



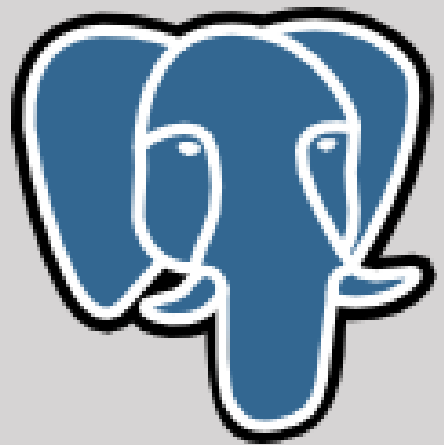
# 2 simple ways to write data to **AWS** **RDS**

RDS Running Postgres DB

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# What is a Database

## LAYMAN DEFINITION



## A General Purpose Database

Database is a server + application that stores data of any type and serves the stored data when it is Queried

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Database Server has many database in it.

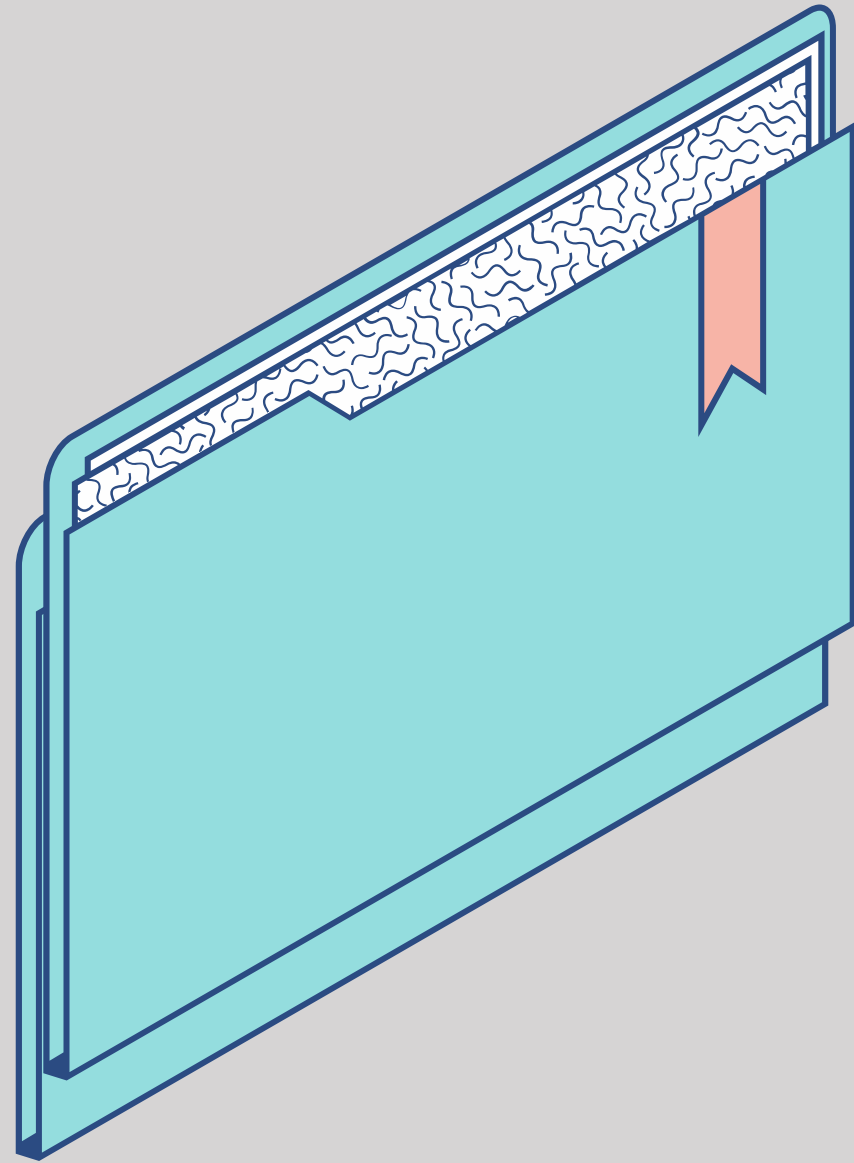
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Each Database can have many tables inside them.

