



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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## EXPERIMENT- 09

|                                  |                                 |
|----------------------------------|---------------------------------|
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| <b>Branch:</b> BE-CSE            | <b>Section/Group:</b> KRG-1 (B) |
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| <b>Subject Name:</b> ADBMS       | <b>Subject Code:</b> 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).□

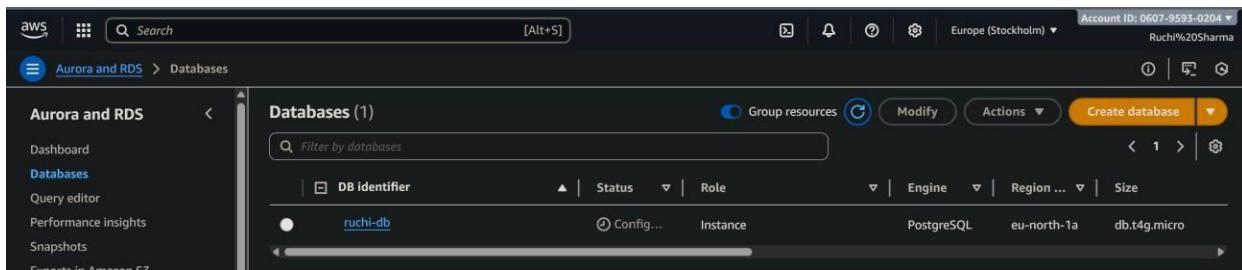
### 3. Tools / Software

- 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.





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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.

| Name                  | Security group rule ID | IP version  | Type | Protocol | Port range     | Source                         |
|-----------------------|------------------------|-------------|------|----------|----------------|--------------------------------|
| sgr-0d39d1bf593210da4 | IPv4                   | PostgreSQL  | TCP  | 5432     | 106.206.235.43 | sg-0570f959421927738 - default |
| sgr-0ee4f18536cb88772 | -                      | All traffic | All  | All      | -              | 106.206.235.43                 |

## 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.