Implementing RDS Database instance in AWS

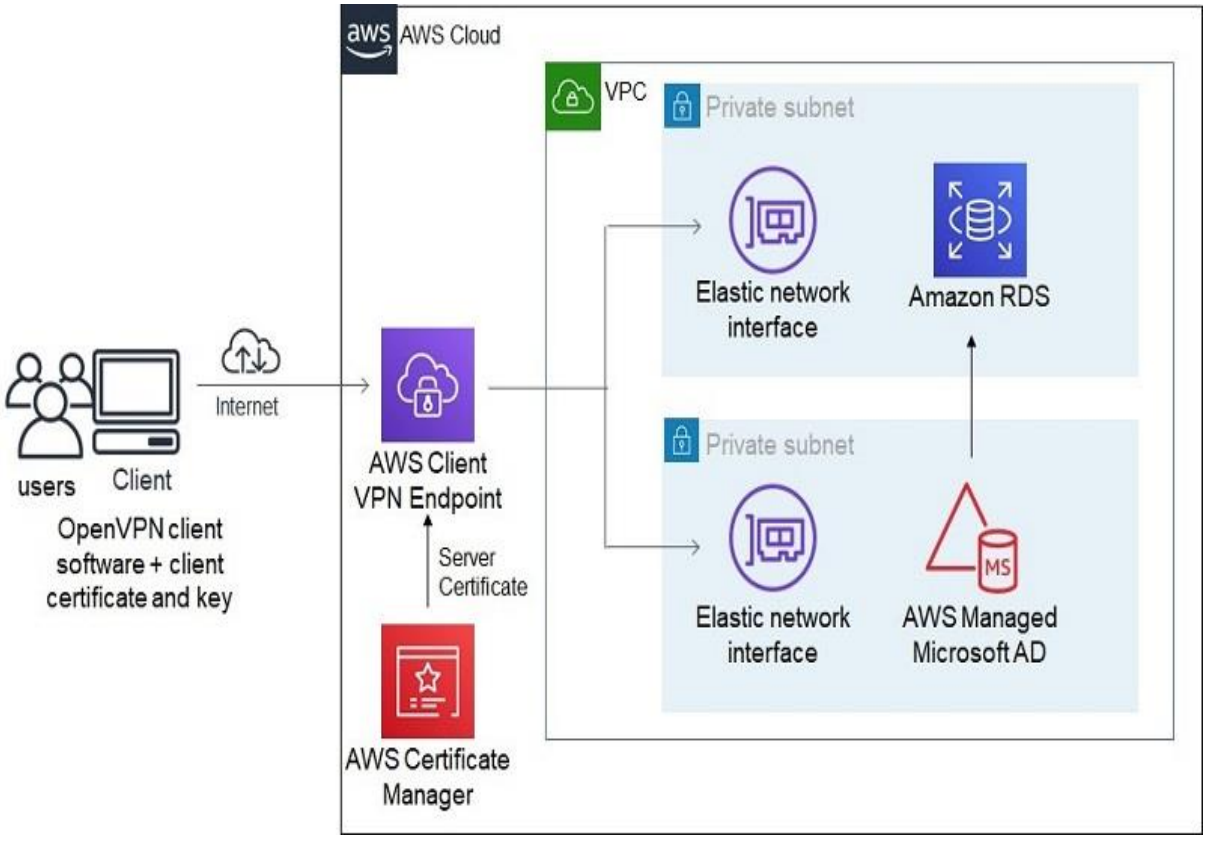
What is RDS?

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:

