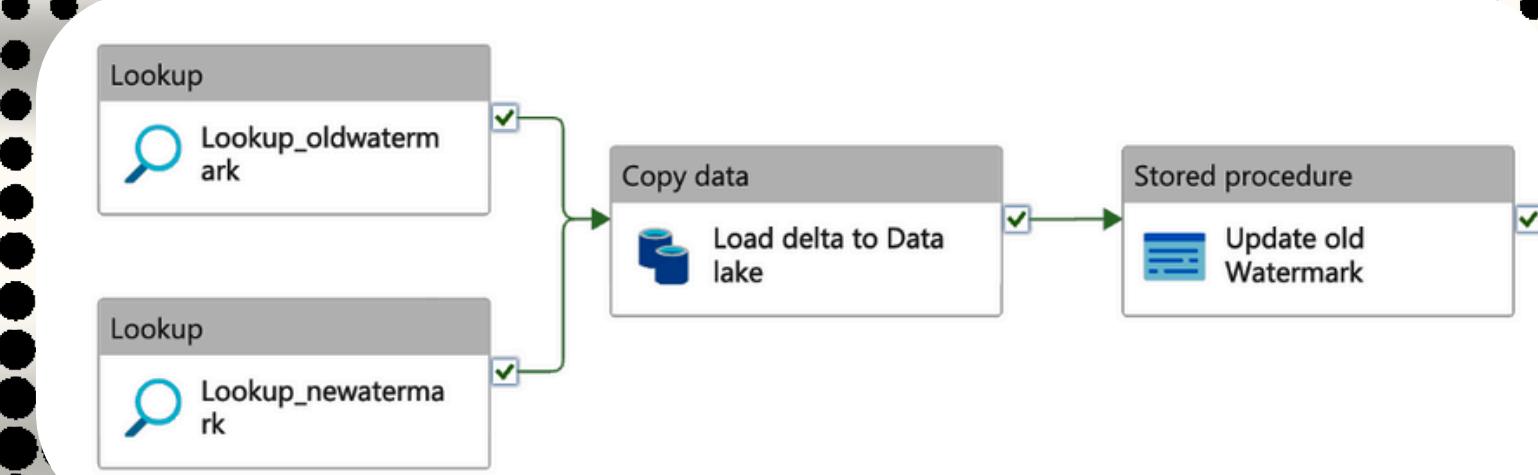
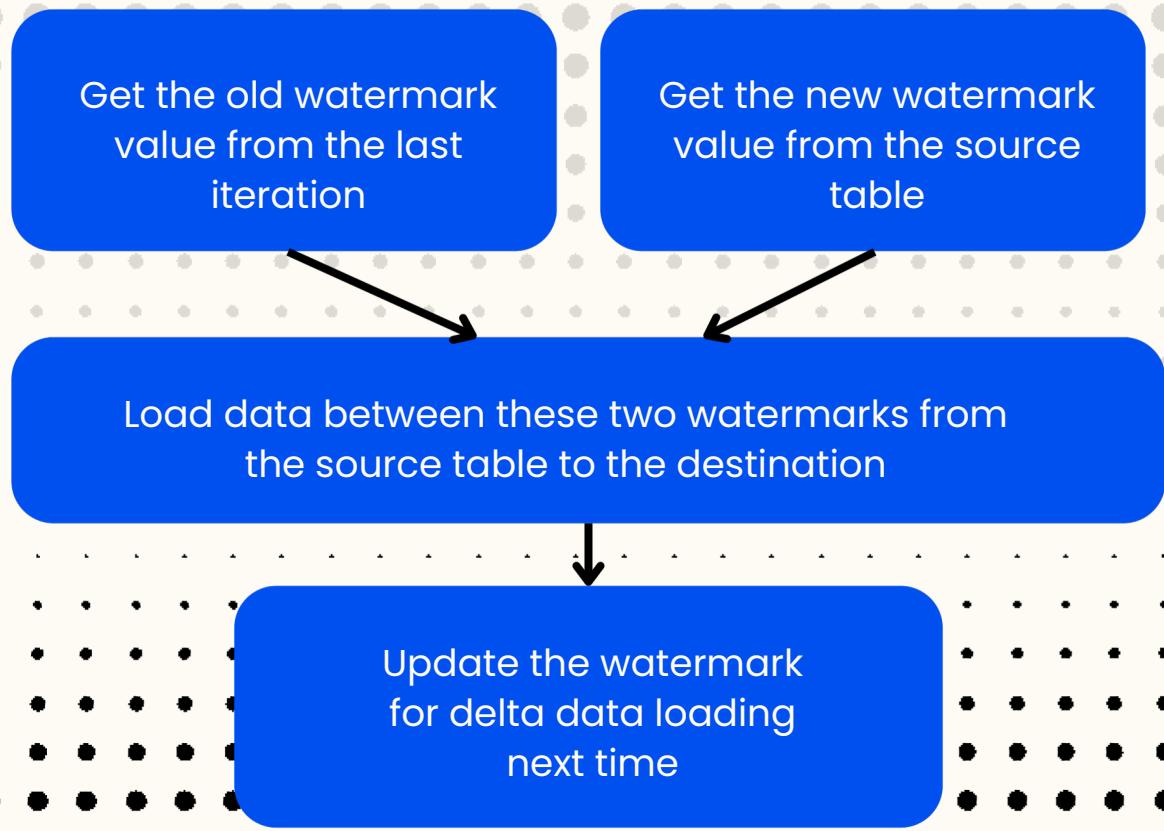


