

# Implementing RDS Database instance in AWS

## What is RDS?

RDS stands for Relational Database Service.

It is a managed DB service for DB that use SQL as query language.

It allows you to create a databases in cloud that are managed by AWS-

- Postgres
- MySQL
- MariaDB
- Oracle
- Microsoft SQL Server
- Aurora (AWS Proprietary Database)

## Benefits and Features:

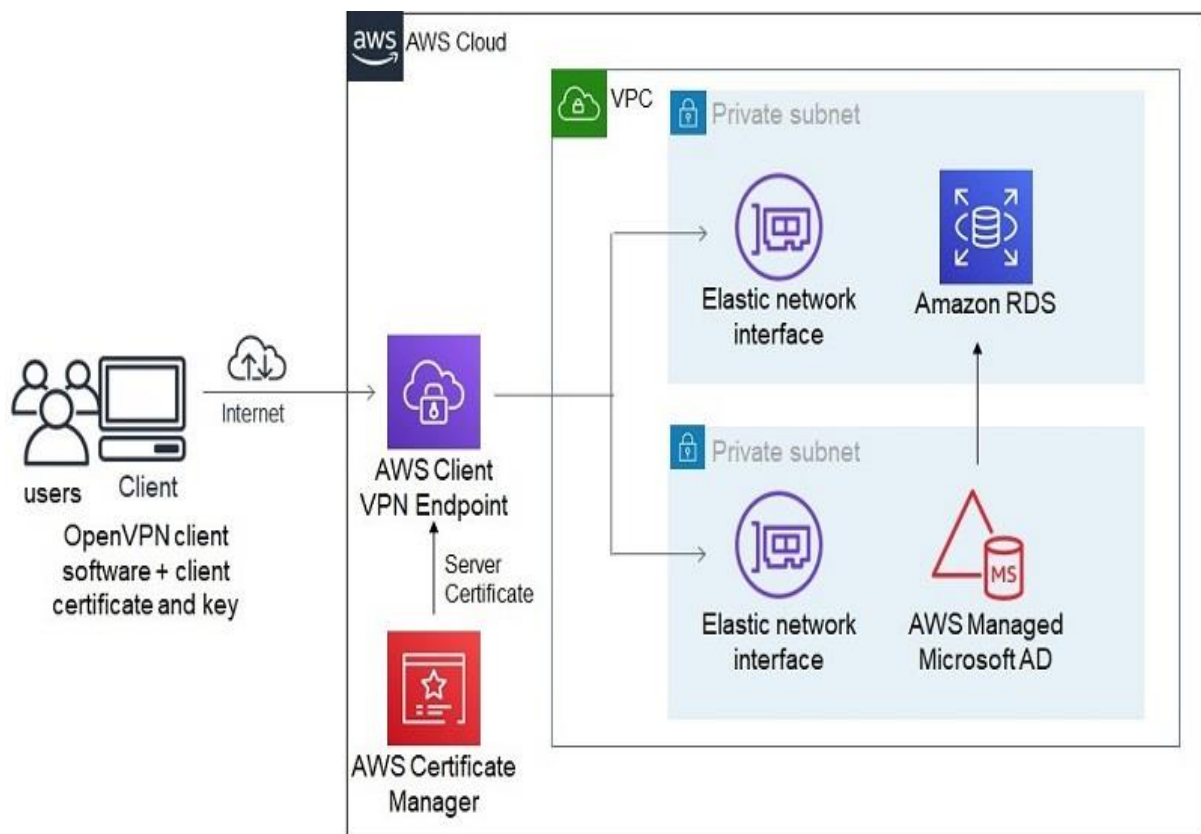
Easy to Administer

Highly Scalable

Available & Durable

Fast

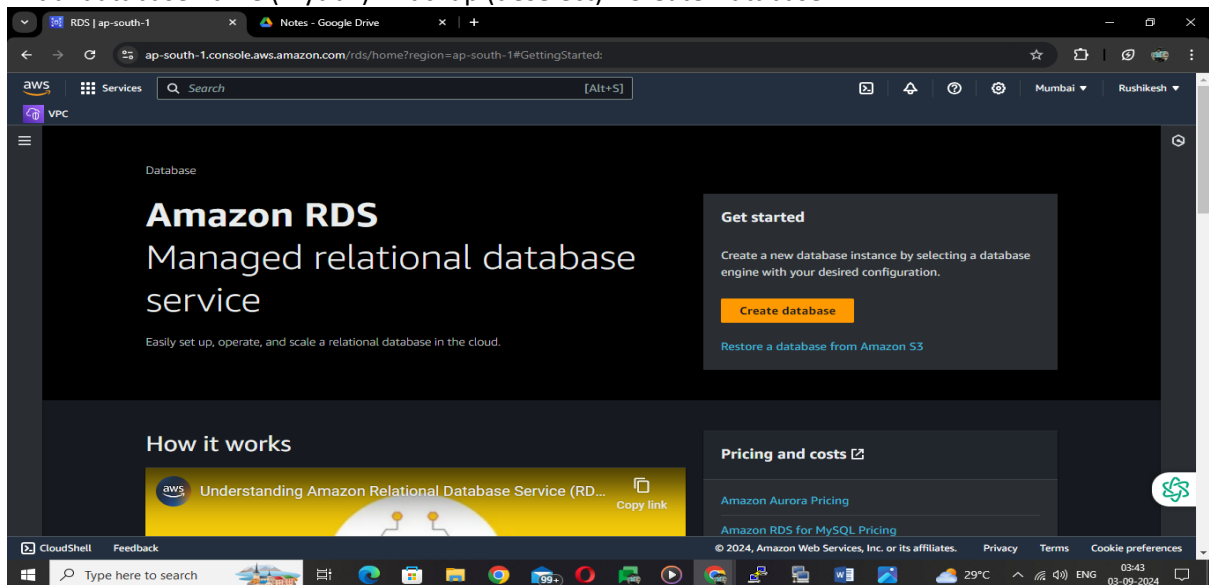
Secure



# RDS MySQL Database

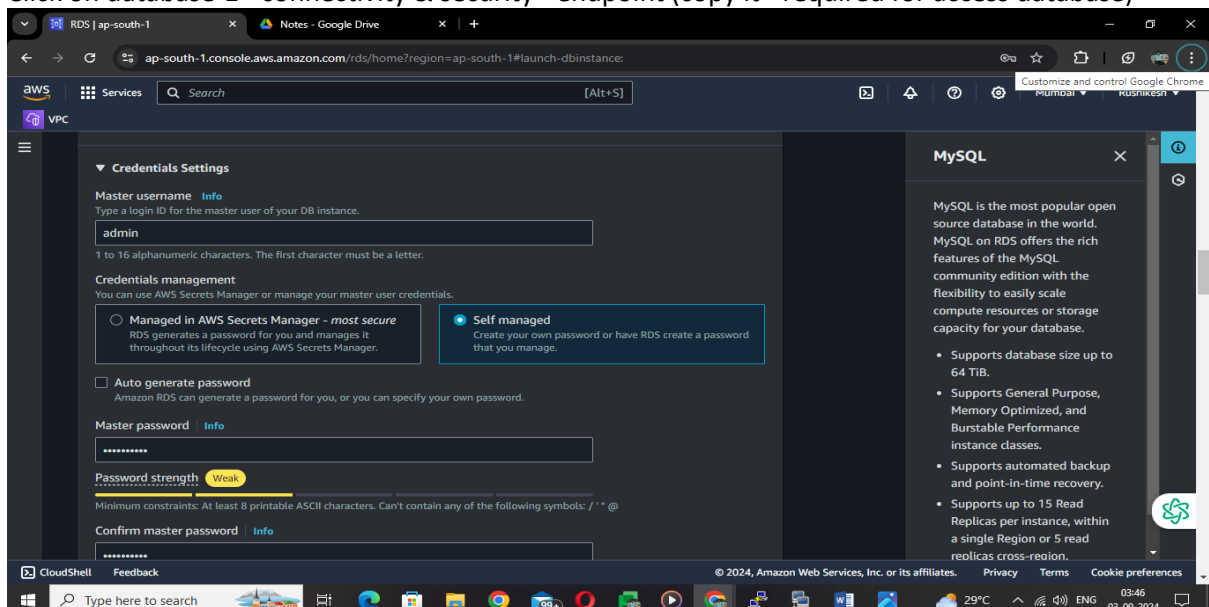
## Steps1: Create RDS Instance

Services - RDS - Create database - choose a database creation method (Standard Create) - Engine Options - MySQL - Edition (mySQL community) - Version (MySQL 8.0.\*) - Templates - Free tier - credentials settings - admin - master password (India123) - DB Instance class (default) - Storage - enable storage autoscaling (deselect) - connectivity - public access (yes) - VPC security group - create new - New vpc security group name ( db-segrp) - Monitoring - Additional configurations (3306) - Initial database name (mydb1) - Backup (deselect) - Create Database.