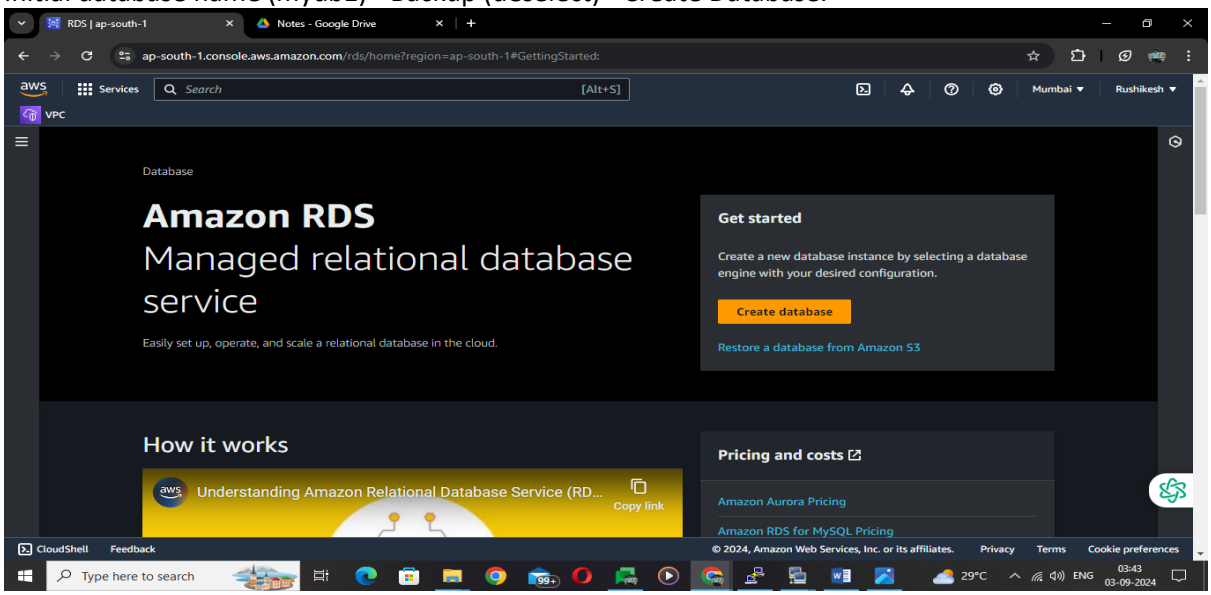
Easy to Administer
Highly Scalable
Available & Durable
Fast
Secure



RDS MySQL Database

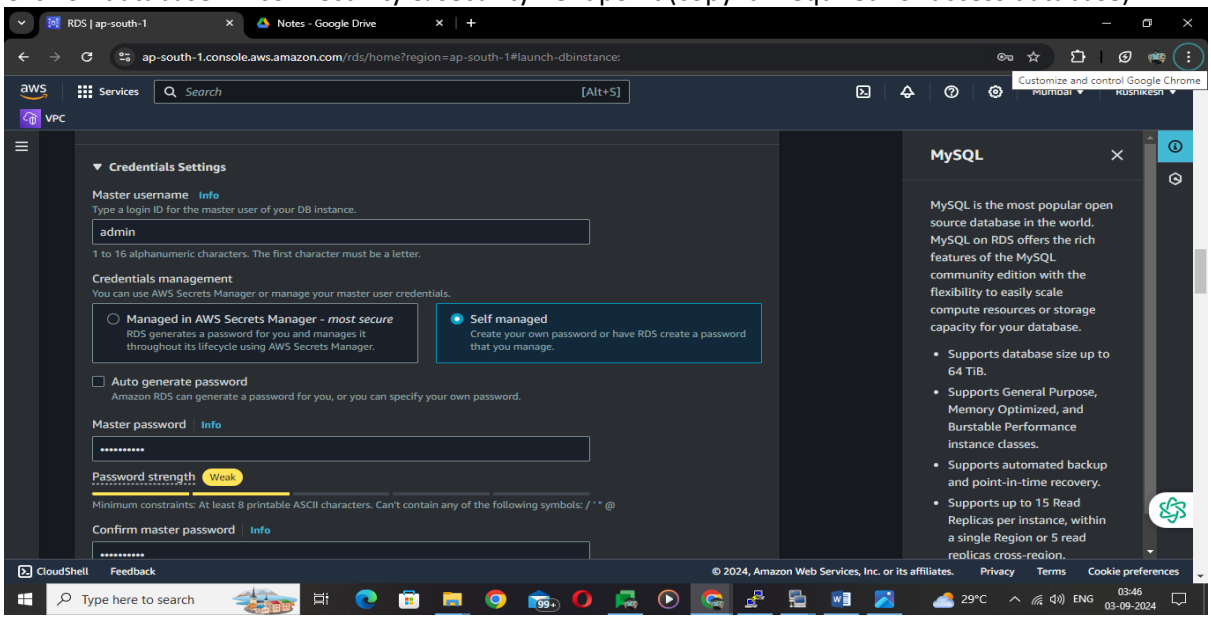
Steps1: Create RDS Instance

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-secgrp) - Monitoring - Additional configurations (3306) - Initial database name (mydb1) - Backup (deselect) - Create Database.