# How to Design the Delta load Pipeline in Azure Data Factory?

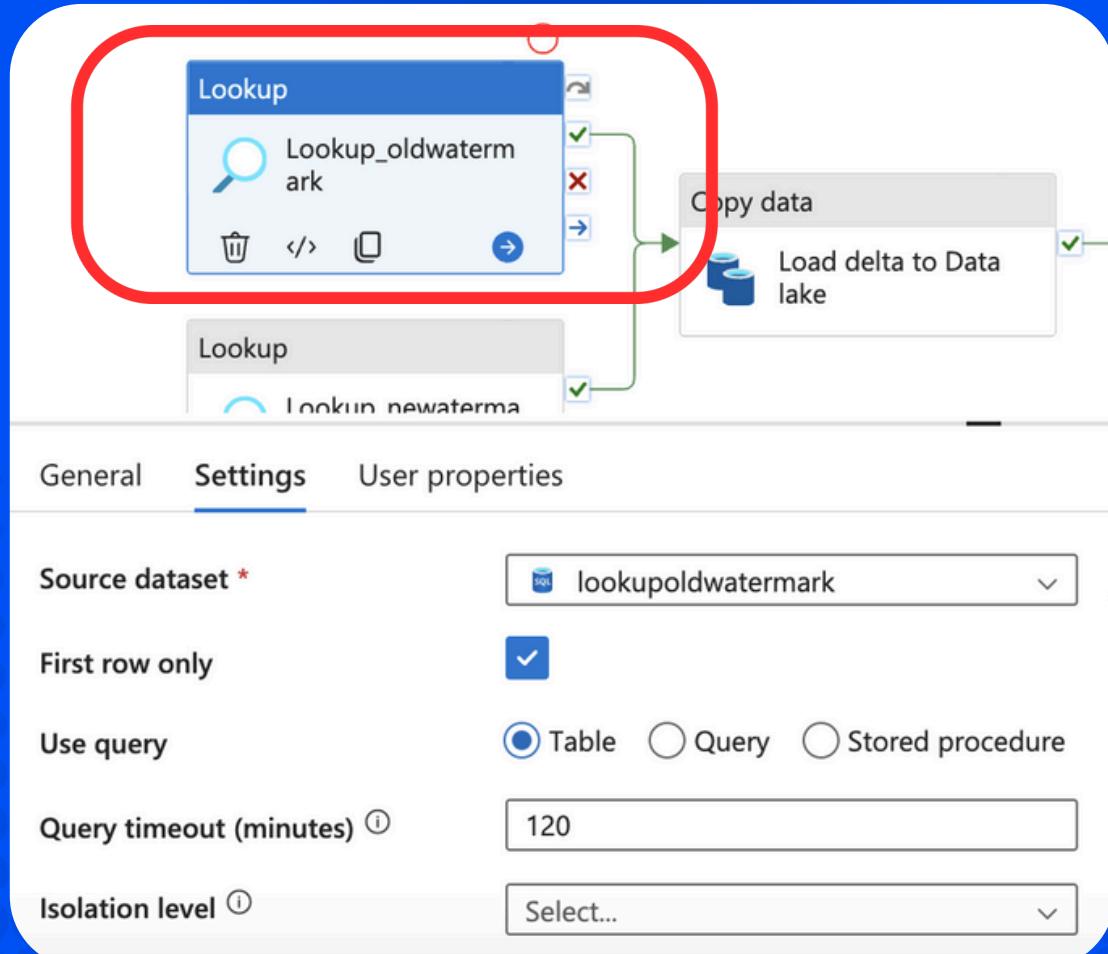


# Configure Lookup\_oldwatermark

**Step1:** Create oldwatermark table in Azure SQL Server and insert very old date

```
1  create table [dbo].[oldwatermark]
2    (watermark date)
3
4
5  insert into [dbo].[oldwatermark]
6  values ('1900-01-01')
```

**Step2:** Configure Lookup\_oldwatermark



# Configure Lookup\_newatermark to get the new watermark from source

The screenshot shows the Azure Data Factory interface with a blue header bar. Below the header, there is a diagram of a data flow pipeline. A red box highlights a 'Lookup' component in the pipeline. Below the pipeline, there is a configuration pane for the 'Lookup' activity.

