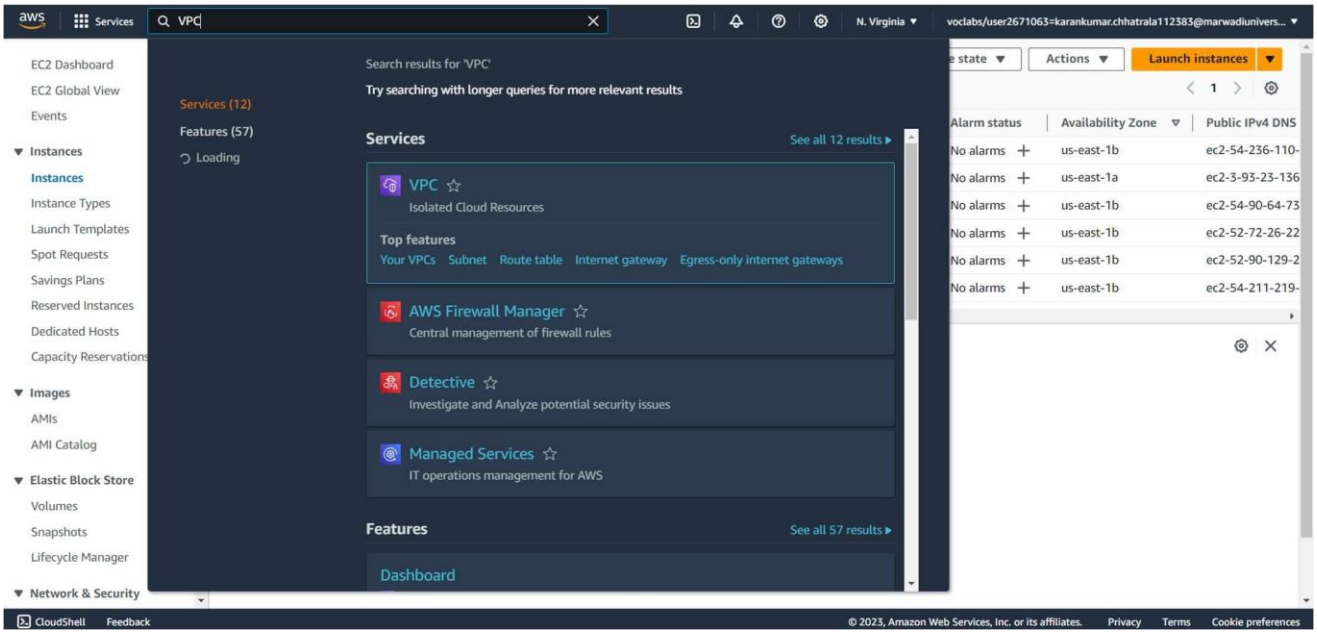
Practical 08 : Creating and configuring database instance

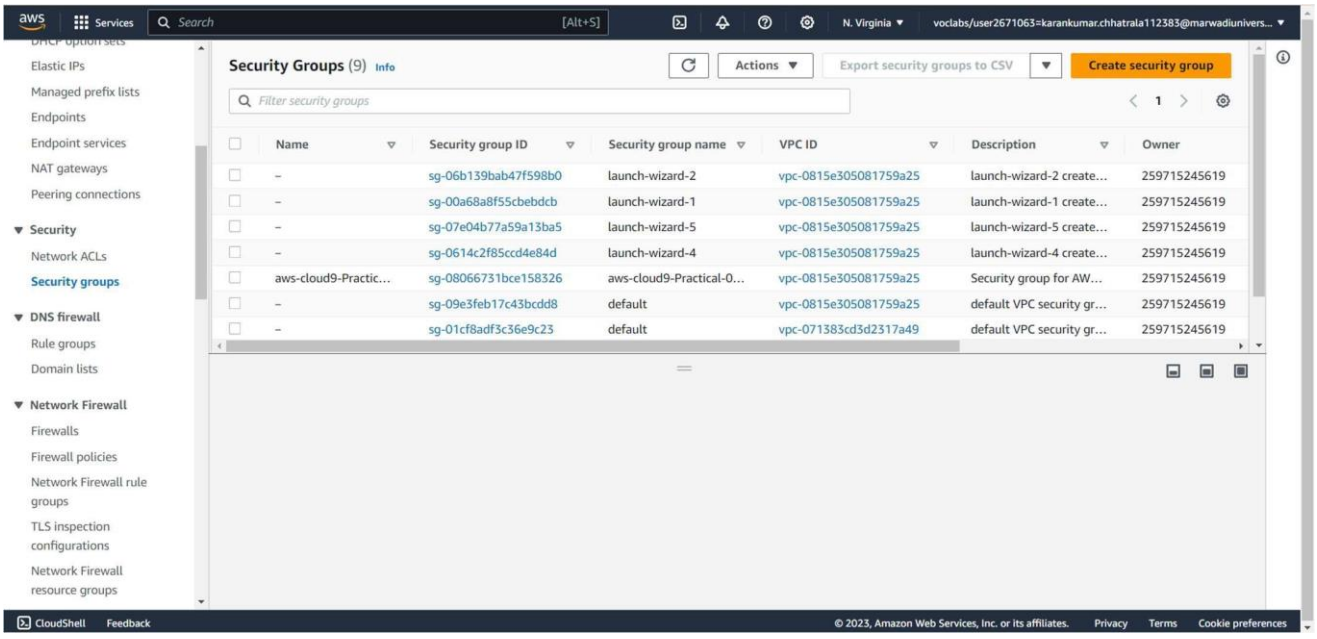
Step 01 : In the AWS Management Console, on the Services menu, choose VPC

Snapshot :



Step 02 : In the left navigation pane, choose Security Groups.

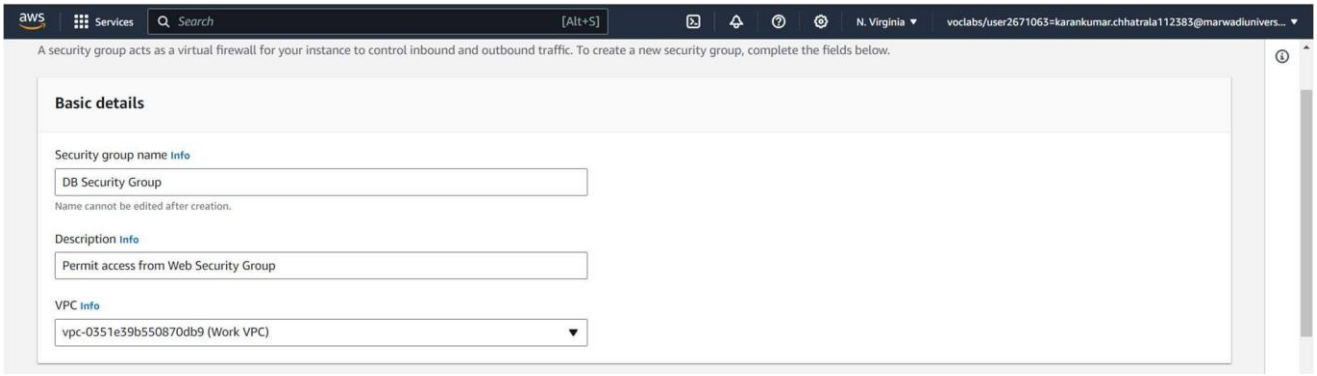
Snapshot :



Step 03 : Choose Create security group and then configure:

- **Security group name**: DB Security Group
- **Description**: Permit access from Web Security Group
- **VPC**: Lab VPC