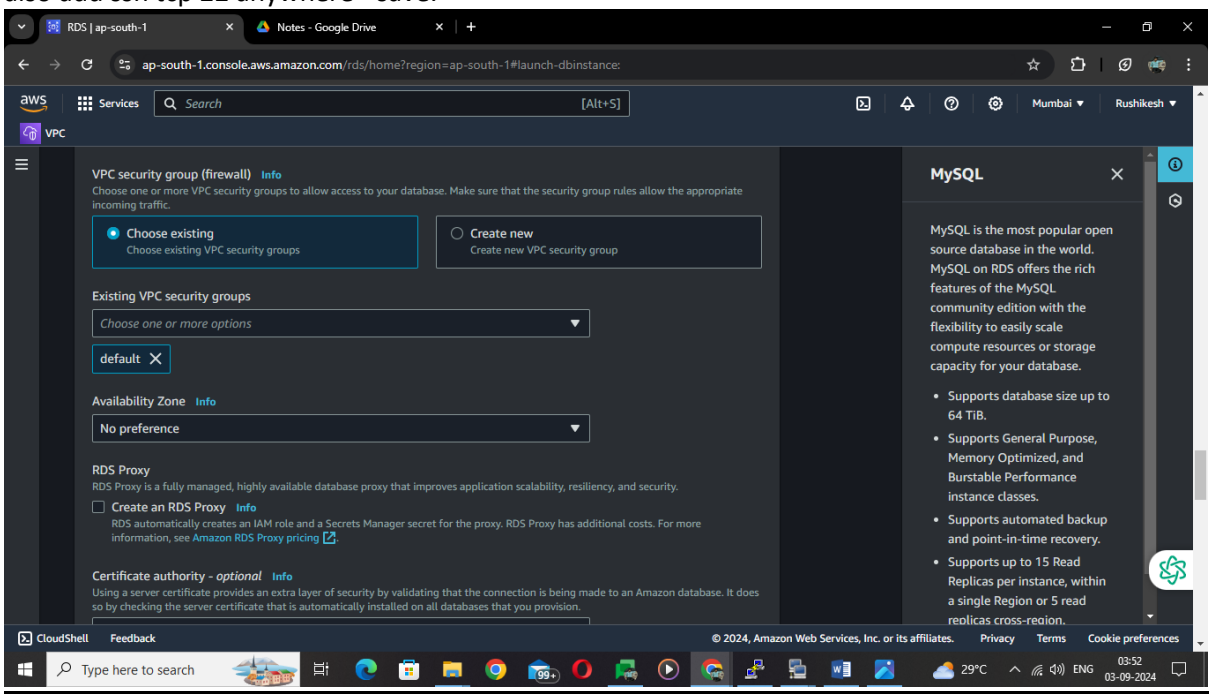
Step2:- username (admin), password (India123) and endpoint required to access database