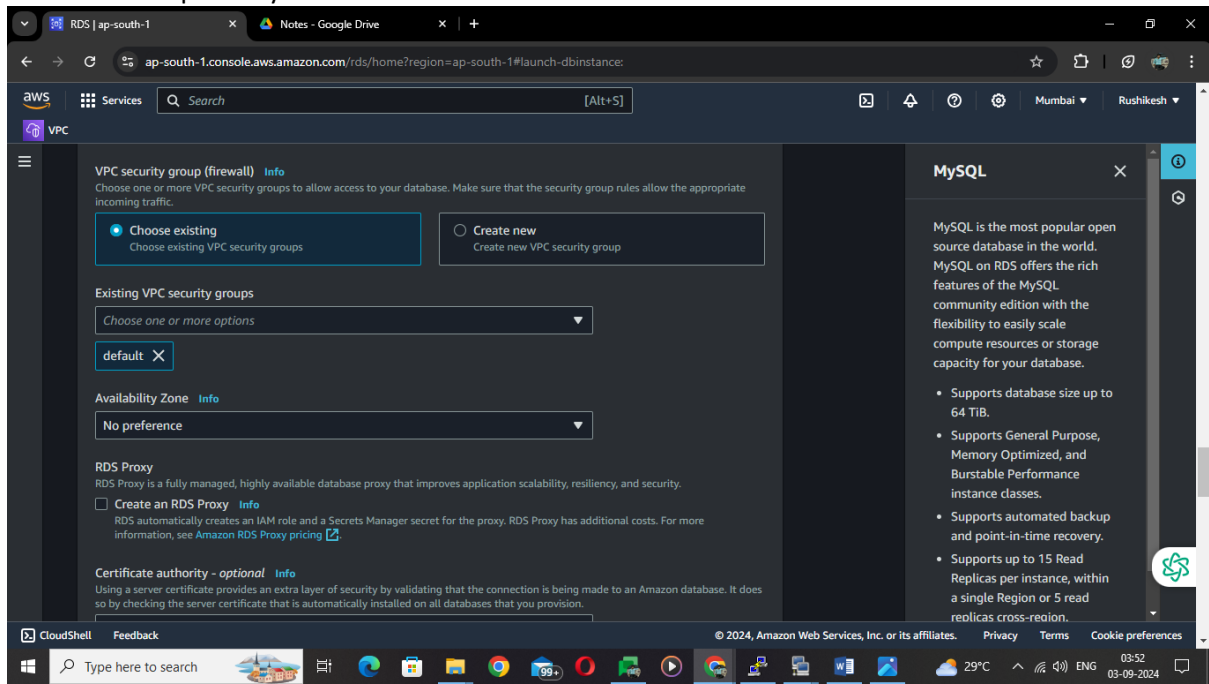
## Step2:- username (admin), password (India123) and endpoint required to access database

Click on database-1 - connectivity & security - endpoint (copy it - required for access database)

