DEPARTMENTOF
COMPUTERSCIENCE&ENGINEERING
Discover. Learn. Empower.

Experiment -9

Student Name: Tanisha Kumari **UID:** 23BCS12542
Branch: BE-CSE **Section/Group:** KRG_2B
Semester:5th **Date of Performance:**27/10/25
Subject Name: Advanced Database and Management System
Subject Code:23CSP-333

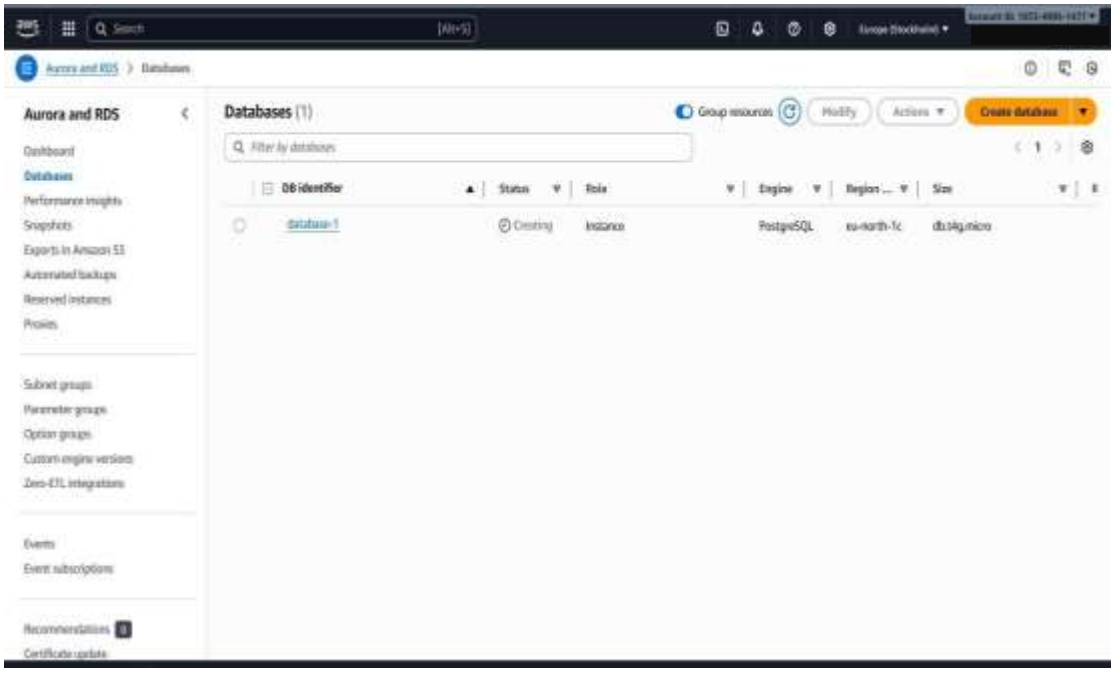
1. Aim

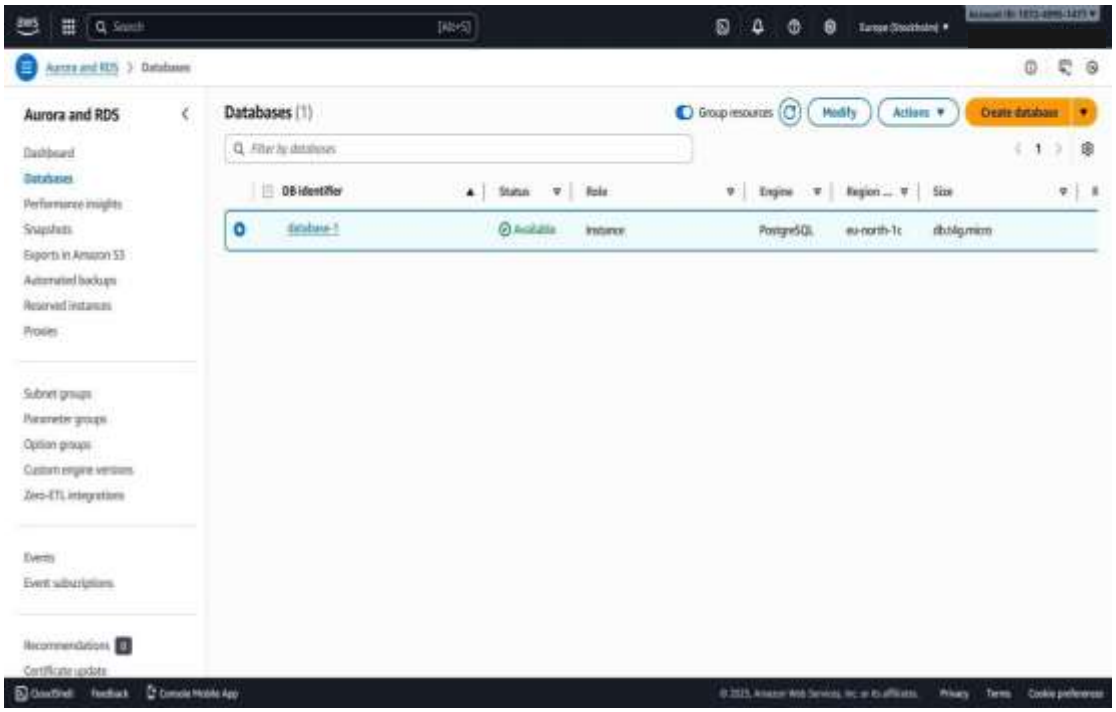
To create, configure, and connect an Amazon RDS PostgreSQL database instance on AWS, and verify successful database operations using a client tool.

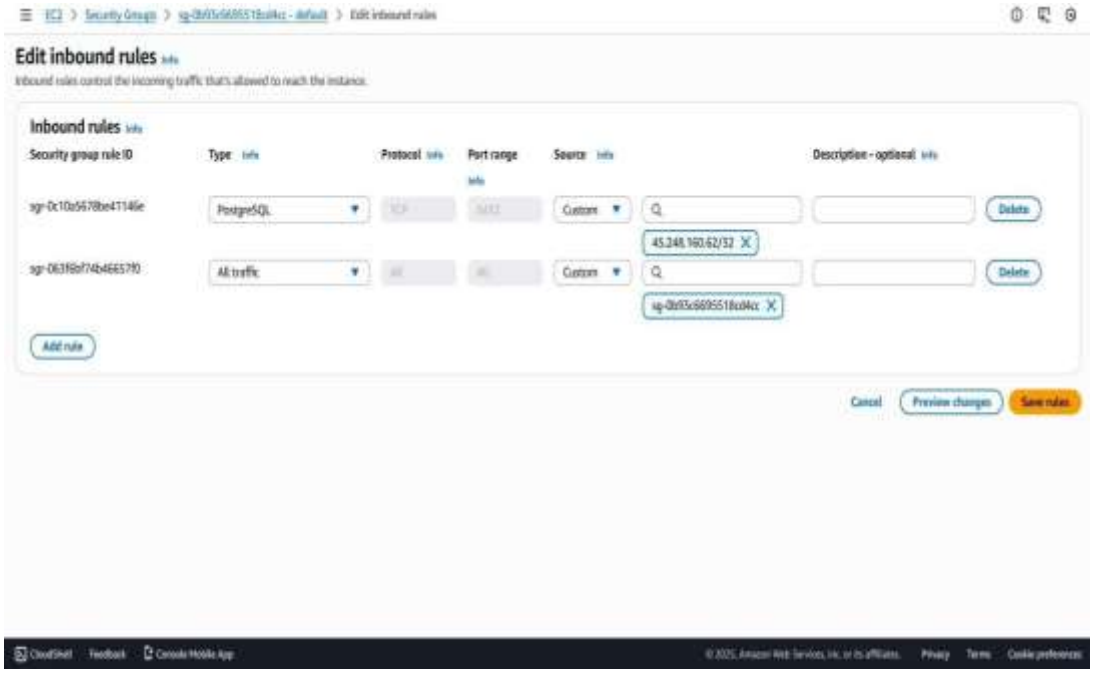
2. Objectives:

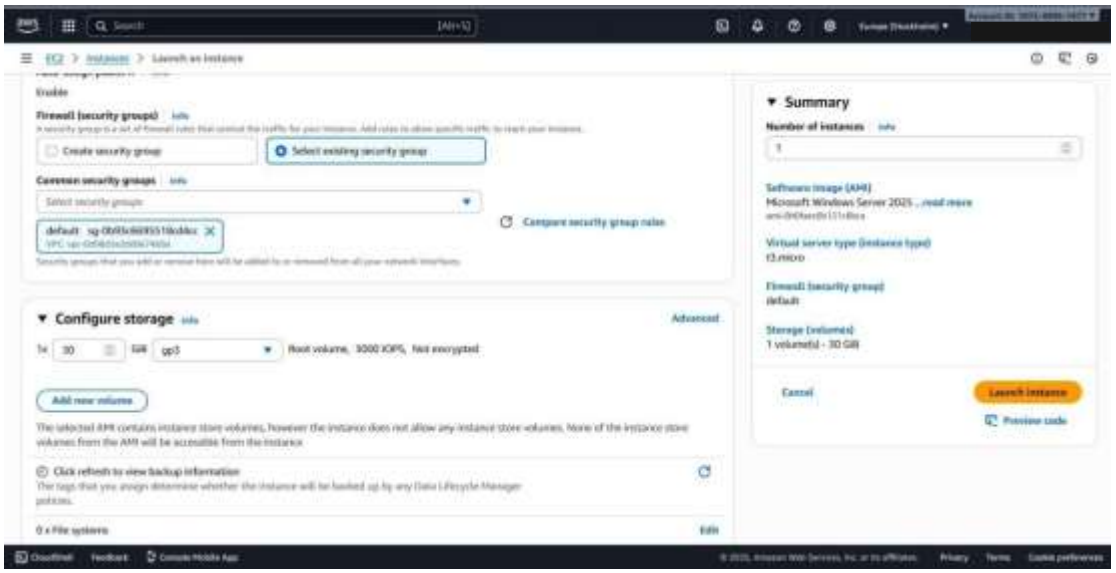
1. To understand the concept of managed relational database services in AWS (Amazon RDS).
2. To create a PostgreSQL database instance using AWS RDS.
3. To configure DB parameters such as instance size, storage, authentication, and security groups.
4. To connect the RDS instance from a PostgreSQL client (e.g., pgAdmin/psql).
5. To execute basic SQL queries to validate connectivity and database functionality.