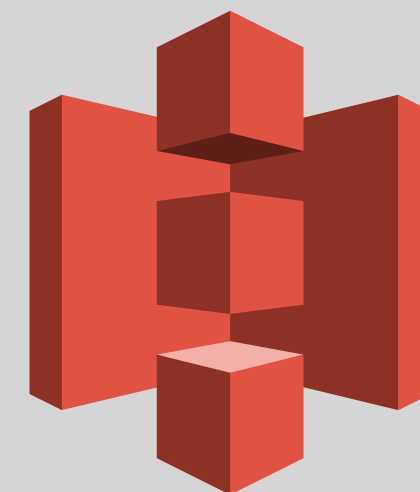
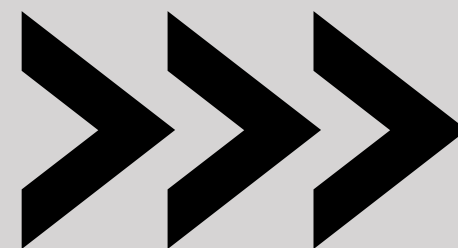
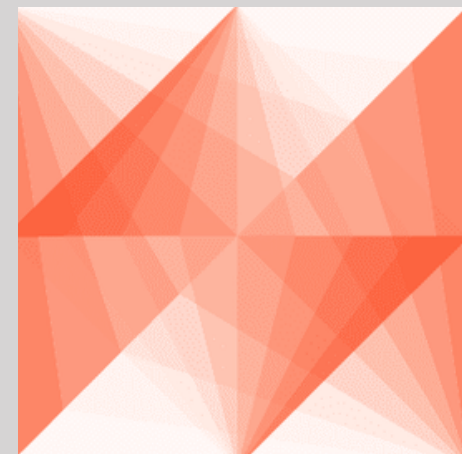
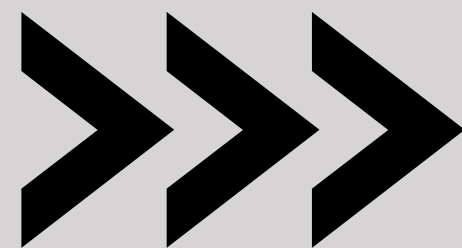
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Each Tables stores data as Tuples

# Pre-Requisites



- Comfortable with AWS Wrangler & Pandas
- Ready to use Psycopg2 and Pandas Library



