

Instance x

Databas x

Instance x

spotify_ x

spotify_ x

snowfla x

spotify_ x

Layers x

Snowpi x

yash_sp x

How to x

what is x

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← → ↺ ap-south-1.console.aws.amazon.com/ec2/home?region=ap-south-1#Instances:

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aws

Services

🔍 Search [Option+S]

🔗 🔔 ? ⚙️ Mumbai ▼ Yash ▼

New EC2 Experience

Tell us what you think

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EC2 Dashboard

EC2 Global View

Events

▼ Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

▼ Images

AMIs

AMI Catalog

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

▼ Network & Security

Security Groups

Instances (1) Info

🔄

Connect

Instance state ▼

Actions ▼

Launch instances ▼

🔍 Find instance by attribute or tag (case-sensitive)

< 1 > ⚙️

<input type="checkbox"/>	Name ▼	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status	Availability Zone ▼	Publ
<input type="checkbox"/>	yash-real-time...	i-0ffc206567b1b029a	✔️ Running 🔍	t2.large	–	No alarms +	ap-south-1a	ec2-4

Select an instance

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CloudShell Feedback

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Name **success**

Queued **0** (0 bytes)

Name	success
Queued	0 (0 bytes)

FetchFile		
FetchFile 1.14.0		
org.apache.nifi - nifi-standard-nar		
In	3 (0 bytes)	5 min
Read/Write	0 bytes / 2.87 MB	5 min
Out	3 (2.87 MB)	5 min
Tasks/Time	3 / 00:00:00.067	5 min

data-warehouse-snowflake-for JupyterLab NiFi Flow

← → ↻ ⚠ Not Secure | 43.205.191.47:4888/lab? ⏏ ☆ ⌵ ⬇ 🗑 Y ⋮

File Edit View Run Kernel Tabs Settings Help

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/ data /

Name	Last Modified
FakeDataset	seconds ago
DataGeneration.ipynb	seconds ago

Launcher DataGeneration.ipynb customer_2023092019352

Python 3 (ipykernel)

```
[2]: from faker import Faker #use to generate the fake data.
import csv
import random
from decimal import Decimal
from datetime import datetime

RECORD_COUNT = 10000
fake = Faker()

[11]: current_time = datetime.now().strftime("%Y%m%d%H%M%S")
print(current_time)

20230920203439

[12]: def create_csv_file():
    with open(f'FakeDataset/customer_{current_time}.csv', 'w', newline='') as csvfile:
        fieldnames = ["customer_id","first_name","last_name","email","street",
                      "city","state","country"]
        writer = csv.DictWriter(csvfile, fieldnames=fieldnames)

        writer.writeheader()
        for i in range(RECORD_COUNT):
            #print(i)
            writer.writerow(
                {
                    "customer_id": i,#fake.random_int(min=1, max=10000),
                    'first_name': fake.first_name(),
                    'last_name': fake.last_name(),
                    'email': fake.email(),
                    'street': fake.street_address(),
                    'city': fake.city(),
                    'state': fake.state(),
                    'country': fake.country()
                }
            )

[13]: if __name__ == '__main__':
    create_csv_file()
```

0 1 Python 3 (ipykernel) | Idle Saving completed Mode: Command Ln 1, Col 1 DataGeneration.ipynb



Name **success**

Queued **0** (0 bytes)

Name	success
Queued	0 (0 bytes)

FetchFile		
FetchFile 1.14.0		
org.apache.nifi - nifi-standard-nar		
In	4 (0 bytes)	5 min
Read/Write	0 bytes / 3.83 MB	5 min
Out	4 (3.83 MB)	5 min
Tasks/Time	4 / 00:00:00.075	5 min

Yash

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s3.console.aws.amazon.com/s3/buckets/yash-mysql-dwh?region=ap-south-1&prefix=stream_data/&showversions=false

awsServicesSearch[Option+S]

