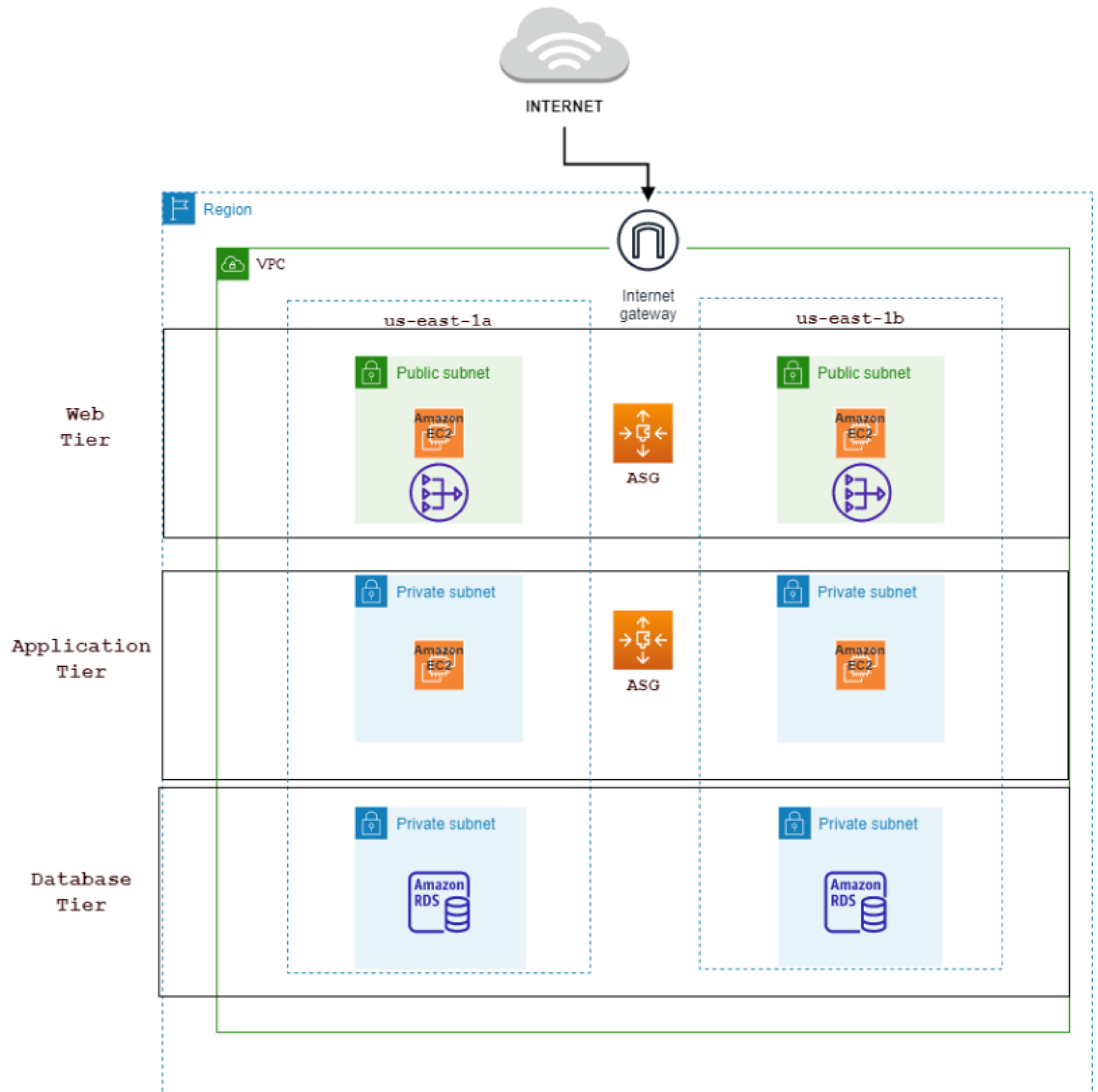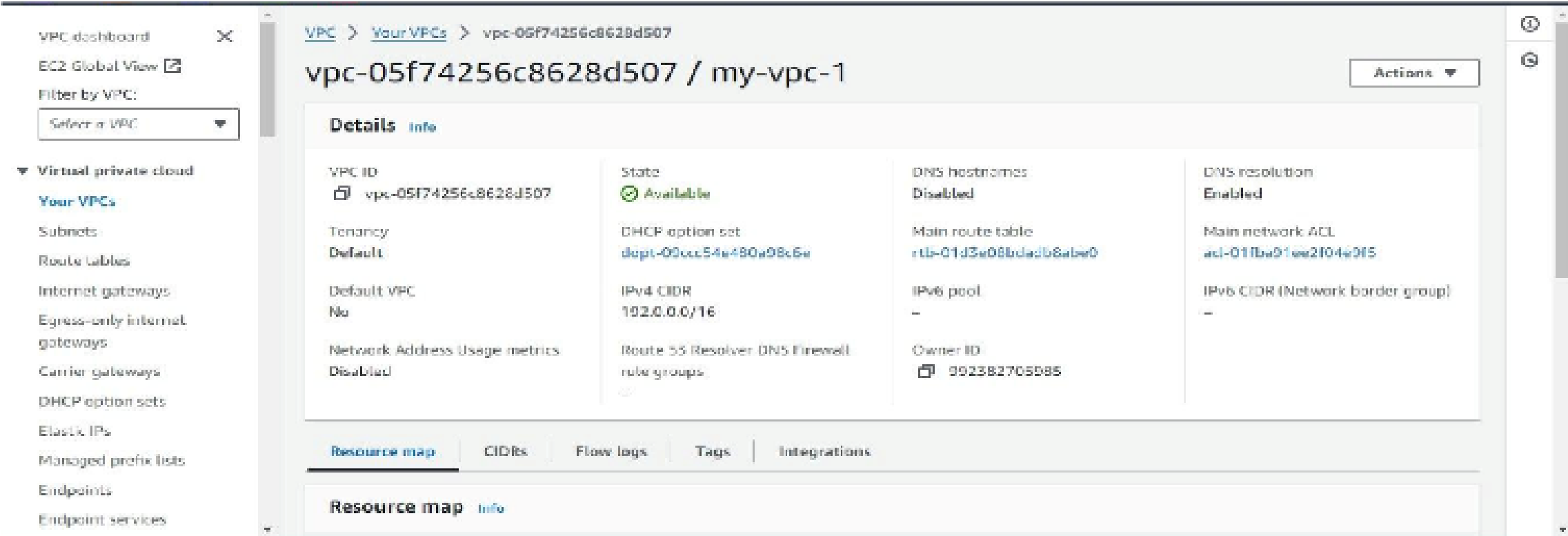**Name:** N.Venkateswararao

