

## **EXPERIMENT- 09**

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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

- AmazonWeb 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  $\rightarrow$  go to RDS  $\rightarrow$  Databases  $\rightarrow$  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  $\rightarrow$  Add rule

Type: PostgreSQLProtocol: TCP 2

Port: 5432 Source: My IP

5. Click Saverules.



### Step3:ConnectDatabaseUsingpgAdmin

- 1. Open pgAdmin 4 on your local system.
- 2. Right-click Servers  $\rightarrow$  Create  $\rightarrow$  Server.
- 3. Under the General tab, enter the name: postgre.
- 4. Under the Connection tab, fill in the following details:
  - Host name/address: ruchidb.xxxxxxx.rds.amazonaws.com
  - Port: 5432 Username: postgre Check Save password.
- 5. Click Save to connect your RDS PostgreSQL database.