GlobalYash

Amazon S3

Buckets

Access Points

Object Lambda Access Points

Multi-Region Access Points

Batch Operations

IAM Access Analyzer for S3

Block Public Access settings for this account

Storage Lens

Dashboards

AWS Organizations settings

Feature spotlight 7

AWS Marketplace for S3

stream_data/

Objects

Properties

Objects (4)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Refresh

Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder

Upload

Find objects by prefix

Name

Type

Last modified

Size

Storage class

customer_20230920193526-checkpoint.csv

csv

September 21, 2023, 02:02:34 (UTC+05:30)

980.3 KB

Standard

customer_20230920193526.csv

csv

September 21, 2023, 02:02:34 (UTC+05:30)

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customer_20230920203343.csv

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customer_20230920203439.csv

csv

September 21, 2023, 02:04:46 (UTC+05:30)

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Standard

CloudShell

Feedback

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2023-09-21 2:10am - Snowfla

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← → ↺ app.snowflake.com/tsdbsqw/zh79962/w49CZ3mZhUaV/query

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Worksheets

InstaCart Fact Dim

snowpipe

storage_integration

2023-09-21 2:10am

2023-09-21 2:15am

2023-09-21 2:38am

2023-09-21 2:40am

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Databases

Worksheets

ACCOUNTADMIN

COMPUTE_WH

Share

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Pinned (0)

No pinned objects

🔍 All Objects

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> 🗄 SCD_DEMO

> 🗄 SNOWFLAKE

> 🗄 SNOWFLAKE_SAMPLE_DATA

> 🗄 YASH_DW1

SCD_DEMO.SCD2

Settings

Latest Version

🔍

1 create database if not exists scd_demo;

2 use database scd_demo;

3 create schema if not exists scd2;

4 use schema scd2;

5 show tables;

6

7 create or replace table customer (

8 customer_id number,

9 first_name varchar,

10 last_name varchar,

11 email varchar,

12 street varchar,

13 city varchar,

14 state varchar,

15 country varchar,

16 update_timestamp timestamp_ntz default current_timestamp());

17

18 create or replace table customer_history (

19 customer_id number,

20 first_name varchar,

21 last_name varchar,

22 email varchar,

23 street varchar,

24 city varchar,

25 state varchar,

26 country varchar,

27 start_time timestamp_ntz default current_timestamp(),

28 end_time timestamp_ntz default current_timestamp(),

29 is_current boolean

30);

31

32 create or replace table customer_raw (

33 customer_id number,

34 first_name varchar,

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2023-09-21 2:15am - Snowflake

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app.snowflake.com/tsdbsqw/zh79962/w3FZ8lcMBjvC/query

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Worksheets

InstaCart Fact Dim

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Databases

Worksheets

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ACCOUNTADMIN • COMPUTE_WH

Share

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Pinned (0)

No pinned objects

🔍 All Objects

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> 📁 SCD_DEMO

> 📁 SNOWFLAKE

> 📁 SNOWFLAKE_SAMPLE_DATA

> 📁 YASH_DW1

SCD_DEMO.SCD2 ⌵

Settings ⌵

Latest Version ⌵

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```
CREATE OR REPLACE STAGE SCD_DEMO.SCD2.customer_ext_stage
  url='s3://yash-mysql-dwh/stream_data/'
  credentials=(aws_key_id='AKIAYQRCIOB4Z2I7DVOG' aws_secret_key='');

CREATE OR REPLACE FILE FORMAT SCD_DEMO.SCD2.CSV
TYPE = CSV,
FIELD_DELIMITER = ','
SKIP_HEADER = 1;

SHOW STAGES;
LIST @customer_ext_stage;

CREATE OR REPLACE PIPE customer_s3_pipe
  auto_ingest = true
  AS
  COPY INTO customer_raw
  FROM @customer_ext_stage
  FILE_FORMAT = CSV
  ;

--select * from customer_raw;

show pipes;
select SYSTEM$PIPE_STATUS('customer_s3_pipe');

