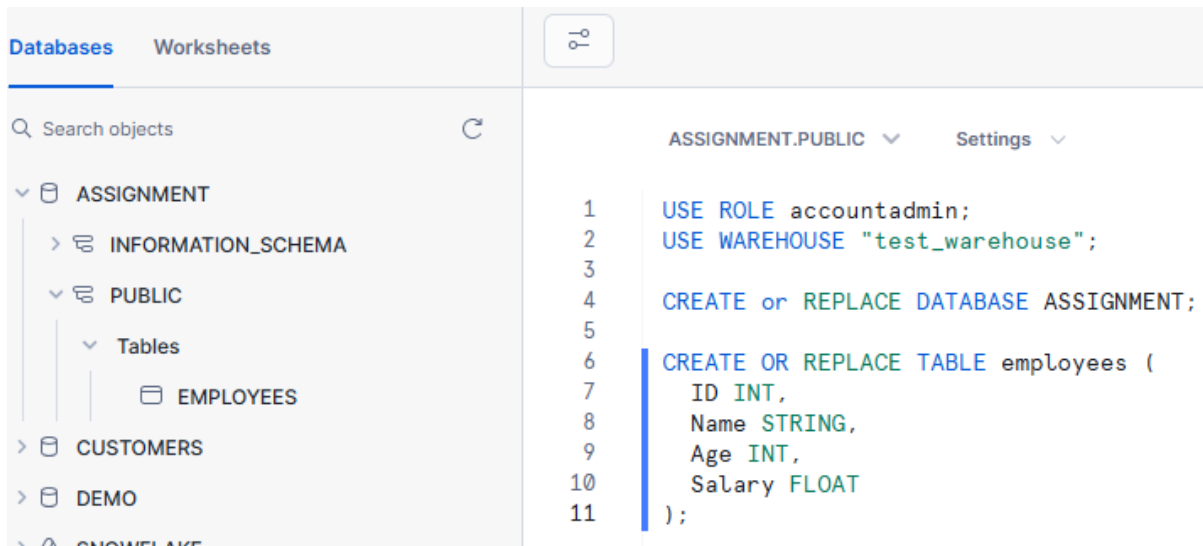


# Assignment -6

- **Create a Target Table in Snowflake:**



- **Set Up a Stage:**

**CSV:**

```
CREATE OR REPLACE STAGE my_stage;
```

**JSON:**

```
CREATE OR REPLACE STAGE my_stage
FILE_FORMAT = (TYPE = 'JSON');
```

**PARQUET:**

```
CREATE OR REPLACE STAGE my_stage
FILE_FORMAT = (TYPE = 'PARQUET');
```

After creating the stage, to upload files into it you have 2 ways:

- Using the Web UI
- Using ShowSQL:

```
snowsql -q "PUT file:///path/to/employees.csv @my_stage;"
```

- **Load Data Using the COPY INTO Command:**

#### **CSV:**

```
COPY INTO employees
FROM @my_stage/Sample-csv.csv
FILE_FORMAT = (TYPE = 'CSV' FIELD_OPTIONALLY_ENCLOSED_BY = '' SKIP_HEADER = 1)
ON_ERROR = 'CONTINUE';
```

#### **JSON:**

```
CREATE OR REPLACE TABLE raw_json_data (
    data VARIANT
);

CREATE OR REPLACE FILE FORMAT json_format
TYPE = 'JSON';

COPY INTO raw_json_data
FROM @my_stage/Sample-json.json
FILE_FORMAT = (TYPE = 'JSON');

CREATE OR REPLACE TABLE employees_json (
    ID INT,
    Name STRING,
    Age INT,
    Salary FLOAT
);
INSERT INTO employees_json
SELECT
    value:ID::INT,
    value:Name::STRING,
    value:Age::INT,
    value:Salary::FLOAT |
FROM raw_json_data,
    LATERAL FLATTEN(input => data);
```

#### **PARQUET:**

```
COPY INTO employees
FROM @my_stage/Sample-parquet.parquet
FILE_FORMAT = (TYPE = 'PARQUET')
MATCH_BY_COLUMN_NAME = 'CASE_INSENSITIVE'
ON_ERROR = 'CONTINUE'
FORCE = TRUE;
```

- **Create a snow pipe:**

**CSV:**

```
CREATE OR REPLACE PIPE my_pipe AS
COPY INTO employees
FROM @my_stage
FILE_FORMAT = (TYPE = 'CSV' FIELD_OPTIONALLY_ENCLOSED_BY = ''');
```

**JSON:**

```
CREATE OR REPLACE PIPE my_pipe AS
COPY INTO employees_json
FROM @my_stage
FILE_FORMAT = (TYPE = 'JSON')
MATCH_BY_COLUMN_NAME = 'CASE_INSENSITIVE';
```

**PARQUET:**

```
CREATE OR REPLACE PIPE my_pipe AS
COPY INTO employees
FROM @my_stage
FILE_FORMAT = (TYPE = 'parquet')
MATCH_BY_COLUMN_NAME = 'CASE_INSENSITIVE';
```

- Manually trigger Snow pipe for testing:

26 | `ALTER PIPE my_pipe REFRESH;`

[↩ Results](#) [~ Chart](#)

	<a href="#">A</a> File	:	<a href="#">A</a> Status	
1	Sample csv.csv		SENT	<a href="#">Q</a>
				<a href="#">Q</a>
				<a href="#">R</a>

```
ALTER PIPE my_pipe SET PIPE_EXECUTION_PAUSED = TRUE

ALTER PIPE my_pipe SET PIPE_EXECUTION_PAUSED = FALSE;
```

- Transform while copying:

Example: Add a default value for Salary if it's NULL.

#### CSV:

```
CREATE OR REPLACE PIPE my_pipe AS
COPY INTO employees
FROM (
  SELECT
    $1 AS id,
    $2 AS name,
    $3 AS age,
    IFF($4 IS NULL, 50000, $4) AS salary
  FROM @my_stage
)
FILE_FORMAT = (TYPE = 'CSV' FIELD_OPTIONALLY_ENCLOSED_BY = '');
```

#### JSON:

```
CREATE OR REPLACE PIPE my_pipe
AS
COPY INTO employees_json
FROM (
  SELECT
    $1:id::INT AS id,
    $1:name::STRING AS name,
    $1:age::INT AS age,
    COALESCE($1:salary::FLOAT, 50000) AS salary
  FROM @my_stage
)
FILE_FORMAT = (TYPE = 'JSON')
ON_ERROR = 'CONTINUE';
```

#### PARQUET:

```
CREATE OR REPLACE PIPE my_pipe AS
COPY INTO employees
FROM (
  SELECT
    $1:id::INT AS id,
    $1:name::STRING AS name,
    $1:age::INT AS age,
    COALESCE($1:salary::FLOAT, 50000) AS salary
  FROM @my_stage
)
FILE_FORMAT = (TYPE = 'PARQUET')
ON_ERROR = 'CONTINUE';
```