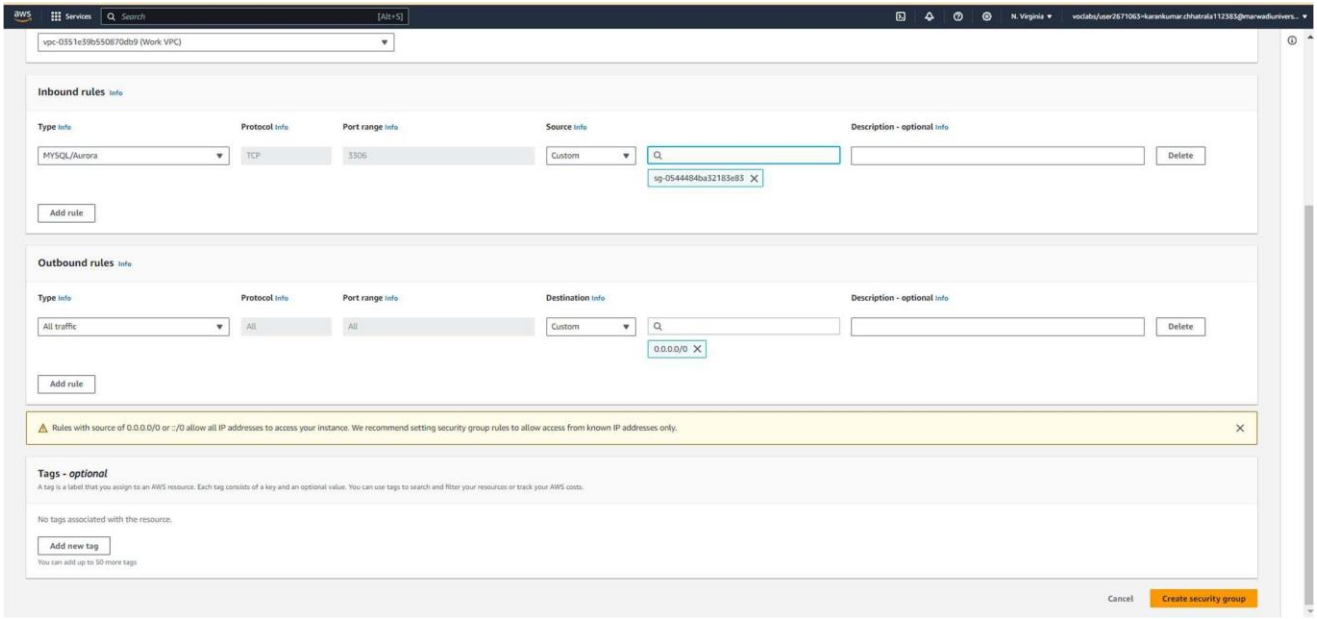
Snapshot :

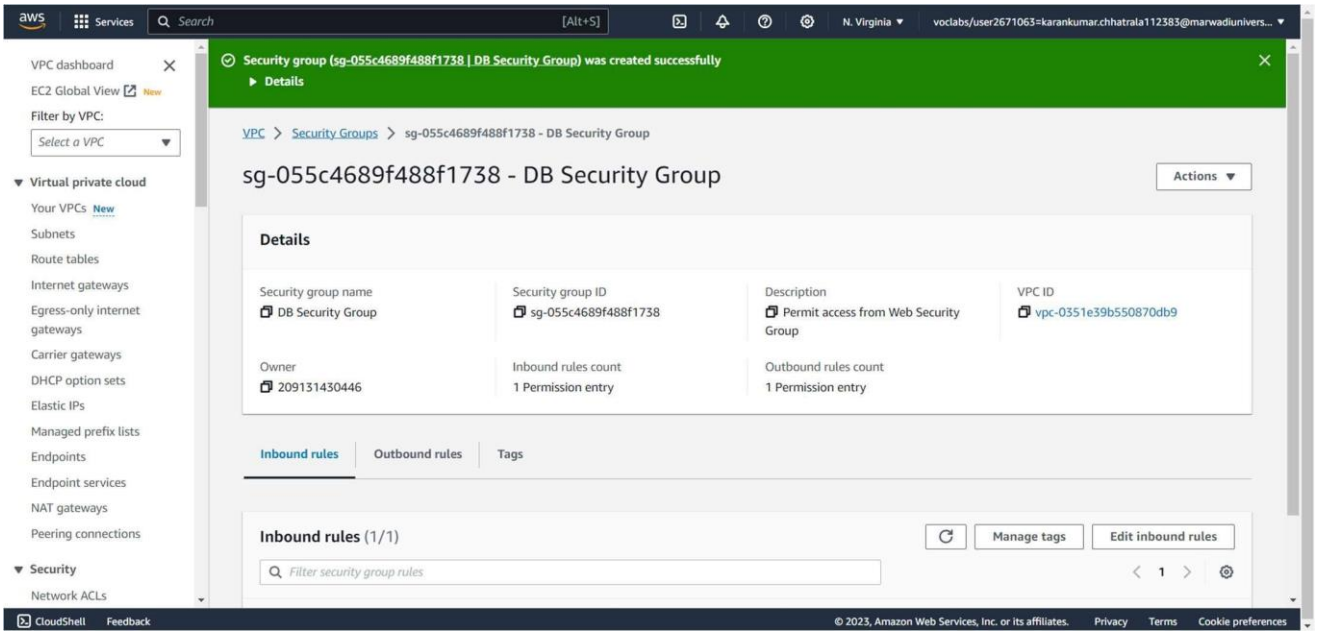


Step 04 : In the Inbound rules pane, choose Add rule**.**

- **Type**: MySQL/Aurora (3306)
- **CIDR, IP, Security Group or Prefix List**: Type **sg** and then select Web Security Group.
- Choose Create security group

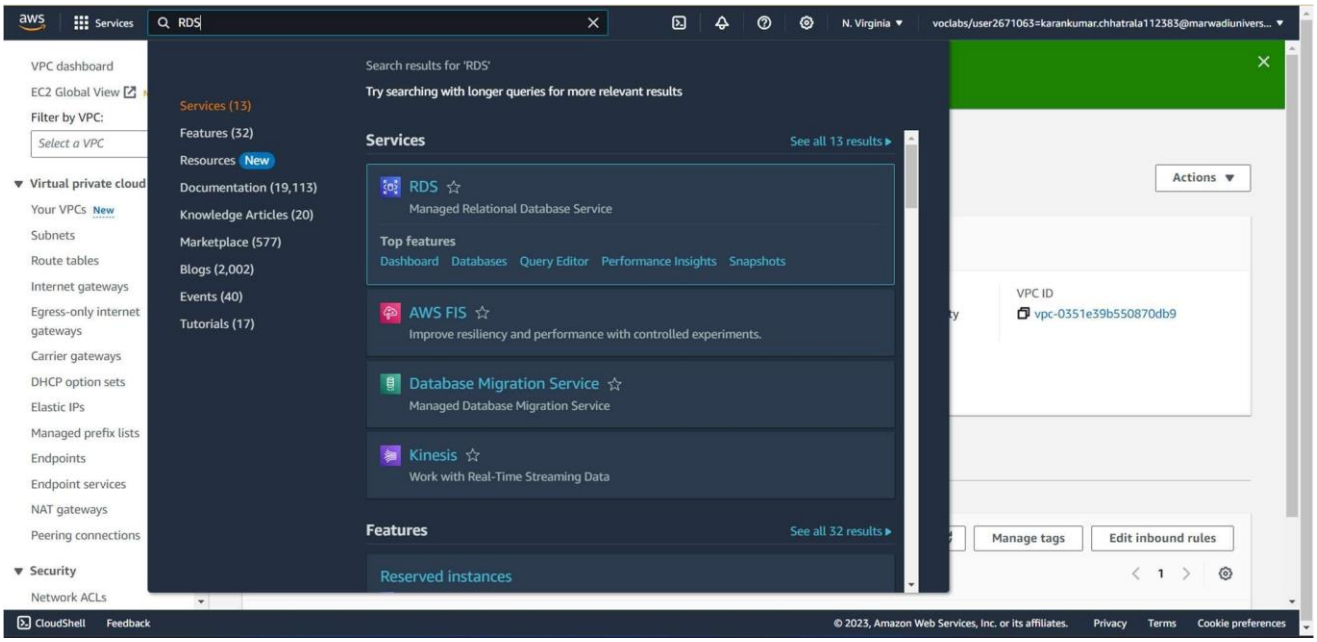
Snapshot :