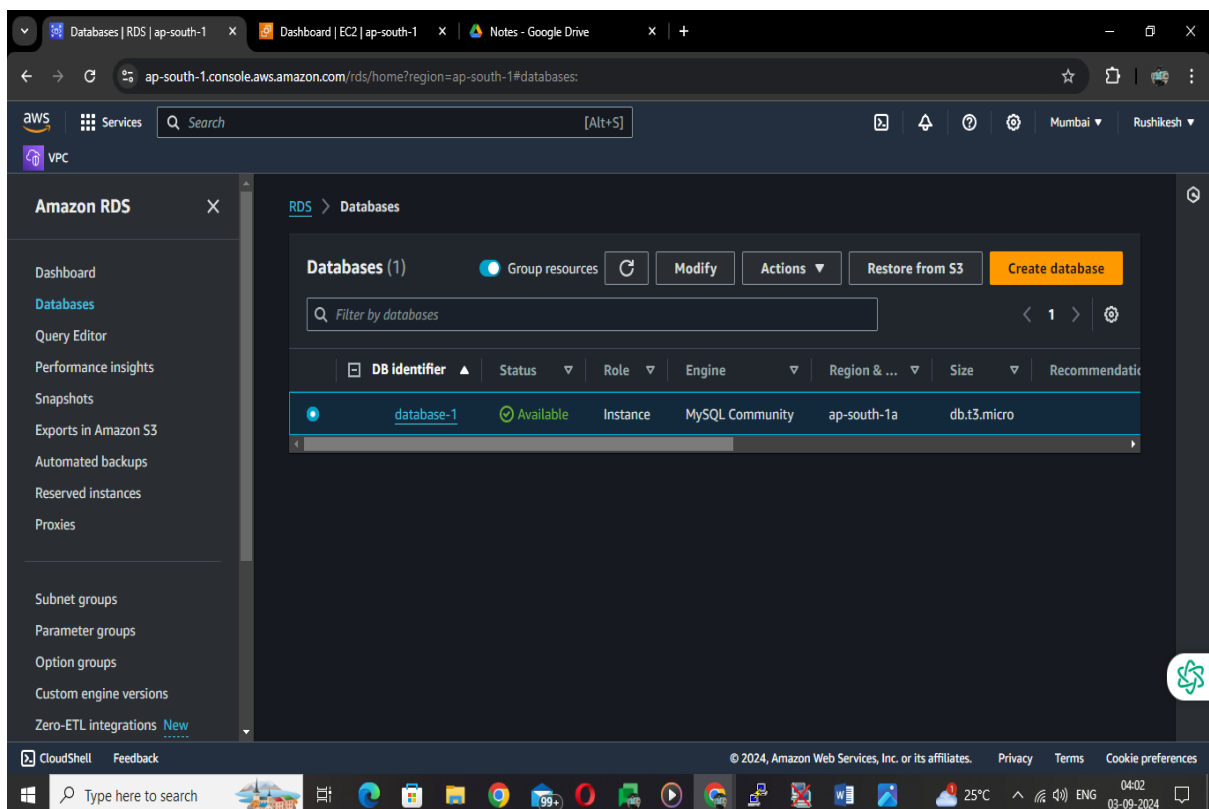


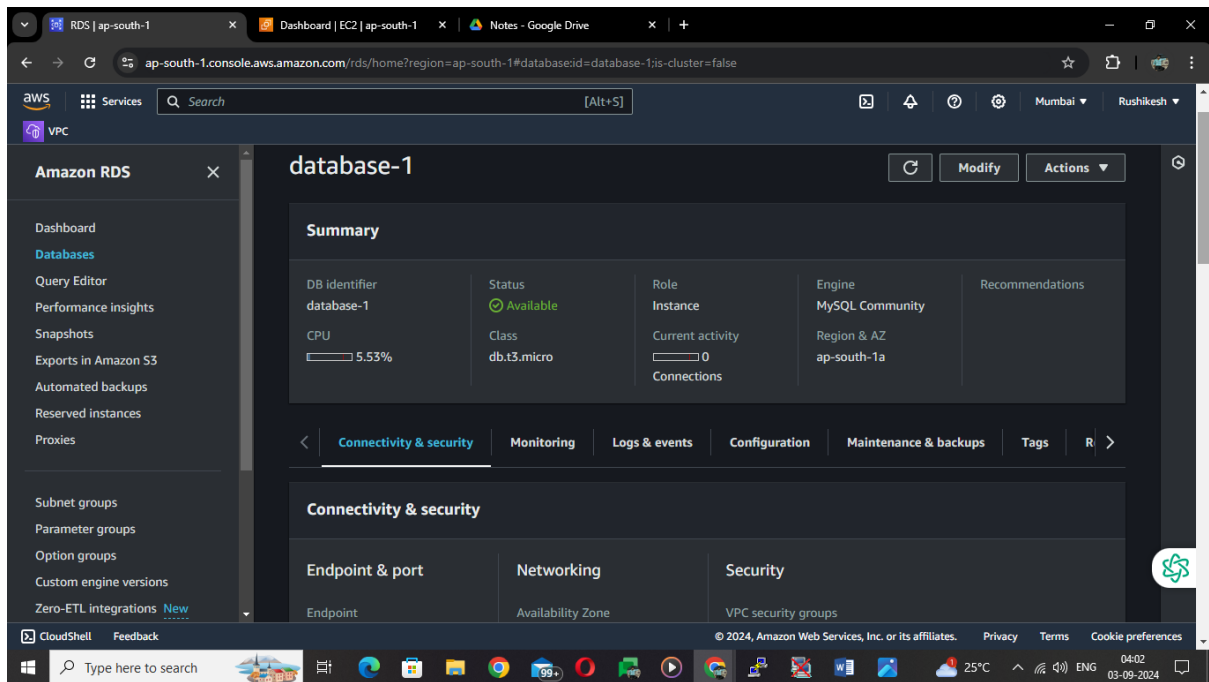
## Step3:- Update Security Group

Services - VPC - Dashboard - security groups - select db-secgrp - Make sure that in db-secgrp enable mysql/auroa tcp 3306 anywhere.  
also add ssh tcp 22 anywhere - save.