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

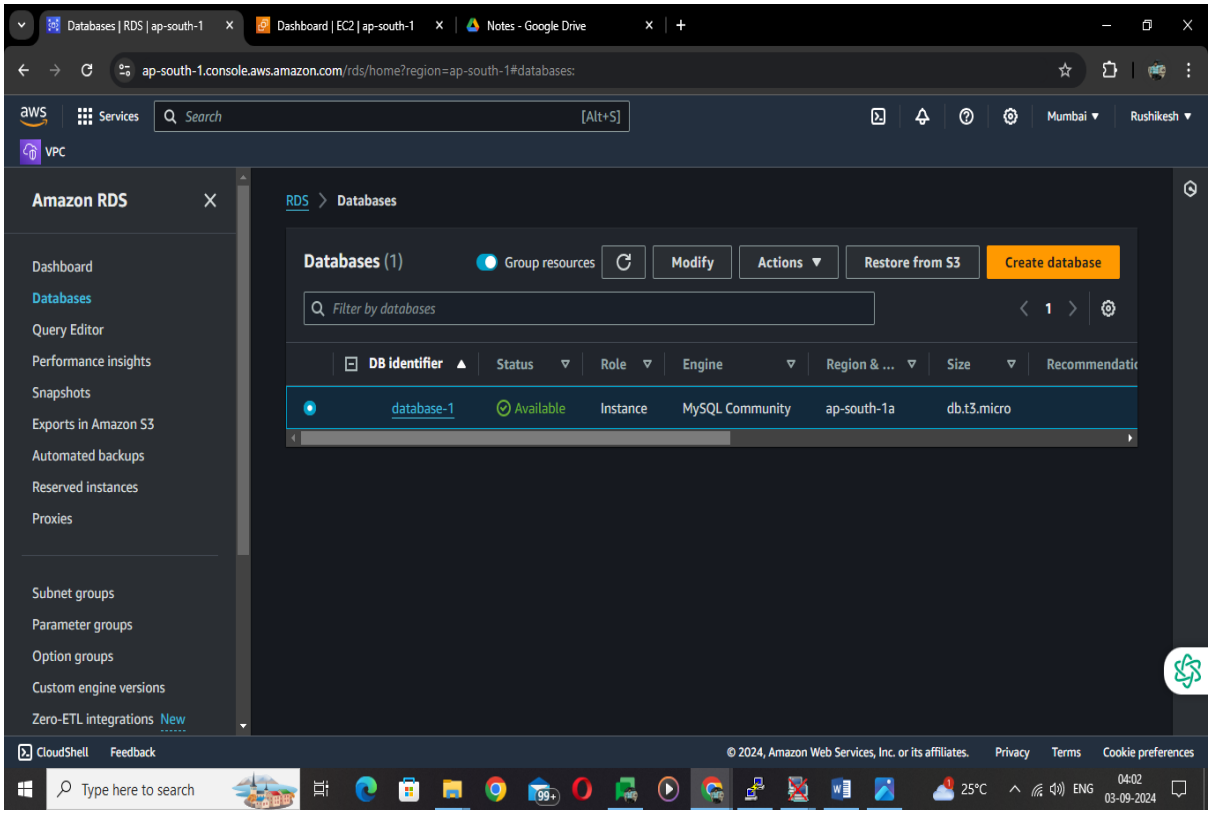


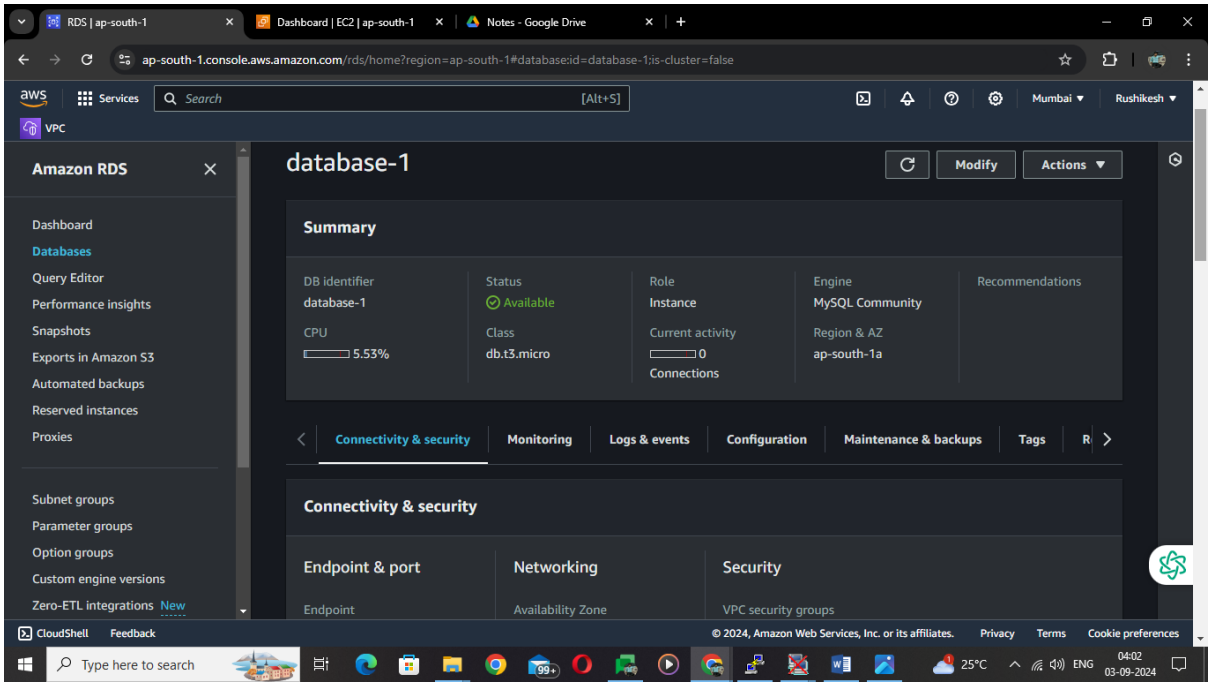
Step3:- Update Security Group

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.