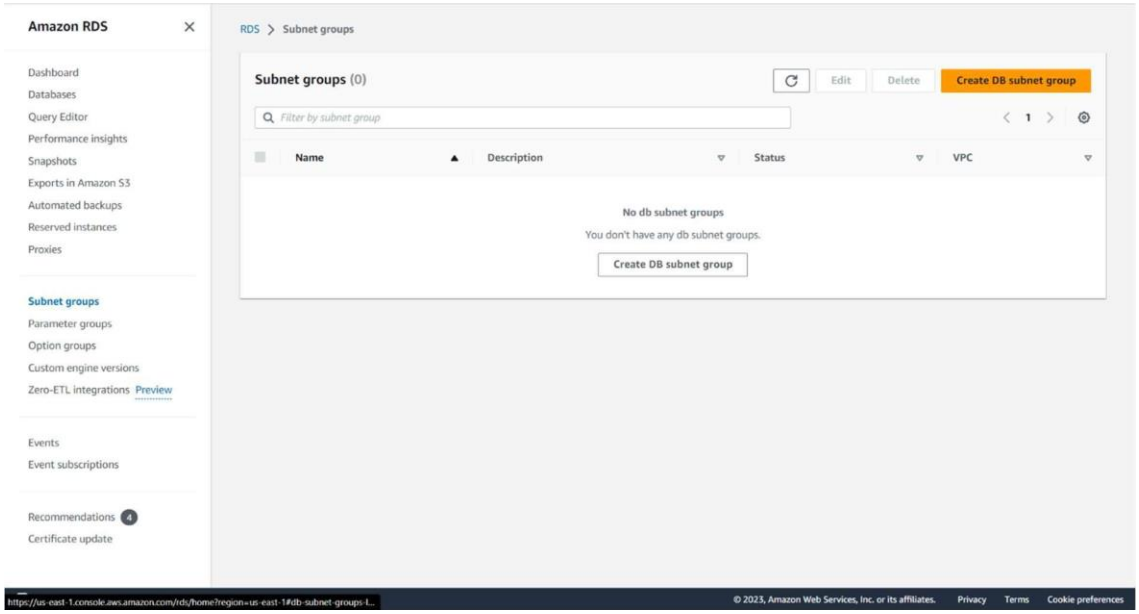
Step 05 : On the Services menu, choose RDS.

Snapshot :



Step 06 : In the left navigation pane, choose Subnet groups.

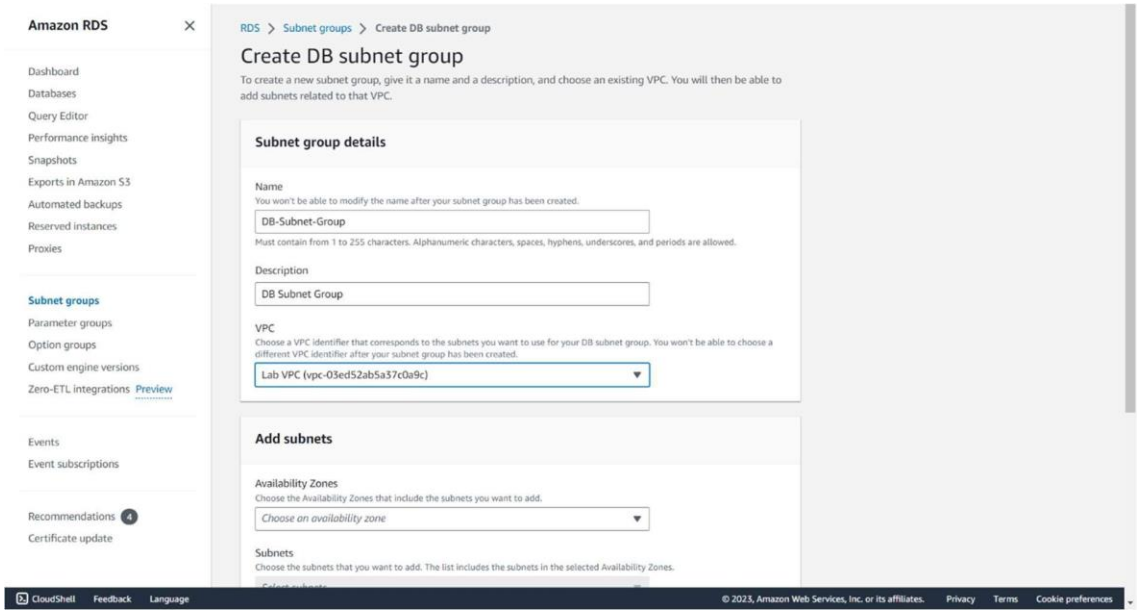
Snapshot :



Step 07 : Choose Create DB Subnet Group then configure:

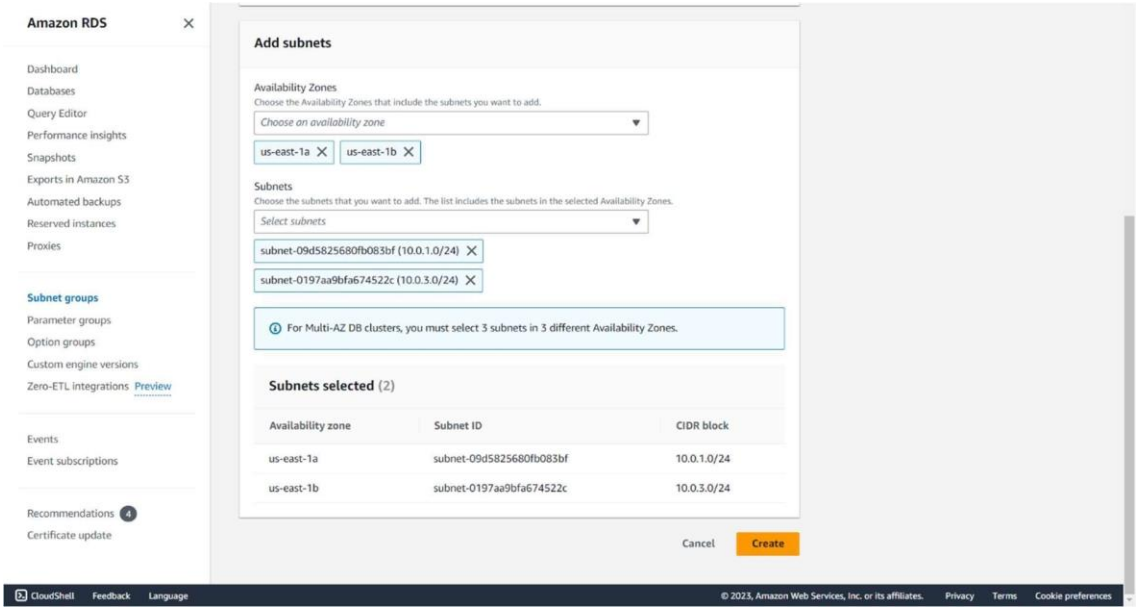
- **Name**: DB-Subnet-Group
- **Description**: DB Subnet Group
- **VPC**: Lab VPC