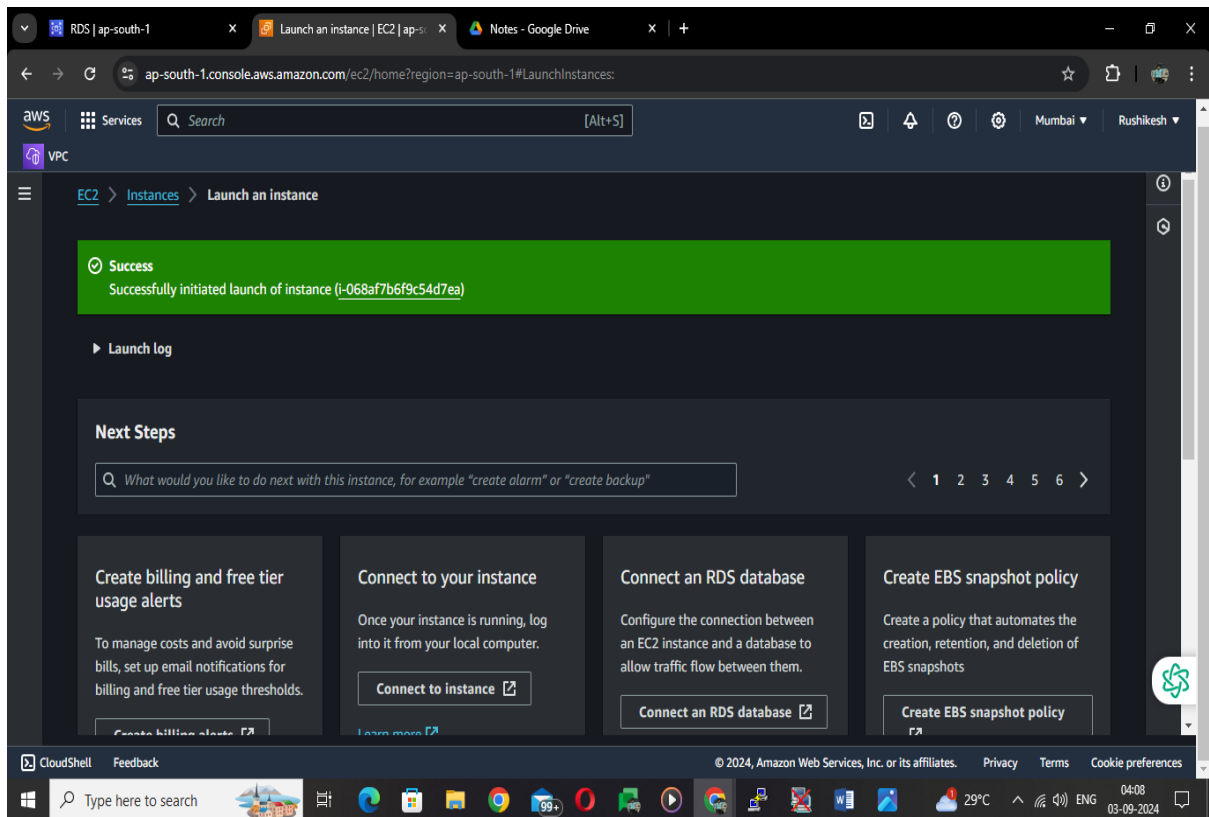
## Step4 :- Sucessfully Database Created