Phone no: +91-6303568924

Batch: 119(7am)

Mini Project (3-tier Architecture):-

- Create a VPC with specific name my-vpc-1 in a region Oregon

- Now create 1 public & 2 private subnet in one availability Zone(1a) and other 1 public & 2 private subnet in other availability Zone(1b) and enable auto assign ipv4 in subnet settings by attaching the route tables and Internet gateway within my-vpc-1
- And also attach the nat gateway(one-way traffic) to the private subnet
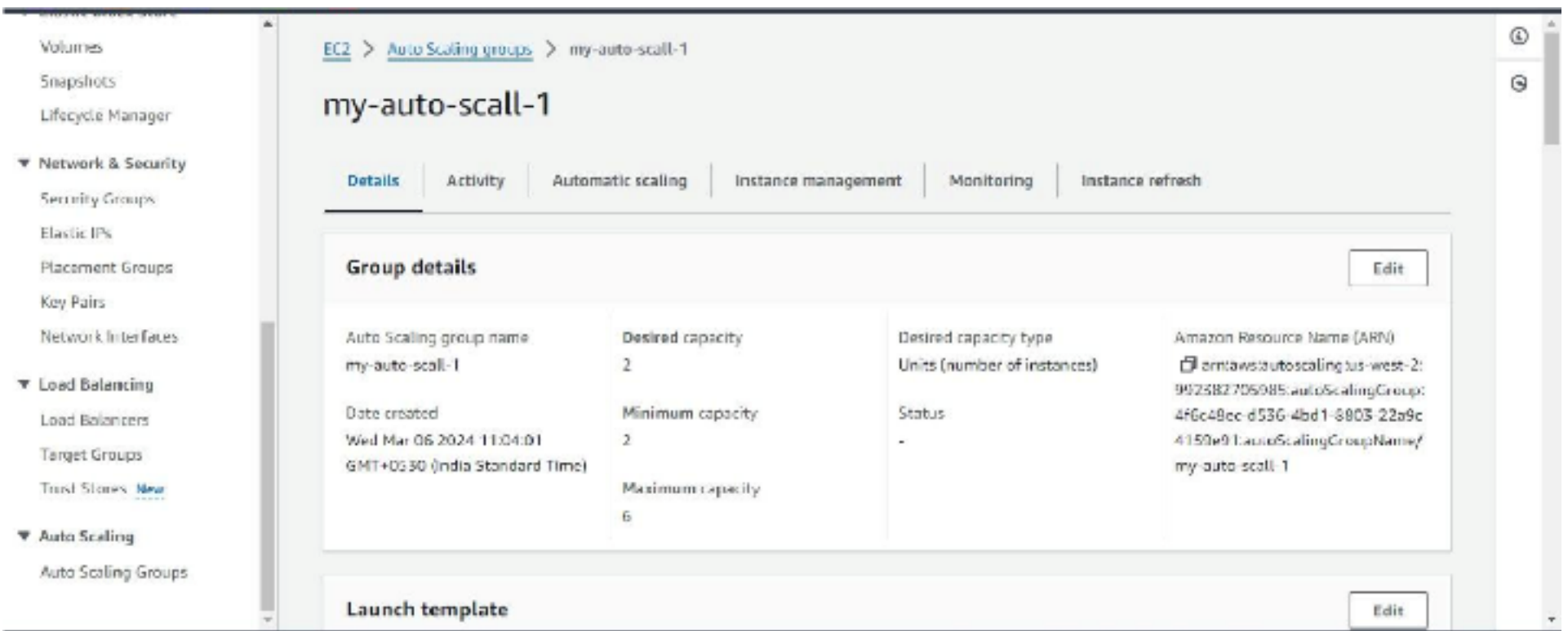