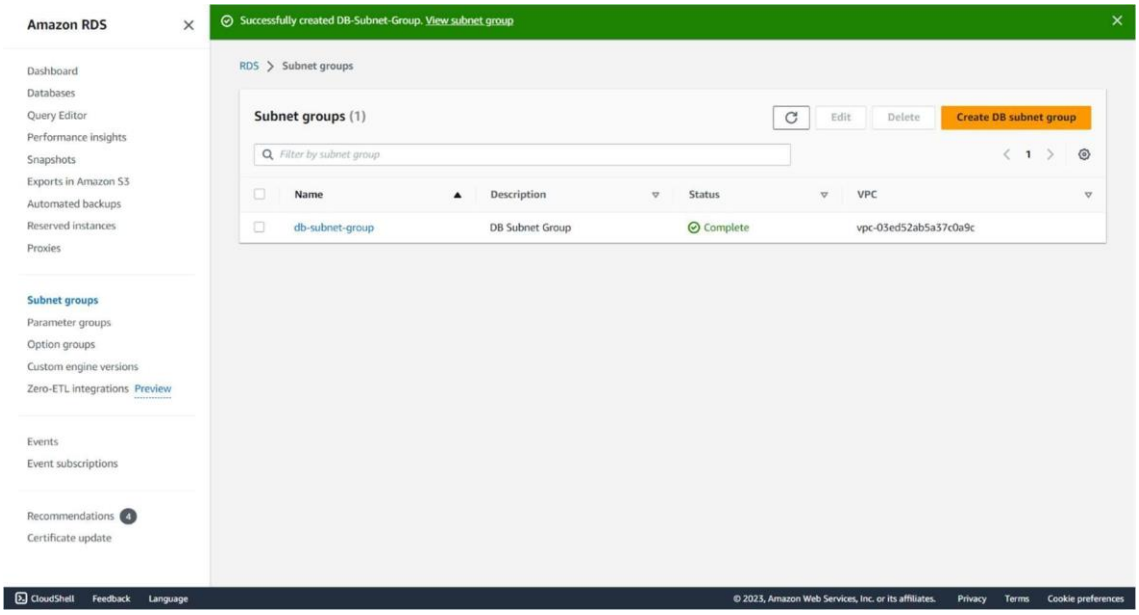
Snapshot :



Step 08 : Scroll down to the Add Subnets section. Expand the list of values under Availability Zones and select the first two zones: us-east-1a and us-east-1b. Expand the list of values under Subnets and select the subnets associated with the CIDR ranges 10.0.1.0/24 and 10.0.3.0/24 Than Choose Create.

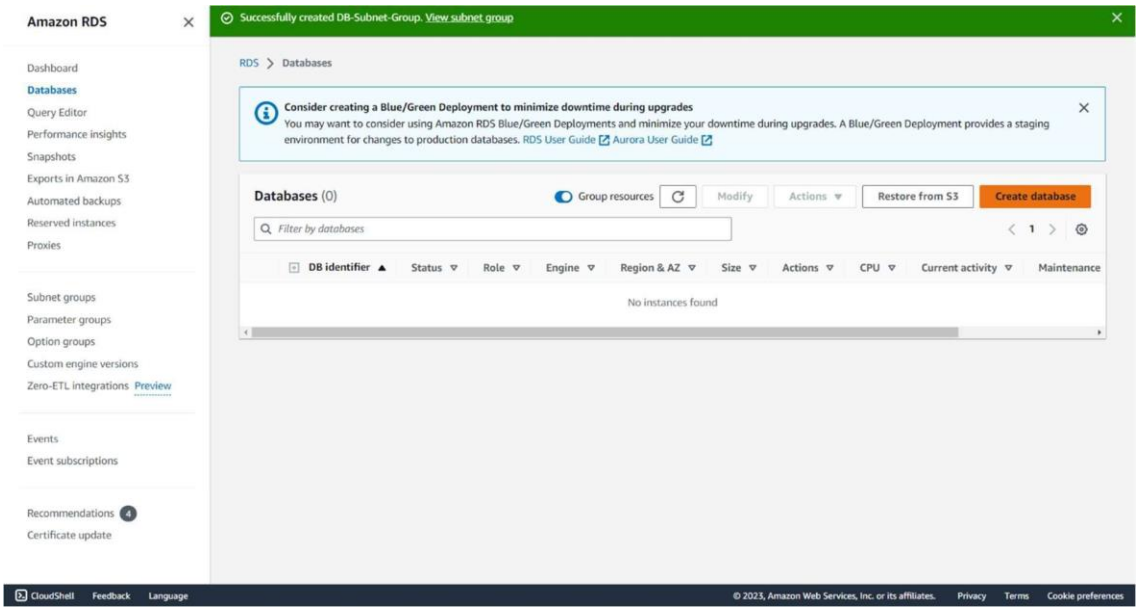
Snapshot :





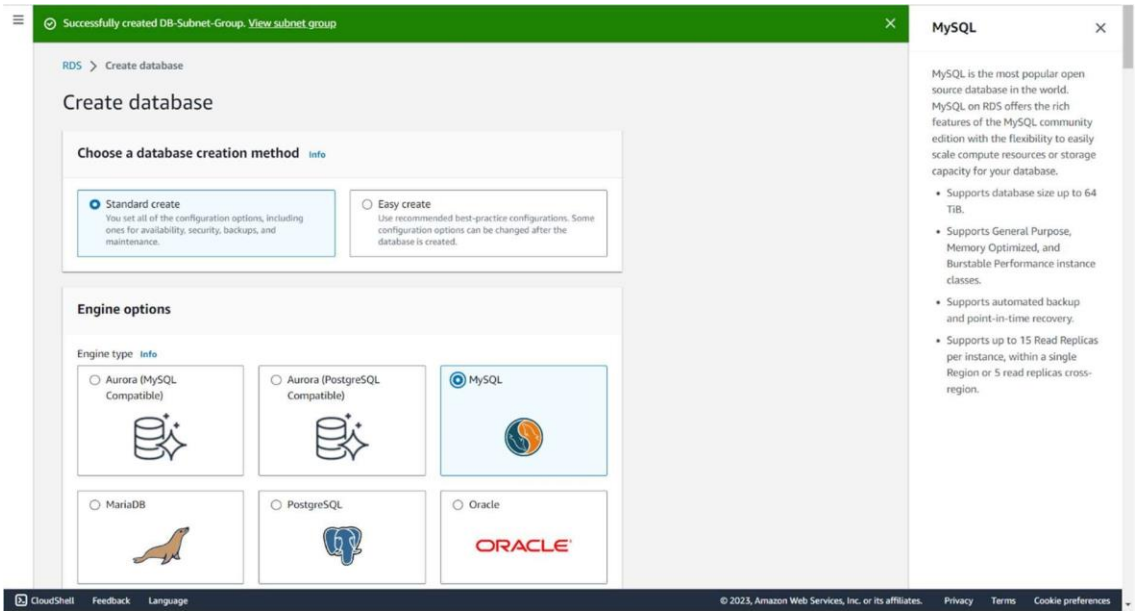
Step 09 : In the left navigation pane, choose Databases. Choose Create database.

