

```
CREATE DATABASE spotify_db;
```

```
CREATE OR REPLACE storage integration s3_init
  TYPE = EXTERNAL_STAGE
  STORAGE_PROVIDER = S3
  ENABLED = TRUE
  STORAGE_AWS_ROLE_ARN = 'arn:aws:iam::241533125232:role/spotify-spark-snowflake-role'
  STORAGE_ALLOWED_LOCATIONS = ('s3://spotify-etl-complete-project')
  COMMENT = 'Creating connection to S3'
```

```
DESC integration s3_init;
```

```
CREATE OR REPLACE FILE FORMAT csv_fileformat
  TYPE = CSV
  FIELD_DELIMITER = ','
  RECORD_DELIMITER = '\n'
  SKIP_HEADER = 1
  NULL_IF = ('NULL','null','')
  EMPTY_FIELD_AS_NULL = TRUE
  TRIM_SPACE = TRUE
  ERROR_ON_COLUMN_COUNT_MISMATCH = FALSE;
```

```
SHOW DATABASES;
```

```
CREATE OR REPLACE stage spotify_stage
  URL = 's3://spotify-etl-complete-project/transformed_data/'
  STORAGE_INTEGRATION = s3_init
  FILE_FORMAT = csv_fileformat;
```

```
LIST @spotify_stage/songs;
```

```
CREATE OR REPLACE TABLE tbl_album(
  album_id STRING,
  name STRING,
  release_date DATE,
  total_tracks INT,
  url STRING
);
```

```
CREATE OR REPLACE TABLE tbl_artists(
  artist_id STRING,
  name STRING,
  url STRING
);
```

```
CREATE OR REPLACE TABLE tbl_songs(
  song_id STRING,
```

```
song_name STRING,  
duration_ms INT,  
url STRING,  
popularity INT,  
song_added DATE,  
album_id STRING,  
artist_id STRING  
);
```

```
COPY INTO tbl_songs  
FROM @spotify_stage/songs/songs_transformed_2025-02-19/run-1739998598433-part-r-00000;
```

```
COPY INTO tbl_artists  
FROM @spotify_stage/artist/artist_transformed_2025-02-19/run-1739999596568-part-r-00008;
```

```
COPY INTO tbl_album  
FROM @spotify_stage/album/album_transformed_2025-02-19/run-1739998589964-part-r-00001;
```

```
COPY INTO tbl_songs  
FROM @spotify_stage/songs/songs_transformed_2025-02-19/run-1739998598433-part-r-00000  
FILE_FORMAT = (TYPE = CSV, FIELD_DELIMITER = ',', RECORD_DELIMITER = '\n', SKIP_HEADER  
= 1, FIELD_OPTIONALLY_ENCLOSED_BY='');
```

```
SELECT * FROM tbl_songs;
```

```
LIST @spotify_stage;
```

```
----- snow pipe -----  
USE SCHEMA PUBLIC;
```

```
CREATE OR REPLACE PIPE spotify_db.pipe.tbl_songs_pipe  
AUTO_INGEST = TRUE  
AS  
COPY INTO public.tbl_songs  
FROM @spotify_db.public.spotify_stage/songs;
```

```
CREATE OR REPLACE PIPE spotify_db.pipe.tbl_artists_pipe  
AUTO_INGEST = TRUE  
AS  
COPY INTO public.tbl_artists  
FROM @spotify_db.public.spotify_stage/artist;
```

```
CREATE OR REPLACE PIPE spotify_db.pipe.tbl_album_pipe  
AUTO_INGEST = TRUE  
AS
```

```
COPY INTO public.tbl_album  
FROM @spotify_db.public.spotify_stage/album;
```

```
DESC pipe tbl_songs_pipe;
```

```
DESC pipe tbl_album_pipe;
```

```
SELECT COUNT(*) FROM tbl_songs;
```

```
ALTER PIPE PIPE.TBL_SONGS_PIPE REFRESH;  
ALTER PIPE PIPE.TBL_ARTISTS_PIPE REFRESH;  
ALTER PIPE PIPE.TBL_ALBUM_PIPE REFRESH;
```

```
SELECT SYSTEM$PIPE_STATUS('pipe.tbl_artists_pipe');
```

```
LIST @spotify_stage;
```

```
DESC pipe tbl_artists_pipe;
```

```
SELECT COUNT(*) FROM tbl_artists;  
SELECT COUNT(*) FROM tbl_album;  
SELECT COUNT(*) FROM tbl_songs;
```

```
SHOW PIPES;
```

```
SELECT SYSTEM$PIPE_STATUS('spotify_db.pipe.tbl_songs_pipe');  
SELECT SYSTEM$PIPE_STATUS('spotify_db.pipe.tbl_artists_pipe');  
SELECT SYSTEM$PIPE_STATUS('spotify_db.pipe.tbl_album_pipe');
```

```
LIST @spotify_stage
```

```
SELECT *  
FROM TABLE(  
    INFORMATION_SCHEMA.COPY_HISTORY(  
        TABLE_NAME => 'PUBLIC.TBL_ALBUM',  
        START_TIME => DATEADD('HOUR', -1, CURRENT_TIMESTAMP)  
    )  
)  
ORDER BY LAST_LOAD_TIME DESC;
```

```
SELECT SYSTEM$PIPE_STATUS('spotify_db.pipe.tbl_album_pipe');  
SELECT SYSTEM$PIPE_STATUS('spotify_db.pipe.tbl_songs_pipe');  
SELECT SYSTEM$PIPE_STATUS('spotify_db.pipe.tbl_artists_pipe');
```

```
SELECT *  
FROM TABLE(INFORMATION_SCHEMA.COPY_HISTORY)  
WHERE TABLE_NAME = 'PUBLIC.TBL_ALBUM'
```

```
ORDER BY LAST_LOAD_TIME DESC;
```

```
SELECT *
```

```
FROM TABLE(
```

```
    INFORMATION_SCHEMA.COPY_HISTORY(
```

```
        START_TIME => DATEADD('HOUR', -1, CURRENT_TIMESTAMP)
```

```
    )
```

```
)
```

```
ORDER BY LAST_LOAD_TIME DESC;
```