# Snowflake Understanding Stages

## Exercise 1: Create and Explore Stages

1. Check available stages in your Snowflake account:

SHOW STAGES;

2. Identify the default user stage and confirm its location:

DESC STAGE;

## Exercise 2: User vs. Table Stages

1. Create a test table:

CREATE OR REPLACE TABLE employee\_staging (id INT, name STRING, department STRING);

2. Upload a CSV file (employee.csv) into user stage:

PUT file://<local\_path>/employee.csv @~ AUTO\_COMPRESS=TRUE;

3. List files in user stage:

LIST @~;

4. Copy data from user stage into the table:

COPY INTO employee\_staging FROM @~/employee.csv.gz FILE\_FORMAT = (TYPE=CSV SKIP\_HEADER=1);

5. Repeat with a table stage:

PUT file://<local\_path>/employee.csv @%employee\_staging AUTO\_COMPRESS=TRUE;

## Exercise 3: Internal Named Stage

1. Create a named internal stage:

CREATE OR REPLACE STAGE my\_internal\_stage;

2. Upload file into it:

PUT file://<local\_path>/employee.csv @my\_internal\_stage AUTO\_COMPRESS=TRUE;

3. Query the stage:

LIST @my\_internal\_stage;

## Exercise 4: External Stage with AWS S3

1. Create an external stage:

CREATE OR REPLACE STAGE my\_s3\_stage URL='s3://mybucket/employees/' CREDENTIALS=(AWS\_KEY\_ID='xxx' AWS\_SECRET\_KEY='yyy') FILE\_FORMAT=(TYPE=CSV SKIP\_HEADER=1);

2. Copy data from S3 into Snowflake table:

COPY INTO employee\_staging FROM @my\_s3\_stage;

## Exercise 5: File Format Options & Compression

1. Create multiple file formats:

CREATE OR REPLACE FILE FORMAT csv\_format TYPE=CSV SKIP\_HEADER=1;

CREATE OR REPLACE FILE FORMAT json\_format TYPE=JSON;

2. Upload file with and without compression:

PUT file://<local\_path>/employee.csv @my\_internal\_stage AUTO\_COMPRESS=FALSE;

PUT file://<local\_path>/employee.csv @my\_internal\_stage AUTO\_COMPRESS=TRUE;

LIST @my\_internal\_stage;

## Exercise 6: Secure File Transfer (PUT & GET)

1. Upload (PUT) local file into stage:

PUT file://<local\_path>/employee.csv @my\_internal\_stage AUTO\_COMPRESS=TRUE;

2. Download (GET) file from stage back to local system:

GET @my\_internal\_stage file://<local\_download\_path>/;