



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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EXPERIMENT- 09

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Semester: 05

Date of Performance: 30/10/25

Subject Name: ADBMS

Subject Code: 23CSP-333

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

The screenshot shows the 'Databases (1)' section of the Amazon RDS console. On the left, there's a sidebar with various navigation links. The main area displays a table with one row for the database 'ayush-db'. The columns in the table are 'DB Identifier', 'Role', 'Engine', 'Region', and 'Size'. The 'DB Identifier' column shows 'ayush-db', 'Role' shows 'Config...', 'Engine' shows 'PostgreSQL', 'Region' shows 'eu-north-1a', and 'Size' shows 'db.t4g.micro'. There are buttons for 'Modify' and 'Create database' at the top right of the table area.

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: postgres, 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.

Inbound rules (2)						
	Name	Security group rule ID	IP version	Type	Protocol	Port range
<input type="checkbox"/>	-	sgr-0d39d1bf593210da4	IPv4	PostgreSQL	TCP	5432
<input type="checkbox"/>	-	sgr-0ee4f18536cb88772	-	All traffic	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.