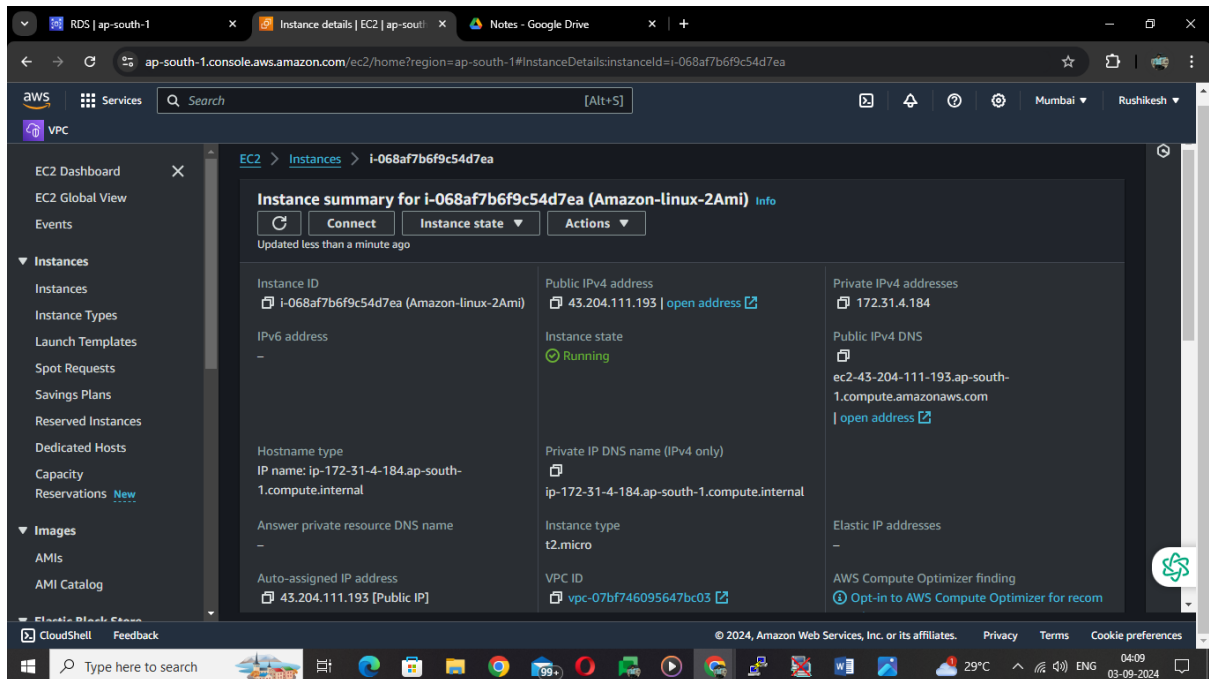




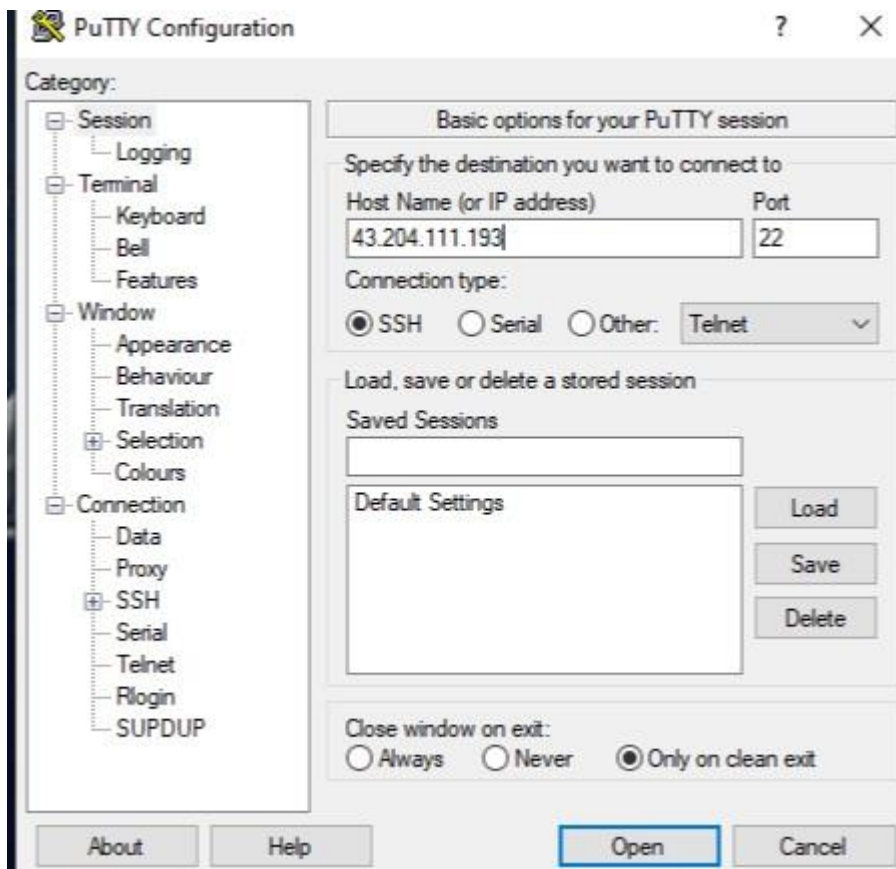
## Step5:-Launch EC2 Instance.