Snapshot :



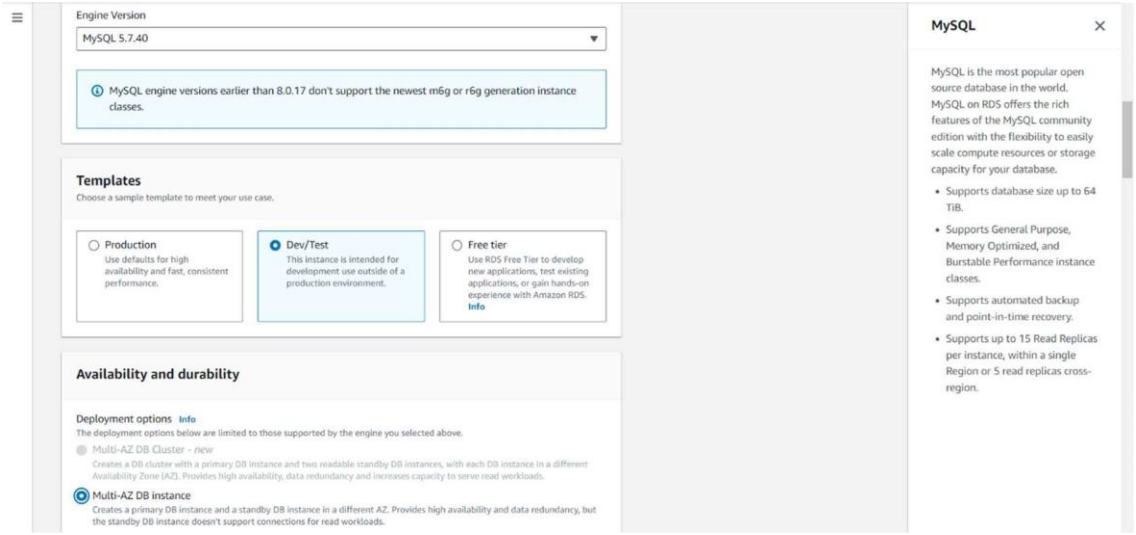
Step 10 : Select MySQL under Engine Options.

Snapshot :



Step 11 : Under Templates choose Dev/Test Under Availability and durability choose Multi-AZ DB instance.

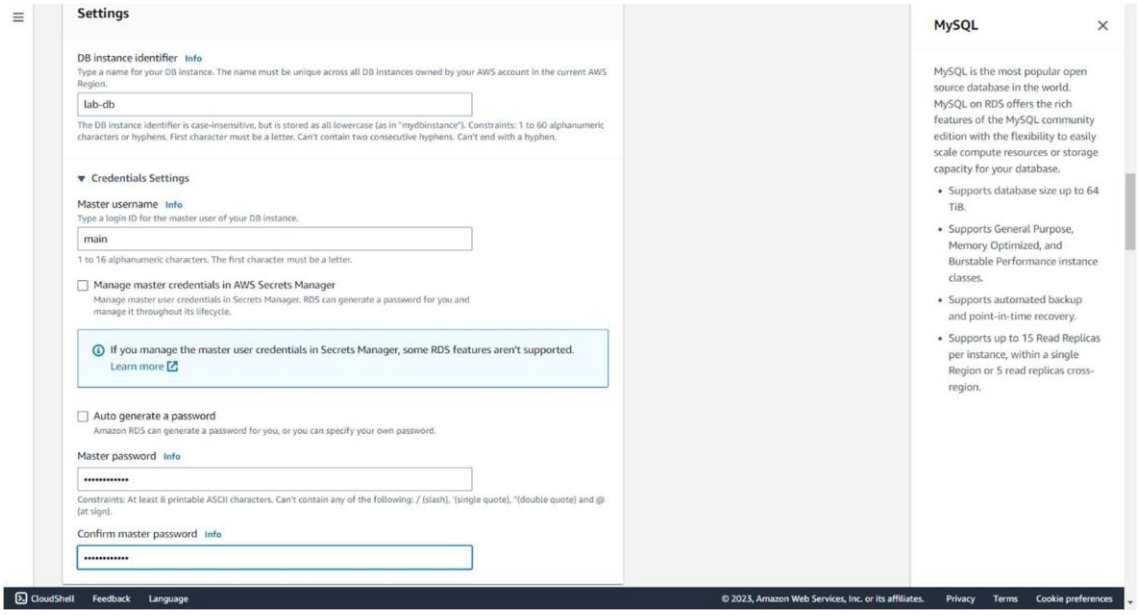
Snapshot :



Step 12 : Under Settings, configure:

- **DB instance identifier**: lab-db
- **Master username**: main
- **Master password**: lab-password
- **Confirm password**: lab-password

Snapshot :



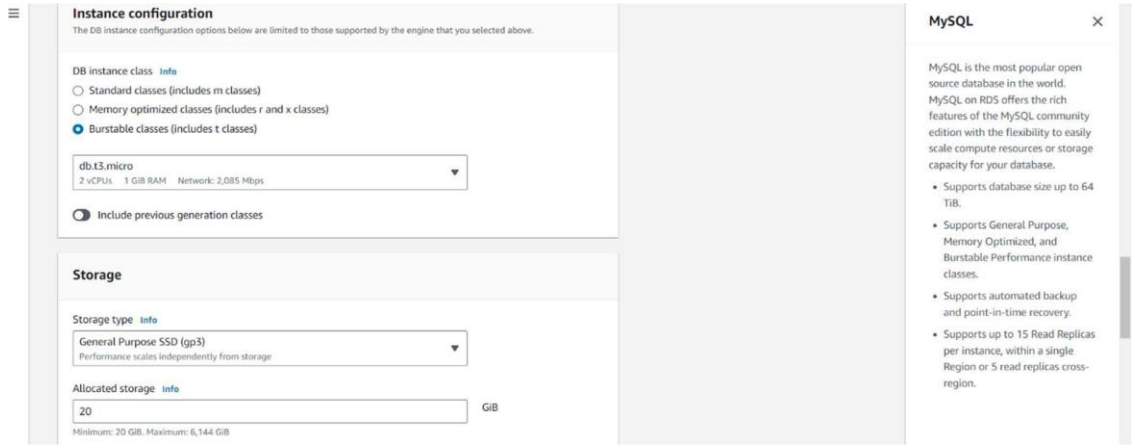
Step 13 : Under DB instance class, configure:

- Select Burstable classes (includes t classes).
- Select db.t3.micro

➢ Under Storage, configure:

- Storage type: General Purpose (SSD)
- Allocated storage: 20

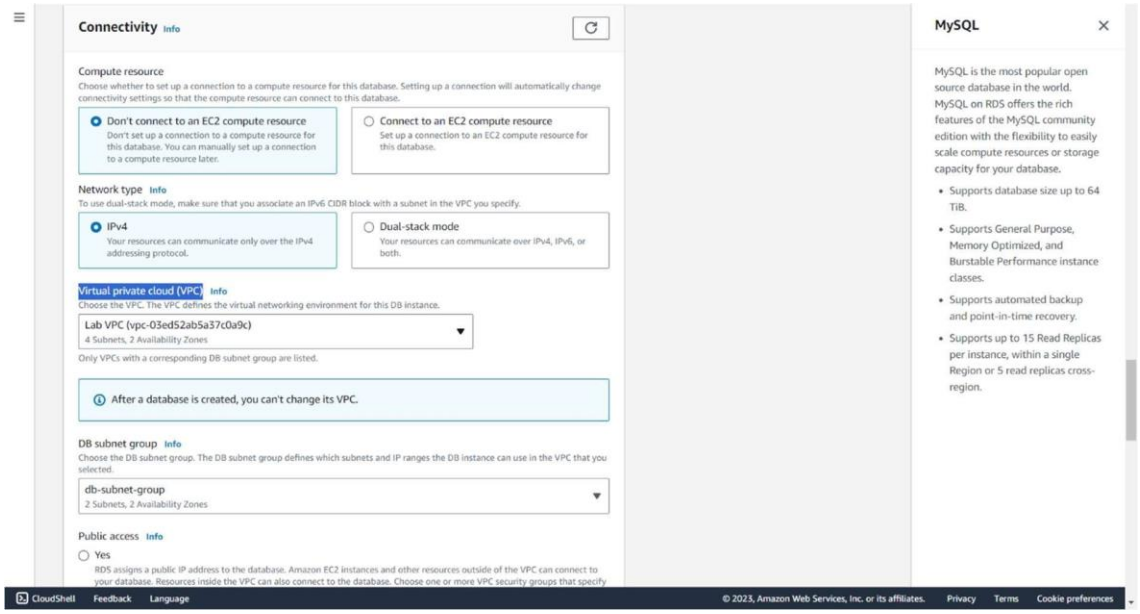
Snapshot :



Step 14 : Under Connectivity, configure:

- **Virtual Private Cloud (VPC)**: Lab VPC.

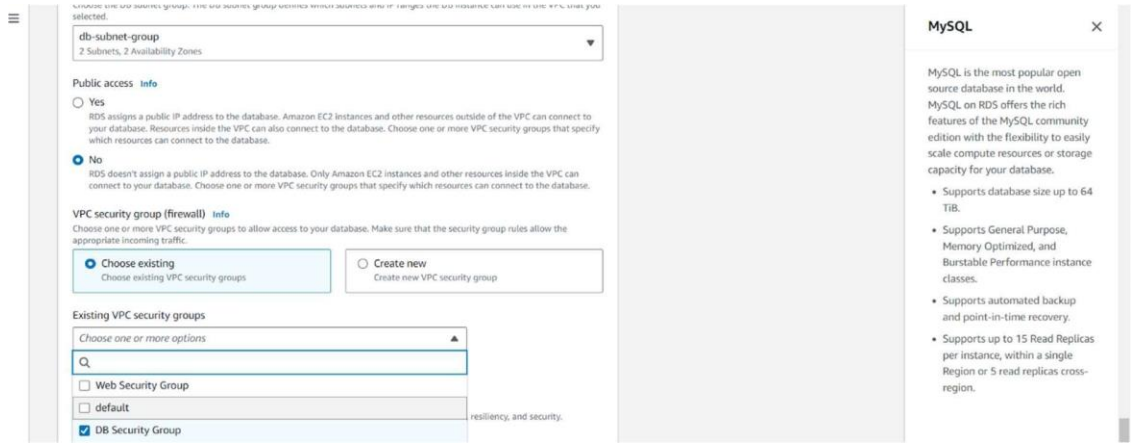
Snapshot :



Step 15 : Under Existing VPC security groups, from the dropdown list:

- Choose DB Security Group.
- Deselect default.

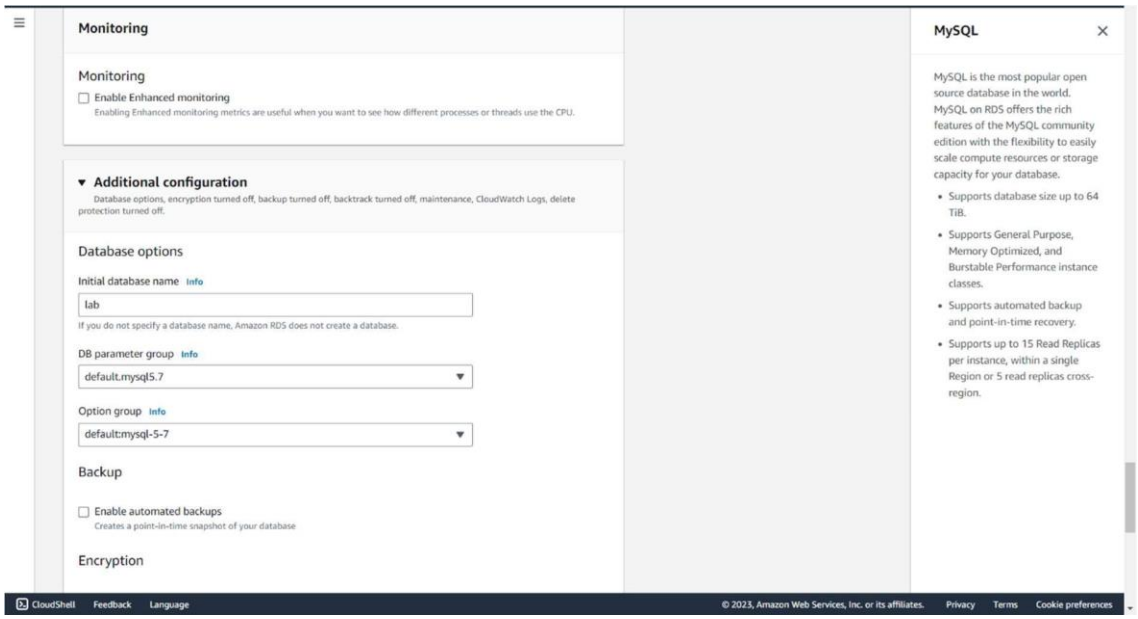
Snapshot :

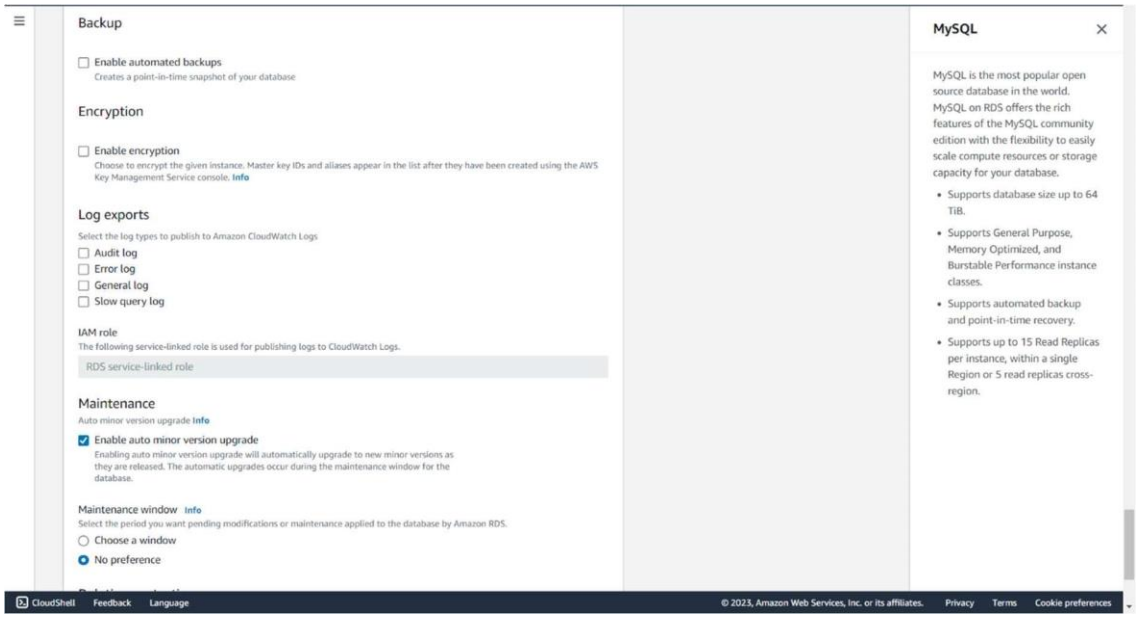


Step 16 : Expand Additional configuration, then configure:

- Initial database name: lab
- Uncheck Enable automatic backups.
- Uncheck Enable encryption
- Uncheck Enable Enhanced monitoring**.** Than Choose Create database

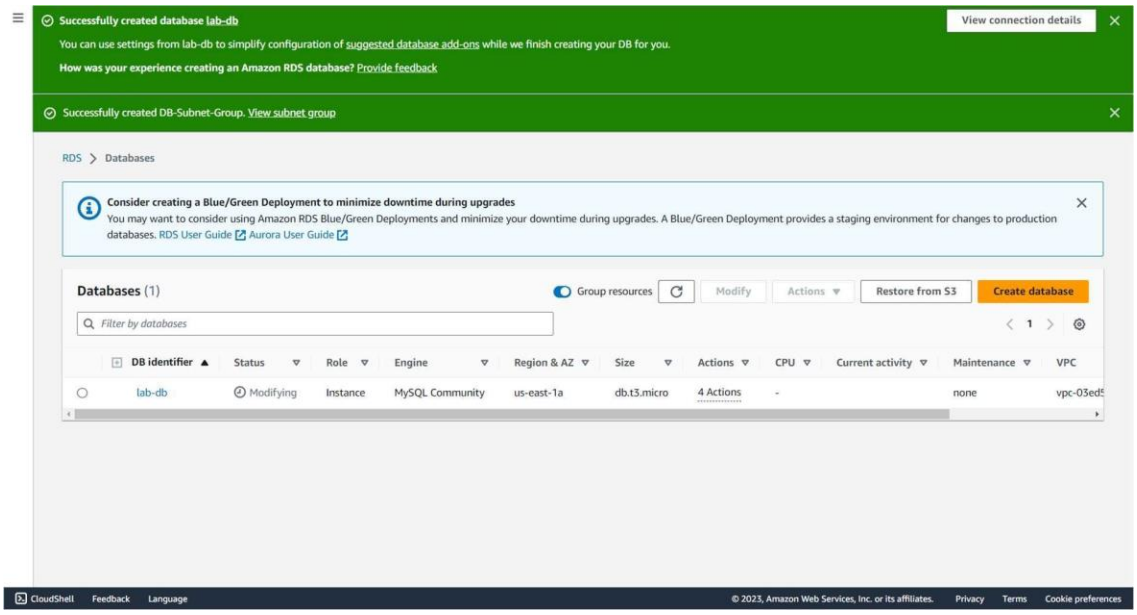
Snapshot :





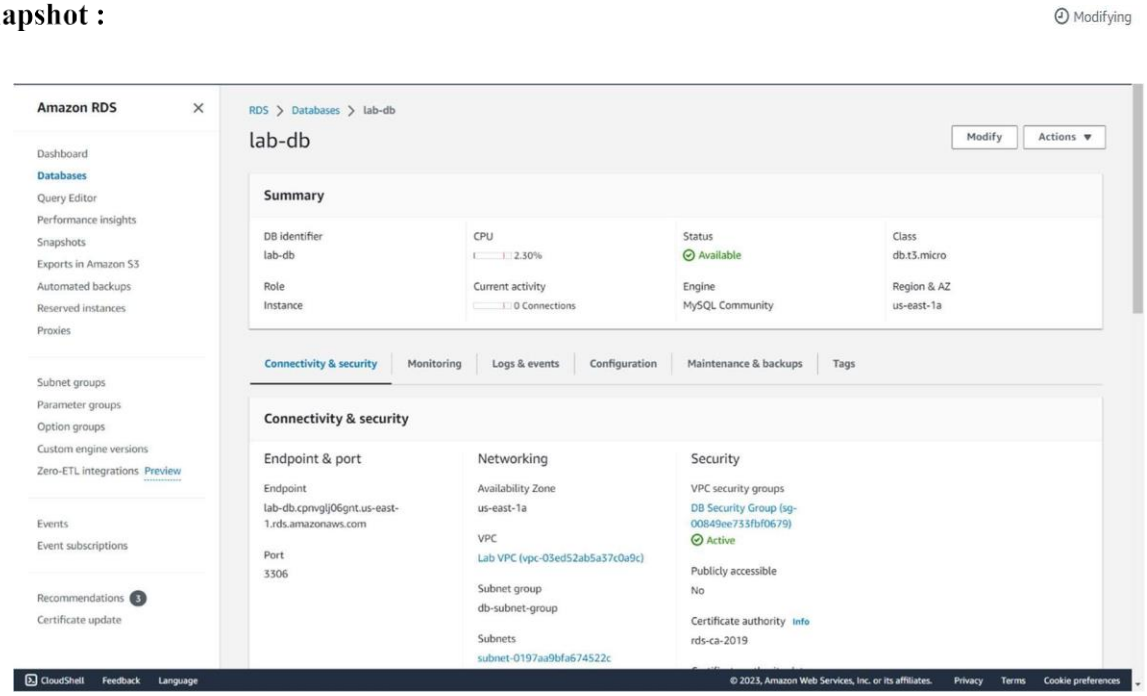
Step 17 : Choose lab-db (choose the link itself).

Snapshot :



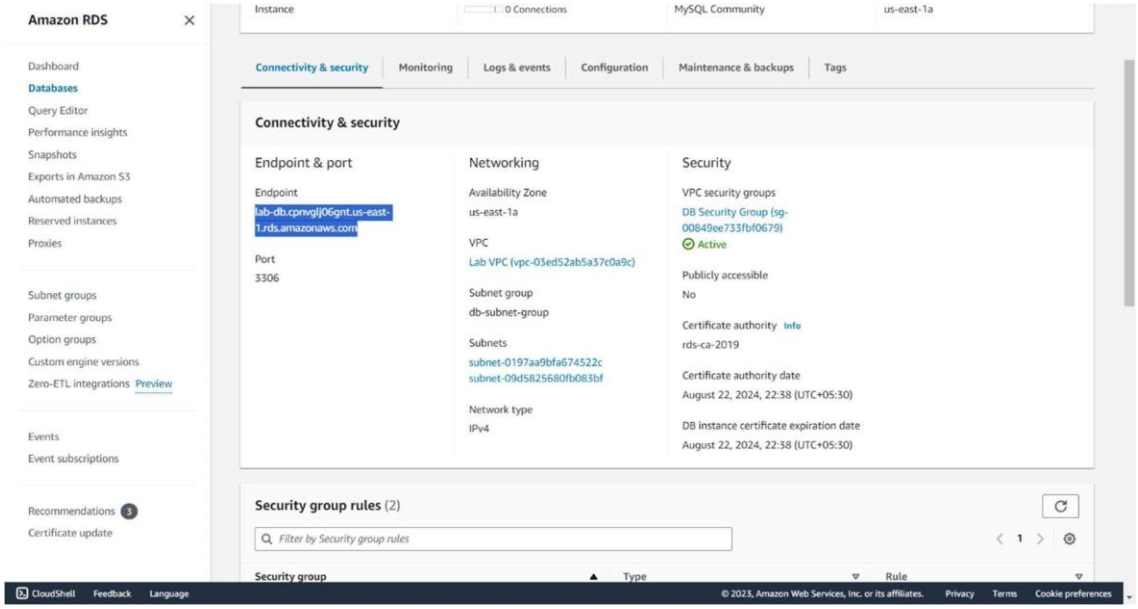
Step 18 : Wait until Info changes to Modifying or Available.

