EXPERIMENT- 09

Student Name: Amrit Dey **UID: 23BCS12543**

Branch: BE-CSE **Section/Group: KRG 1(A)**

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Subject Name: ADBMS **Subject Code: 23CSP-333**

1. Aim:
To create and connect a PostgreSQL database instance on **Amazon RDS (Relational Database Service)**

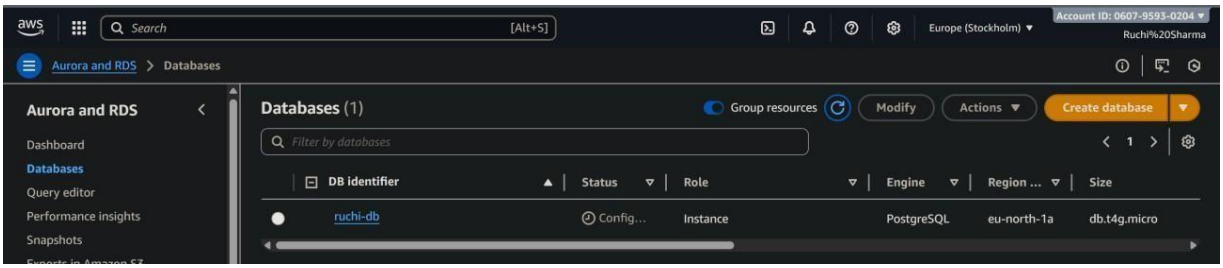
2. Objective:
- To understand the steps involved in launching a database instance using Amazon RDS.
- To configure a database for public access and connect it with a local client (pgAdmin).
- To perform basic SQL operations (CREATE, INSERT, SELECT).

3. Tools / Software
- Amazon Web Services (AWS)
- PostgreSQL
- pgAdmin 4
- RDS (Relational Database Service)

4. Program:

Step 1: Create and Configure Database Instance

1. Login to AWS Console → RDS → Create database, select Standard create and PostgreSQL under the Free Tier template.
2. Set DB identifier: ruchi-db, Username: postgre, choose db.t3.micro, 20 GB gp2 storage, and enable Public access.



3. Click Create database and wait until the status shows Available in the RDS dashboard.

Step 2: Configure Security Group (Allow Local Access Only)

1. In AWS Console → go to RDS → Databases → click your DB (ruchi-db).
2. Open the Connectivity & Security tab.
3. Under VPC security groups, click the linked group name (it opens EC2 security groups).
4. Click Edit inbound rules → Add rule
   - Type: PostgreSQL
   - Protocol: TCP
   - Port: 5432 • Source: My IP

5. Click Save rules.

Step 3: Connect Database Using pgAdmin

1. Open pgAdmin 4 on your local system.
2. Right-click Servers → Create → Server.

3. Under the General tab, enter the name: postgre.
4. Under the Connection tab, fill in the following details:
    - Host name/address: ruchi-db.xxxxxxx.rds.amazonaws.com
    - Port: 5432
    - Username: postgre
    - Check Save password.
5. Click Save to connect your RDS PostgreSQL database.