EC2 - Launch Instance - Amazon Linux - security group (select existing = db-secgrp) - Launch Instance - view instance

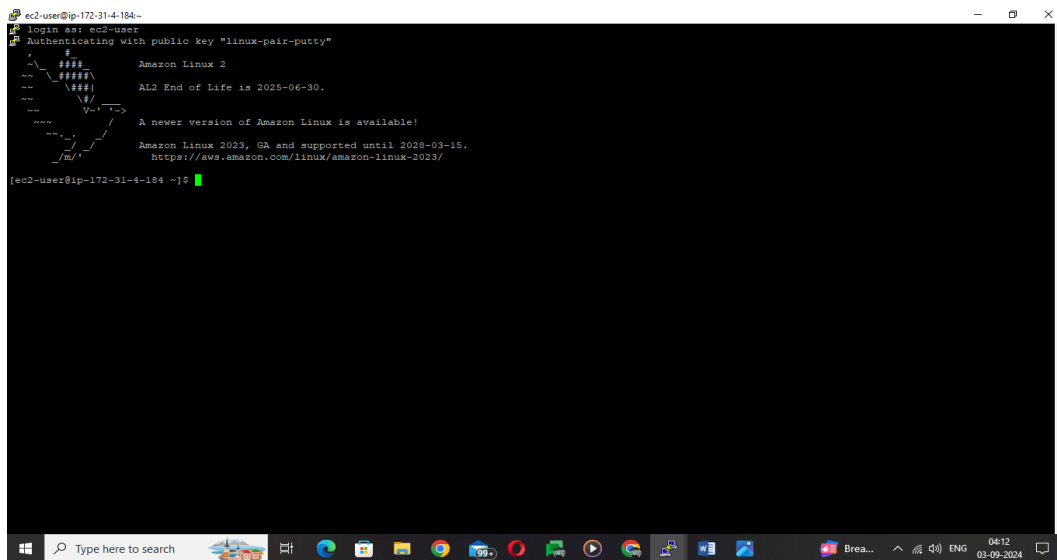




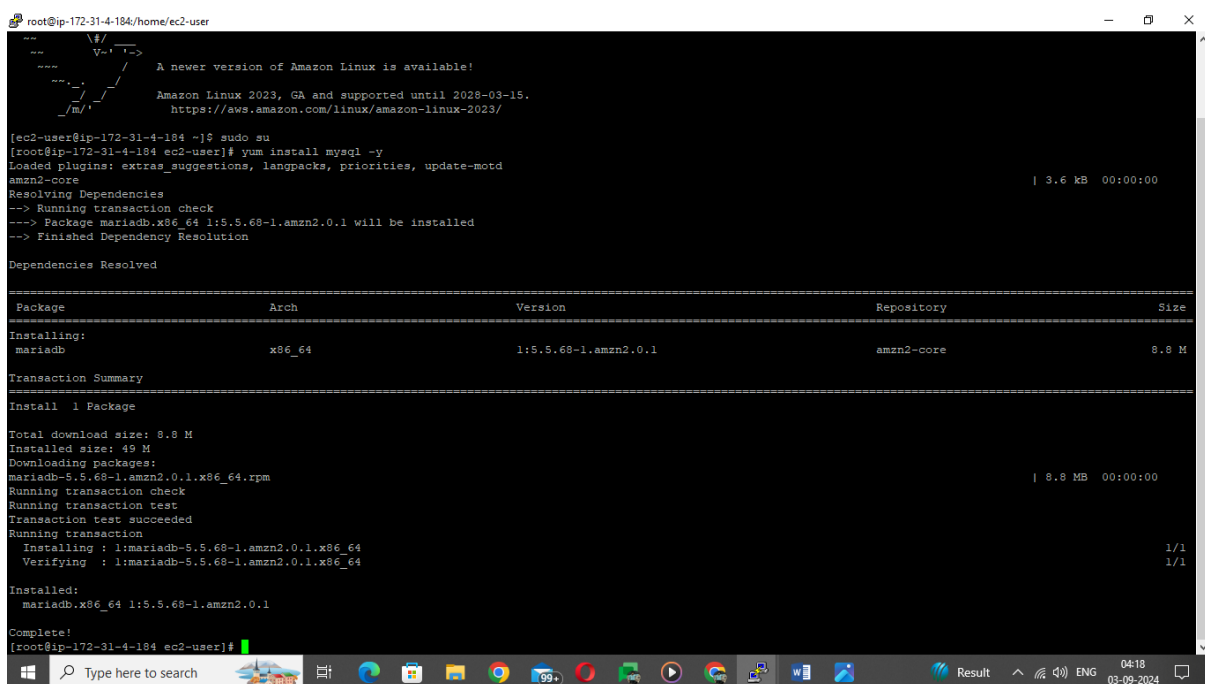
## Step6 :- Access putty server with help of public ip