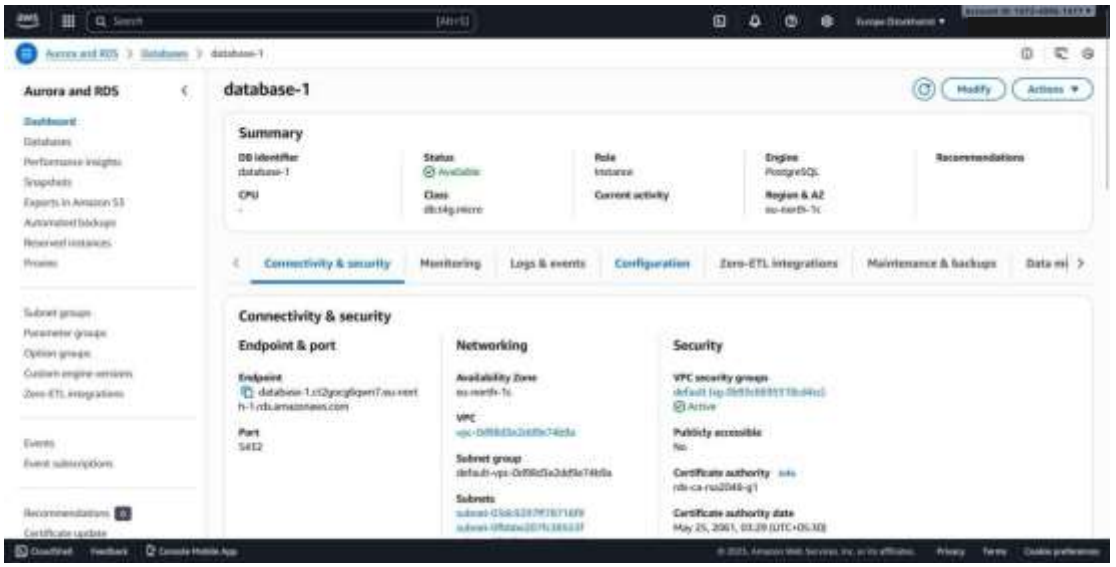
3. AWS RDS OPERATIONS AND OUTPUTS -

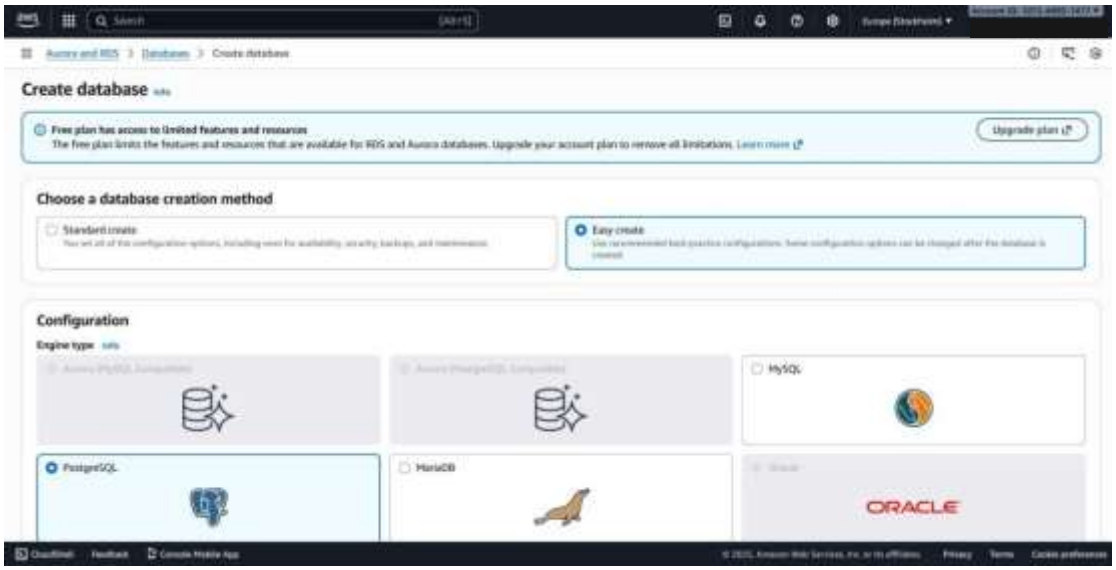



Aurora and RDS
Databases (1)
Group resources
Modify
Actions
Create database
Filter by databases
DB identifier
Status
Role
Engine
Region ...
Size
database-1
Available
Instance
PostgreSQL
eu-north-1c
db.t4g.micro
Dashboard
Databases
Performance insights
Snapshots
Exports in Amazon S3
Automated backups
Reserved instances
Proxies
Subnet groups
Parameter groups
Option groups
Custom engine versions
Zero-ETL integrations
Events
Event subscriptions
Recommendations
Certificate update