**General Settings User properties**

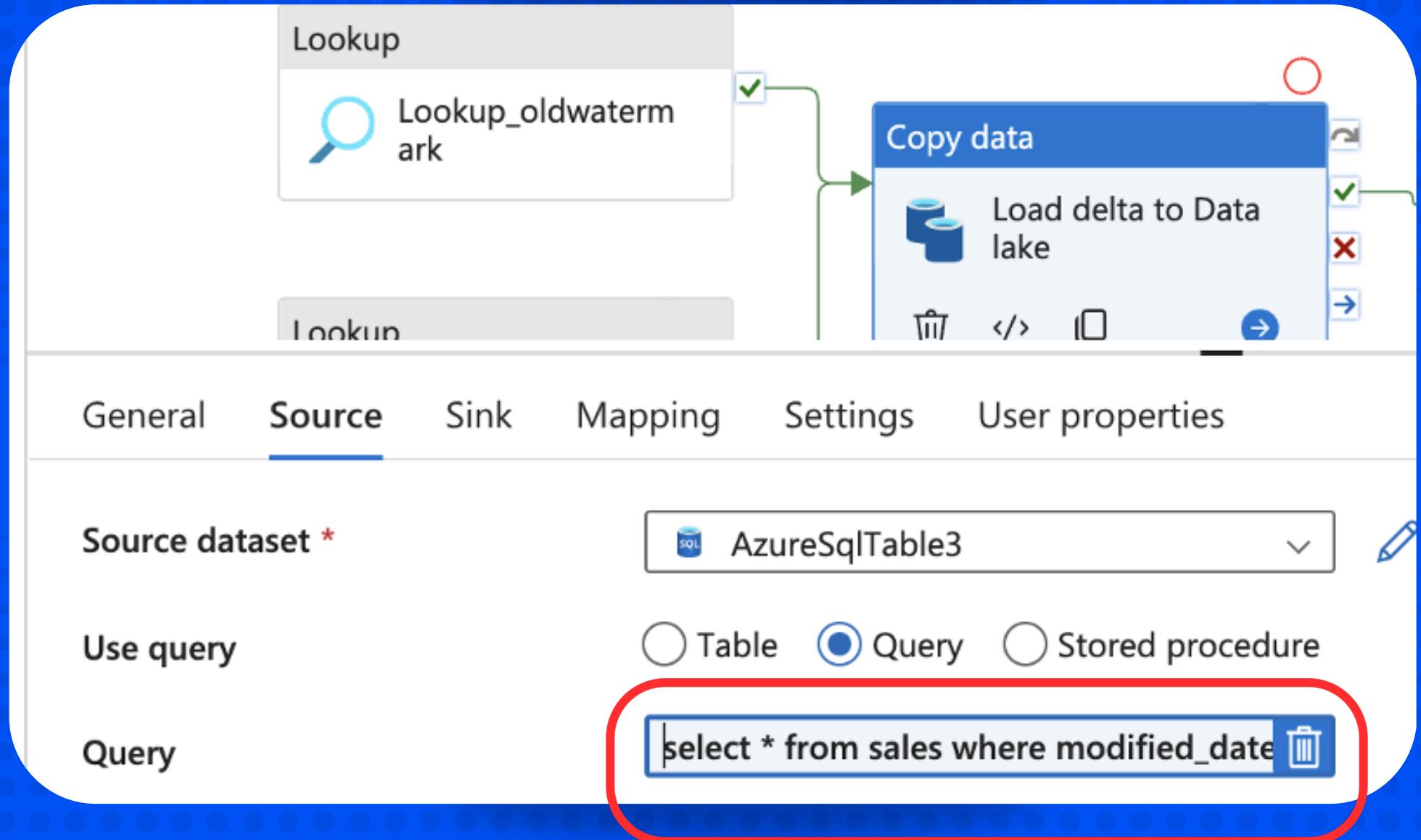
**Source dataset \***: newwatermarkr

**First row only**: checked

**Use query**: selected

**Query \***:  
select max(modified\_date) as  
newwatermark from dbo.sales

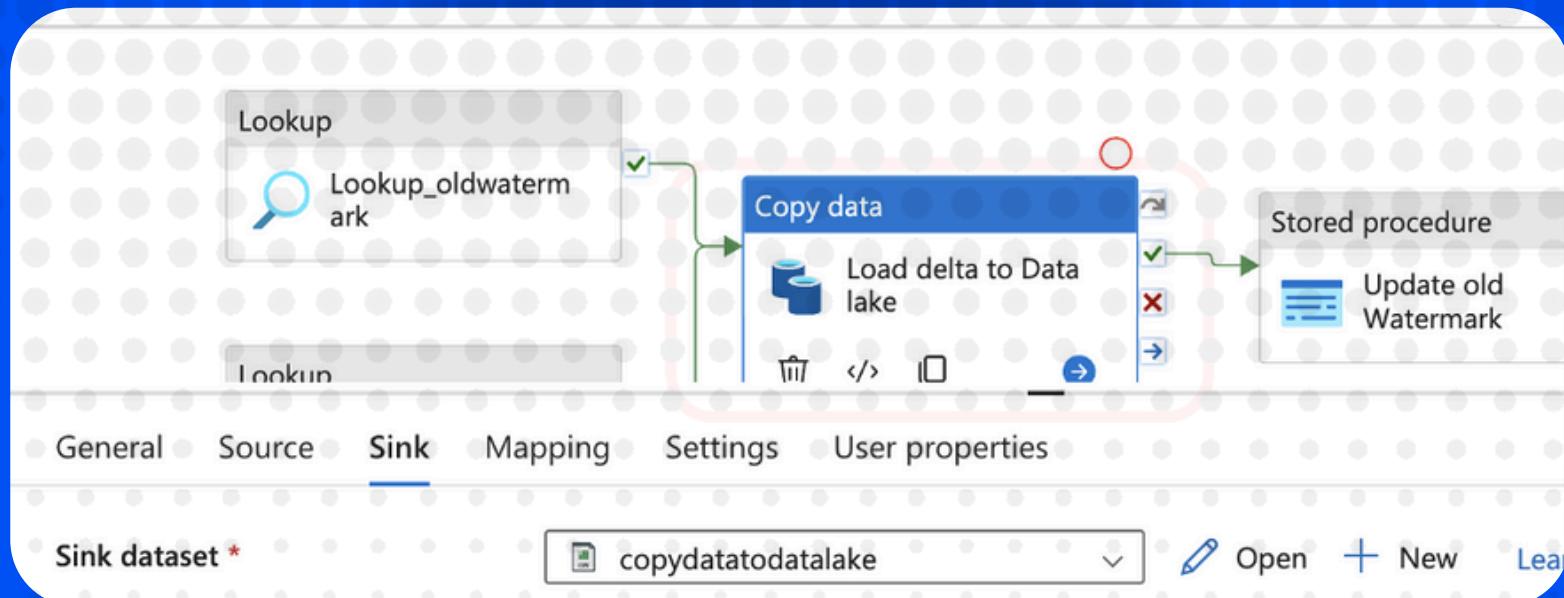
# Configure copy data activity to get the delta from source



Query:

```
select * from sales where modified_date >
'@{{activity('Lookup_oldwatermark').output.firstRow.watermark}}' and modified_date <=
'@{{activity('Lookup_newwatermark').output.firstRow.newwatermark}}'
```

# Configure the sink of copy data activity:



Dataset property:

Parametrize the path to store delta for each date

Connection Schema Parameters

Linked service \* rgstorageellipse Test connection Edit

File path delta / @formatDateTime(utcNow(),'dd\_MM\_yyyy')

Compression type Select...