### Step7 :- Login to Ec2 user



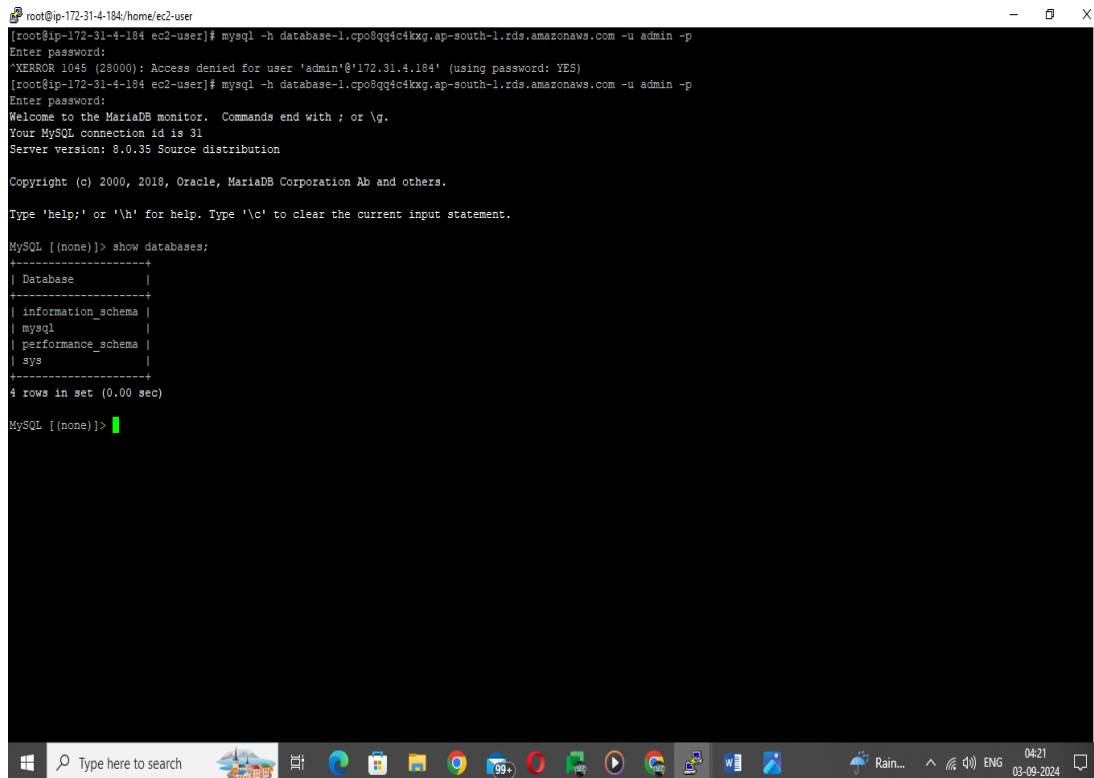
### Step8 :- Install Mysql(with the help of yum server)



## Step9:- For Access RDS:

`mysql -h database-1.crbiwp94aigh.eu-west-2.rds.amazonaws.com -u admin -p mydb1`

`mysql -h <endpoint address paste here> -u admin -p mydb1`



```
root@ip-172-31-4-184:/home/ec2-user
[root@ip-172-31-4-184 ec2-user]# mysql -h database-1.cpo8qq4c4kxg.ap-south-1.rds.amazonaws.com -u admin -p
Enter password:
ERROR 1045 (28000): Access denied for user 'admin'@'172.31.4.184' (using password: YES)
[root@ip-172-31-4-184 ec2-user]# mysql -h database-1.cpo8qq4c4kxg.ap-south-1.rds.amazonaws.com -u admin -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 31
Server version: 8.0.35 Source distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| sys |
+-----+
4 rows in set (0.00 sec)

MySQL [(none)]>
```

## Conclusion:

Amazon Relational Database Service or Amazon RDS is a managed cloud database service from AWS (Amazon Web Services). It is a service designed to simplify a relational database's creation, operation, management, and scaling. AWS launched the RDS service initially in October 2009 with support for MySQL. As years went on, the RDS service added managed services for various other databases like [RDS SQL Server](#), Oracle database, PostgreSQL, and MariaDB.