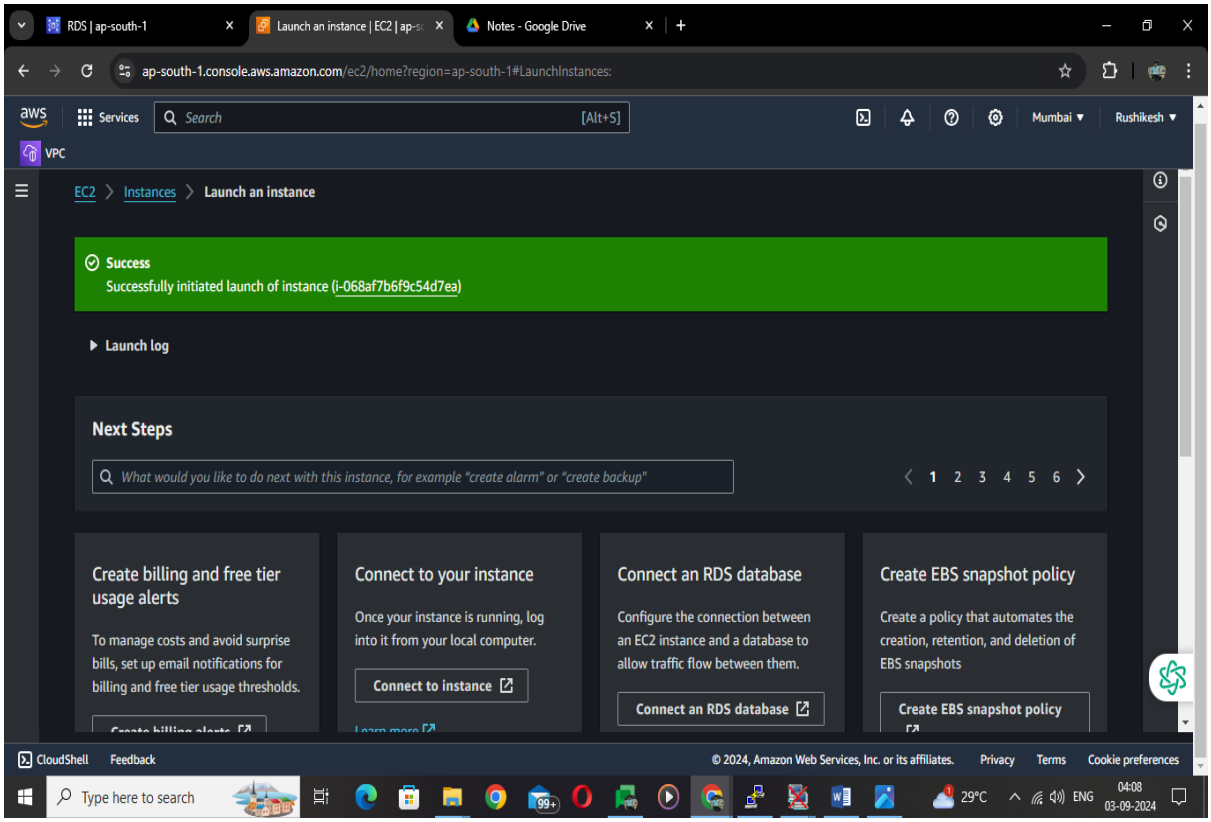
Step4 :- Sucessfully Database Created