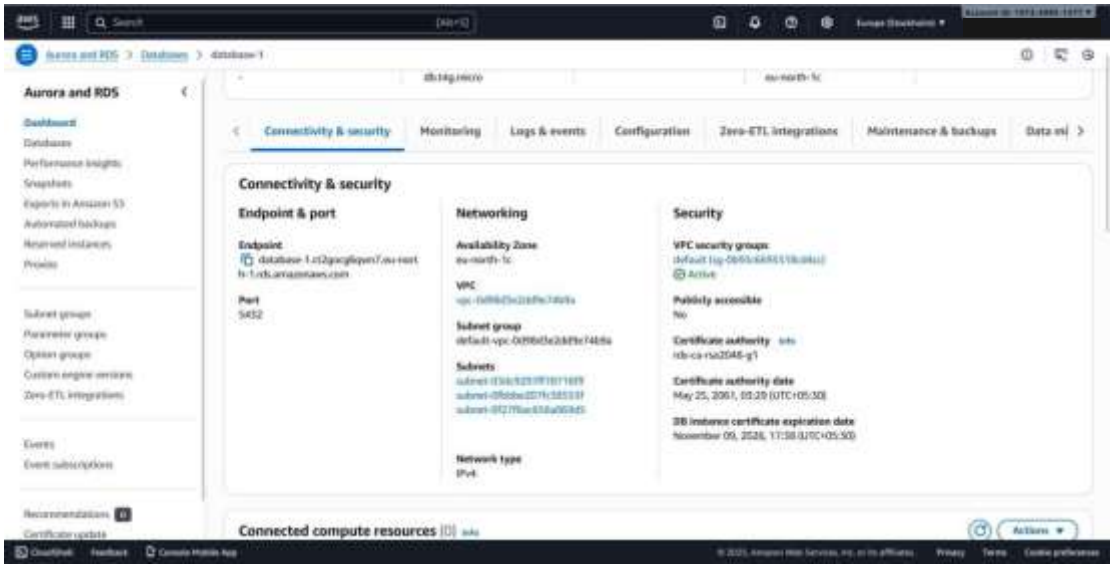

Edit inbound rules
Inbound rules control the incoming traffic that's allowed to reach the instance.
Inbound rules
Security group rule ID
Type
Protocol
Port range
Source
Description - optional
sgr-0c10a5678be4714fe
PostgreSQL
Custom
45.248.160.62/32
Delete
sgr-063f8bf74b4665710
All traffic
Custom
Delete
Add rule
Cancel
Preview changes
Save rules

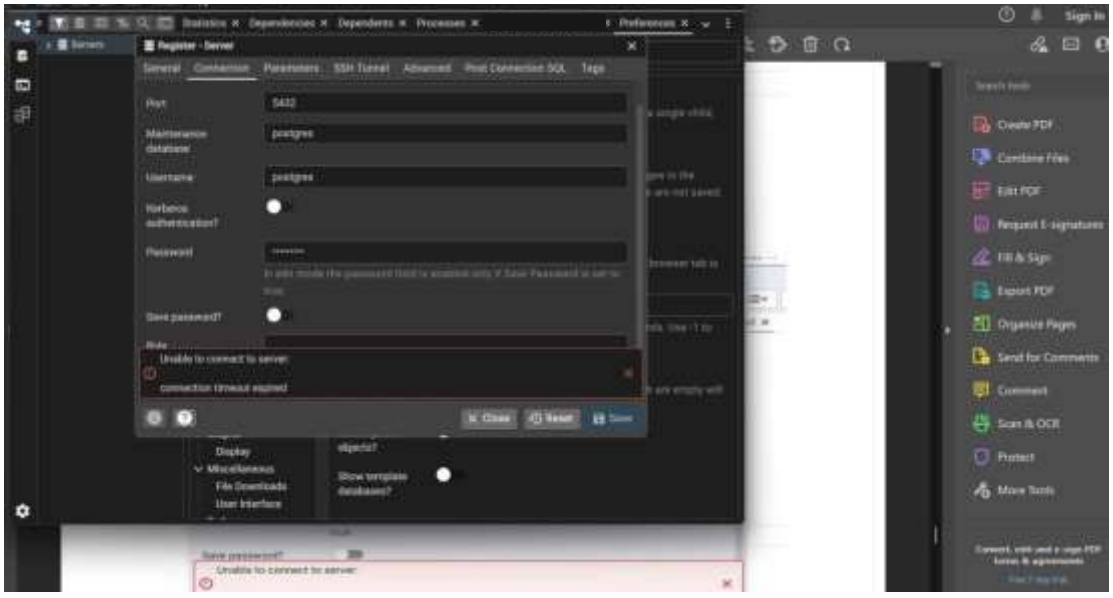

Summary
Number of instances
Software image (AMI)
Virtual server type (instance type)
t3.micro
Firewall (security group)
default
Storage (volumes)
1 volume(s) - 30 GiB
Cancel
Launch instance
Preview code
Configure storage
Add new volume
Click refresh to view backup information