Snapshot :



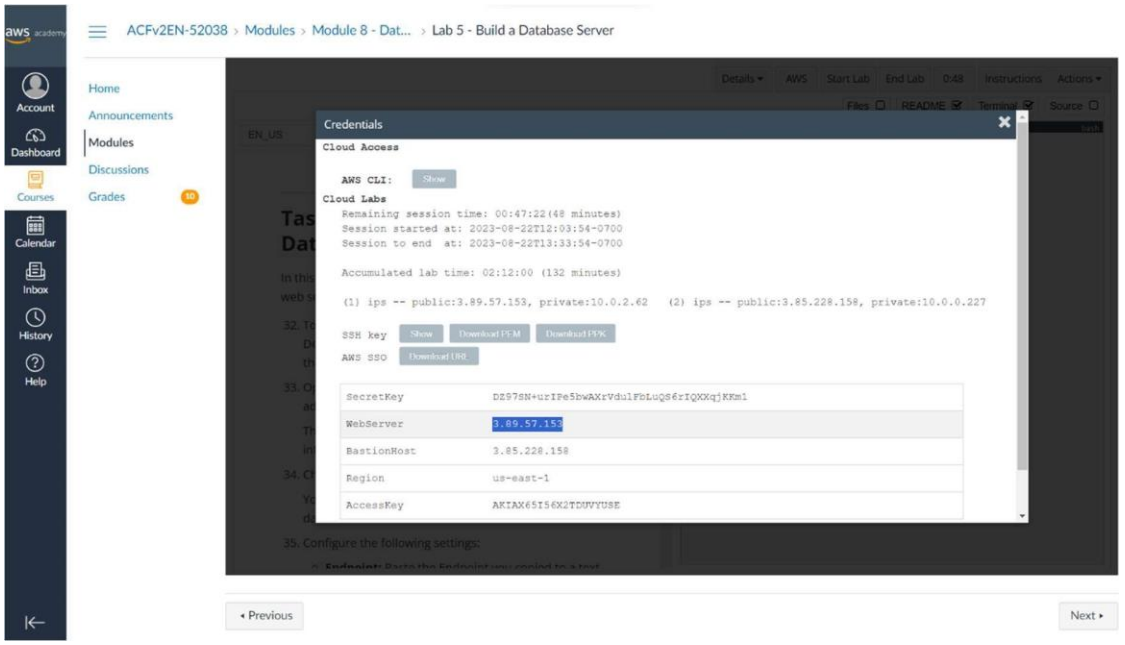
Step 19 : Scroll down to the Connectivity & security section and copy the Endpoint field.

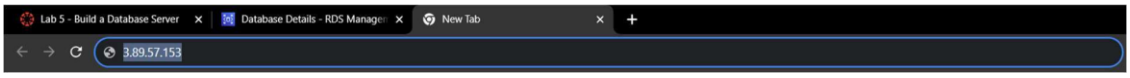
Snapshot :

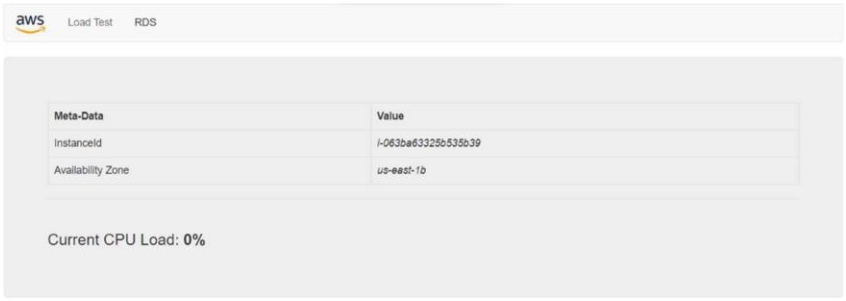


Step 20 : To copy the WebServer IP address, choose on the Details drop down menu above these instructions, and then choose Show. and Open a new web browser tab, paste the WebServer IP address and press Enter.

Snapshot :



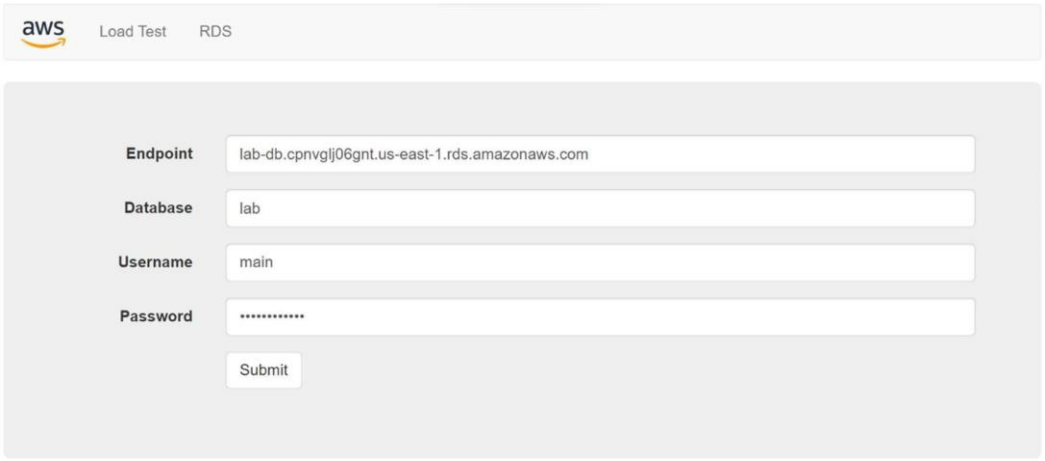


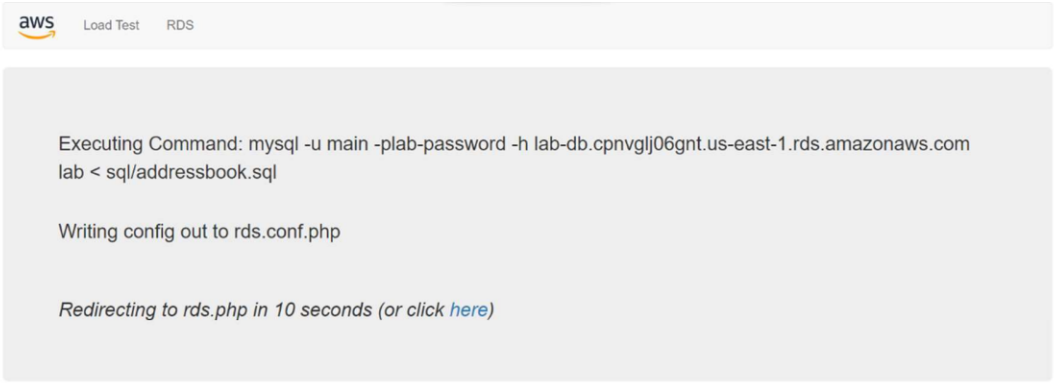


Step 21 : Choose the RDS link at the top of the page then Configure the following settings:

- Endpoint: Paste the Endpoint you copied to a text editor earlier
- Database: lab
- Username: main
- Password: lab-password
- Choose Submit

Snapshot :





Step 22 : Test the web application by adding, editing and removing contacts.

Snapshot :