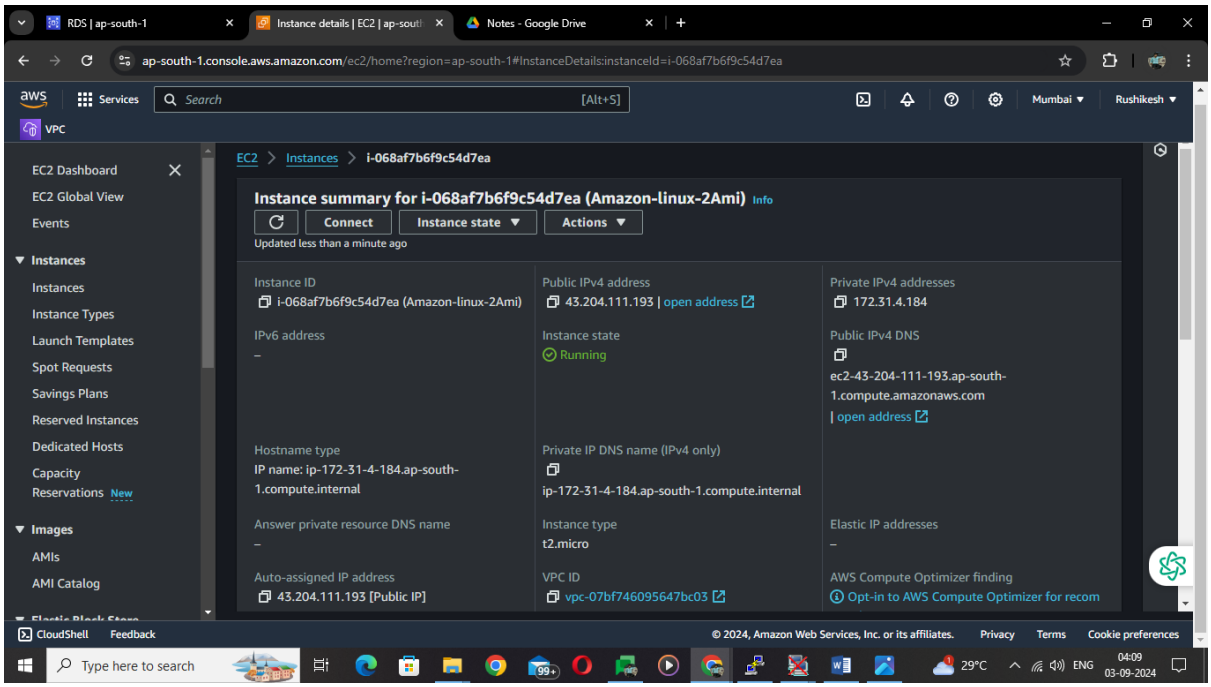




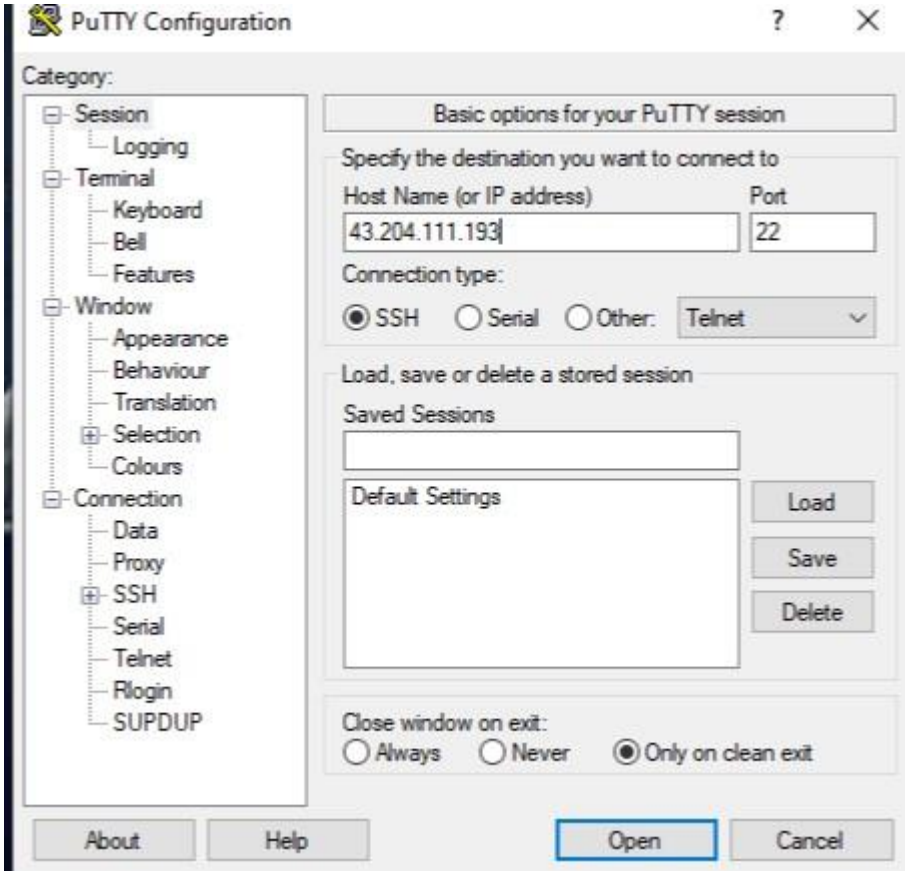
Step5:-Launch EC2 Instance.