## 2 ways to write data to RDS

# RDS - Instance with Postgres

PSEUDOCODE

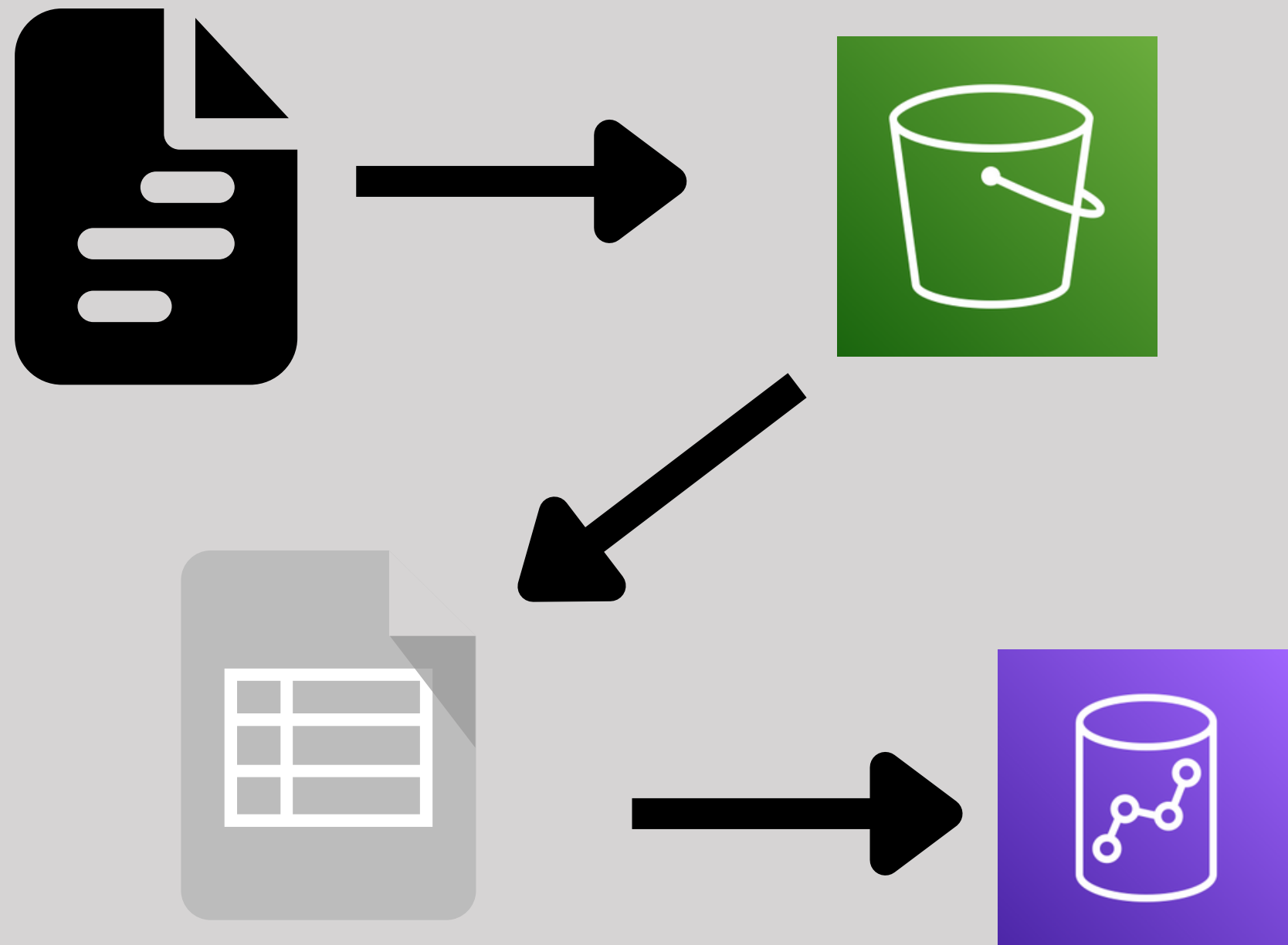
- Start the DB instance if not running
- Secure the DB Credentials in config file

There are two efficient ways to write data to DB. Both will require psycopg2 binary library for creating connection

1. Use pandas sql method to write data to RDS
2. Use psycopg2 to copy file from s3 to RDS

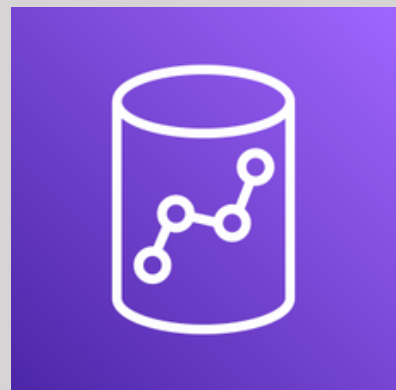
# LIVE DEMO

SUPER CHARGING ATHENA



## Terminal+ PSQL

1. Get the RDS Instance up and running.
2. Connect to Database over PSQL
3. Create table and check by querying



# Method 1 : Pandas Route

File location : S3 / Local hard\_drive

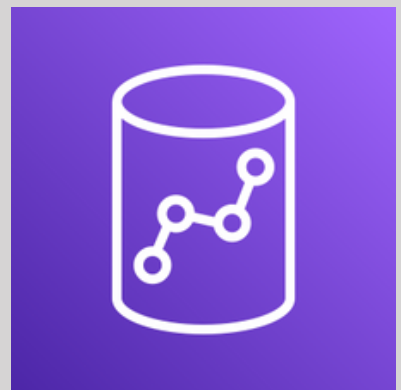
RDS Connection : Psycopg2 connection object

Read local file into Pandas DataFrame

Ensure there is no Null or missing values in Dataframe

Write the dataframe using  
`yourDataframe.to_sql(table_name, connection)`

Check the write  
`schema = pd.read_sql(f"\"SELECT * FROM  
{Table_Name}\"\",con=credentials)`



## Method 2 : Copy Command Route

File location : S3 will be best

RDS Connection : Psycopg2 connection object

Connect to RDS DB using Psql and create Table

Copy the Data to S3 using AWS Wrangler

Use the Copy command query and write the data to database

Check the write

```
schema = pd.read_sql(f"""\nSELECT * FROM\n{Table_Name}""", con=credentials)
```



**THANK  
YOU**