SELECT count(*) FROM customer_raw limit 10;

TRUNCATE customer_raw;
```

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2023-09-21 2:38am - Snowfla X

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app.snowflake.com/tsdbsqw/zh79962/w3MsFu0vFBHK/query

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Worksheets

InstaCart Fact Dim

snowpipe

storage_integration

2023-09-21 2:10am

2023-09-21 2:15am

2023-09-21 2:38am

2023-09-2

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Databases

Worksheets

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ACCOUNTADMIN • COMPUTE_WH

Share

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Pinned (0)

No pinned objects

🔍 All Objects

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> 📁 SCD_DEMO

> 📁 SNOWFLAKE

> 📁 SNOWFLAKE_SAMPLE_DATA

> 📁 YASH_DW1

SCD_DEMO.SCD2 ▾

Settings ▾

Latest Version ▾

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```
merge into customer c
using customer_raw cr
  on c.customer_id = cr.customer_id
when matched and c.customer_id <> cr.customer_id or
      c.first_name <> cr.first_name or
      c.last_name <> cr.last_name or
      c.email <> cr.email or
      c.street <> cr.street or
      c.city <> cr.city or
      c.state <> cr.state or
      c.country <> cr.country then update
  set c.customer_id = cr.customer_id
      ,c.first_name = cr.first_name
      ,c.last_name = cr.last_name
      ,c.email = cr.email
      ,c.street = cr.street
      ,c.city = cr.city
      ,c.state = cr.state
      ,c.country = cr.country
      ,update_timestamp = current_timestamp()
when not matched then insert
  (c.customer_id,c.first_name,c.last_name,c.email,c.street,c.city,c.state,c.country)
  values (cr.customer_id,cr.first_name,cr.last_name,cr.email,cr.street,cr.city,cr.state,cr.country);

select * from customer;
truncate customer;

CREATE OR REPLACE PROCEDURE pdr_scd_demo()
returns string not null
language javascript
```

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2023-09-21 3:24pm - Snowfla

app.snowflake.com/tsdbsqw/zh79962/w4gDDV8B4xoh#query

Worksheets

snowpipe

storage_integration

2023-09-21 2:10am

2023-09-21 2:15am

2023-09-21 2:38am

2023-09-21 3:24pm

Databases

Worksheets

ACCOUNTADMIN

COMPUTE_WH

Share

Pinned (0)

No pinned objects

All Objects

SCD_DEMO

SNOWFLAKE

SNOWFLAKE_SAMPLE_DATA

YASH_DW1

SCD_DEMO.SCD2

Settings

Latest Version

1 show streams;

2 select * from customer_table_changes;

3

4 insert into customer values(223136,'Jessica','Arnold','tanner39@smith.com','595 Benjamin Forge Suite

124','Michaelstad','Connecticut'

5 , 'Cape Verde',current_timestamp());

6

7 update customer set FIRST_NAME='Jessica', update_timestamp = current_timestamp()::timestamp_ntz where customer_id=72;

8 delete from customer where customer_id =73 ;

9

10 select * from customer_history where customer_id in (72,73,223136);

11 select * from customer_table_changes;

12 select * from customer where customer_id in (72,73,223136);

13

14

15 --View Creation--

16 create or replace view v_customer_change_data as

17 -- This subquery figures out what to do when data is inserted into the customer table

18 -- An insert to the customer table results in an INSERT to the customer_HISTORY table

19 select CUSTOMER_ID, FIRST_NAME, LAST_NAME, EMAIL, STREET, CITY,STATE,COUNTRY,

20 start_time, end_time, is_current, 'I' as dml_type

21 from (

22 select CUSTOMER_ID, FIRST_NAME, LAST_NAME, EMAIL, STREET, CITY,STATE,COUNTRY,

23

Results

Chart

	status
1	Statement executed successfully.

Query Details

Query duration182ms

Rows1

Query ID01af2288-3200-e148-0...