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

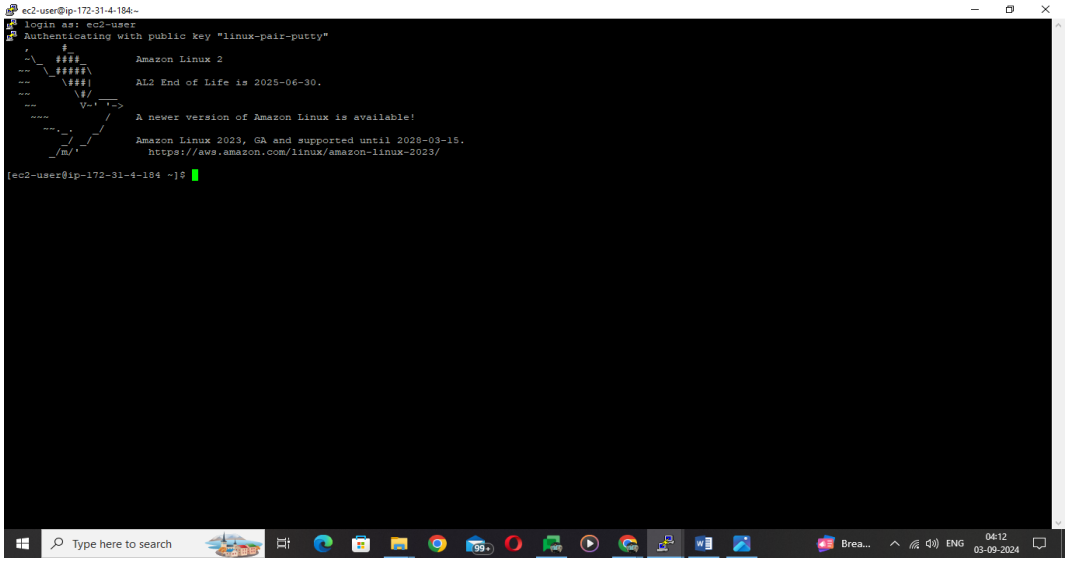




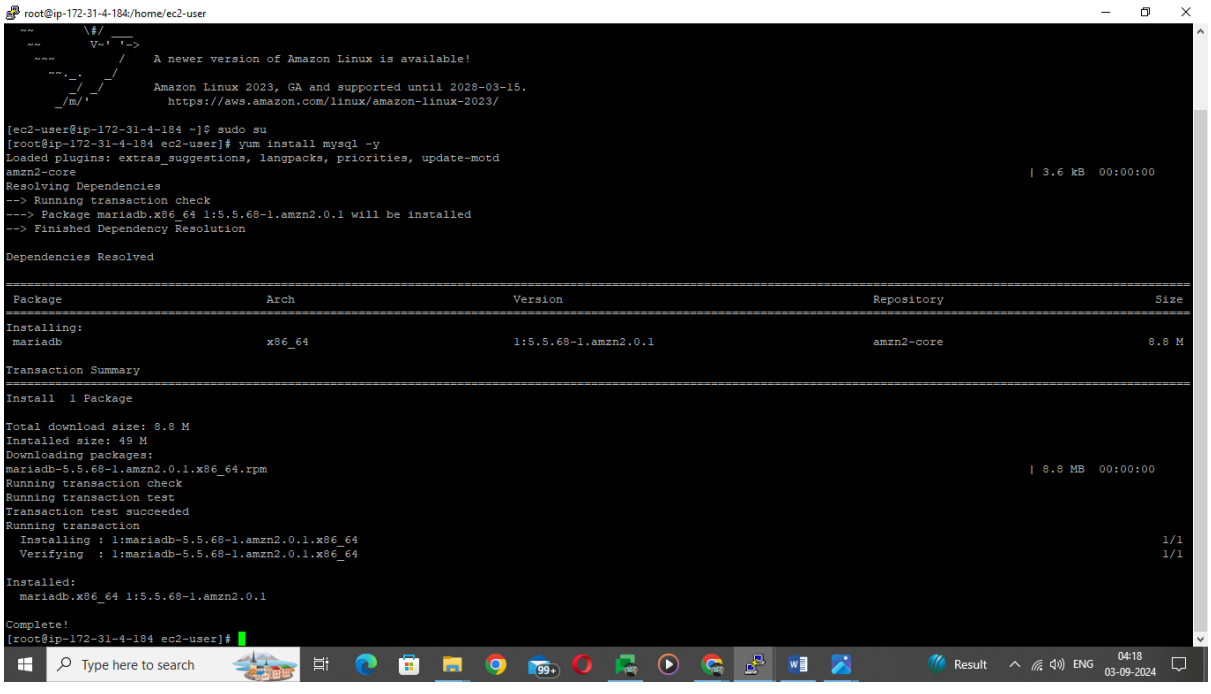
Step6 :- Acess putty server with help of public ip