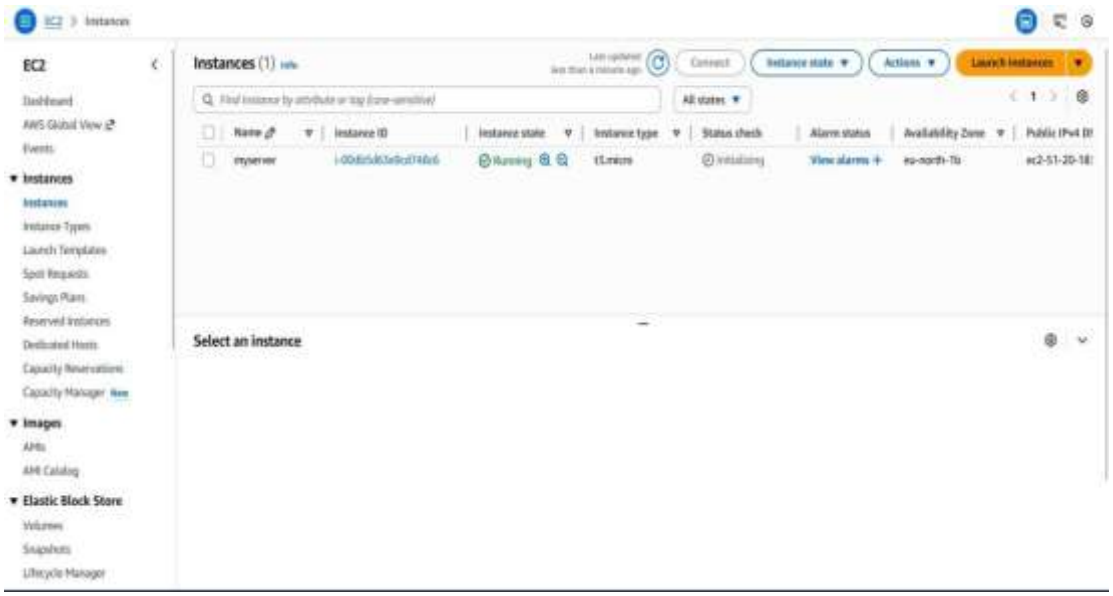

Aurora and RDS
database-1
Modify
Actions
Summary
DB identifier
database-1
Status
Available
Role
Instance
Engine
PostgreSQL
Recommendations
CPU
Class
db.t4g.micro
Current activity
Region & AZ
Connectivity & security
Monitoring
Logs & events
Configuration
Zero-ETL integrations
Maintenance & backups
Endpoint & port
Networking
Security
Endpoint
Port
5432
Availability Zone
VPC
Subnet group
Subnets
VPC security groups
Active
Publicly accessible
No
Certificate authority
Certificate authority date


Create database
Free plan has access to limited features and resources
Upgrade plan
Choose a database creation method
Standard create
Easy create
Configuration
Engine type
MySQL
PostgreSQL
MariaDB
ORACLE

Publicly accessible	No	Yes
Database port	5432	Yes
DB instance identifier	database-1	Yes
DB engine version	17.6	Yes
DB parameter group	default.postgres17	Yes
	Database Insights -	






EC2 > Instances
EC2
Dashboard
AWS Global View
Events
Instances
Instances
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances
Dedicated Hosts
Capacity Reservations
Capacity Manager New
Images
AMIs
AMI Catalog
Elastic Block Store
Volumes
Snapshots
Lifecycle Manager
Instances (1) info
Last updated less than a minute ago
Connect
Instance state
Actions
Launch instances
Find instance by attribute or tag (case-sensitive)
All states
1
Name
Instance ID
Instance state
Instance type
Status check
Alarm status
Availability Zone
Public IPv4 D
myserver
Running
t3.micro
Initializing
View alarms
eu-north-1b
Select an instance