Column delimiter ⓘ Comma (,)

Row delimiter ⓘ Default (\r,\n, or \r\n)

Encoding ⓘ Default(UTF-8)

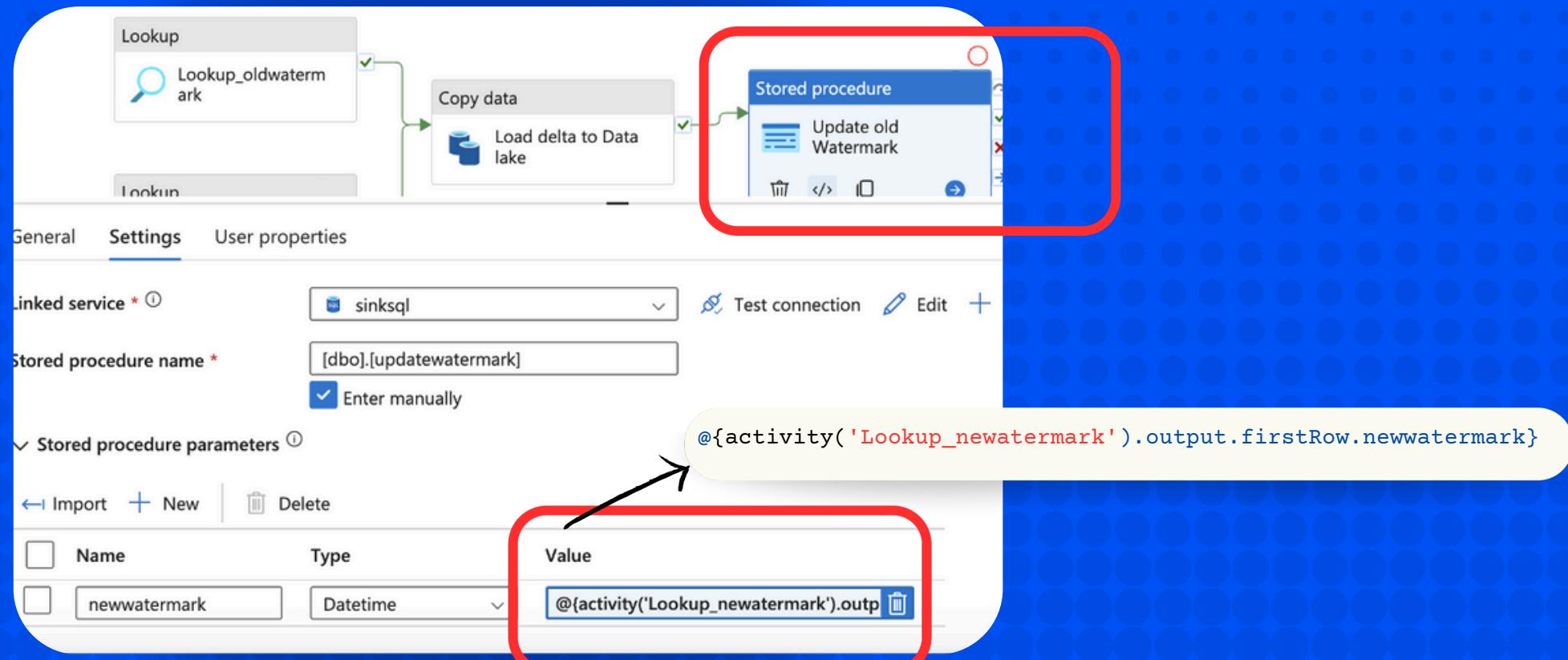
@formatDateTime(utcNow(), 'dd\_MM\_yyyy')

# Configuration of Update Old watermark

## Step 1: Create Stored Procedure in Azure SQL:

```
CREATE procedure updatewatermark
@newwatermark date as begin
update [dbo].[oldwatermark] set
watermark=@newwatermark
```

## Step 2: Trigger stored procedure with ADF



**Run the pipeline to do your  
first delta load:**