Step7 :- Login to Ec2 user



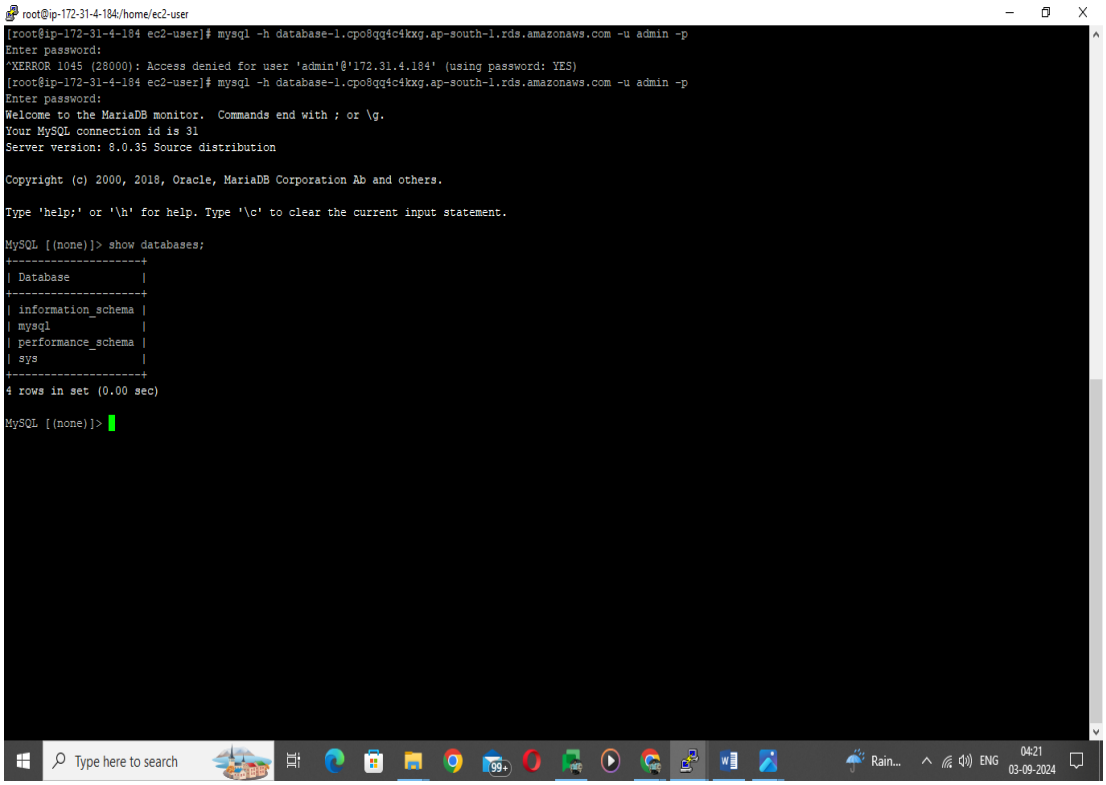
Step8 :- Install Mysql(with the help of yum server)



Step9:- For Access RDS:

mysql -h database-1.crbivp94aigh.eu-west-2.rds.amazonaws.com -u admin -p mydb1

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



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.