WebTier:

- Create a web tier launch template
  1) AMI: Amazon 2 Linux
  2) Instance type: t2.micro (1GB – Free Tier)
  3) A new or existing key pair
  4) Create a new security group and add inbound rules (SSH & HTTP)
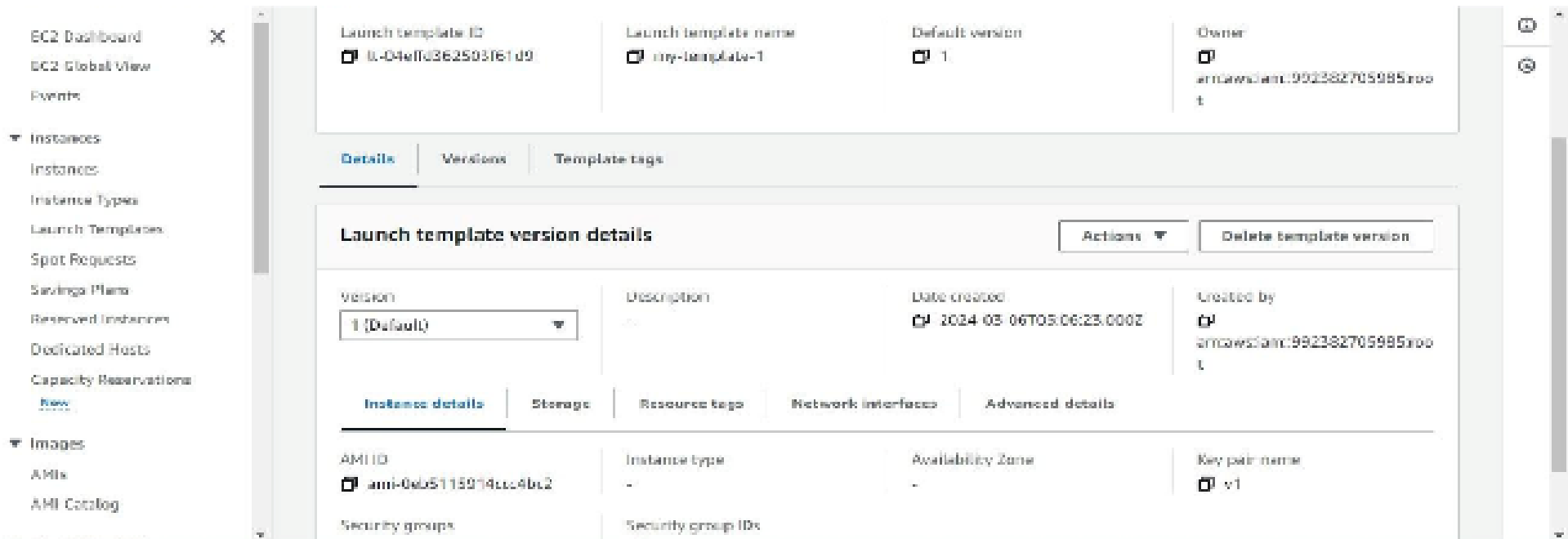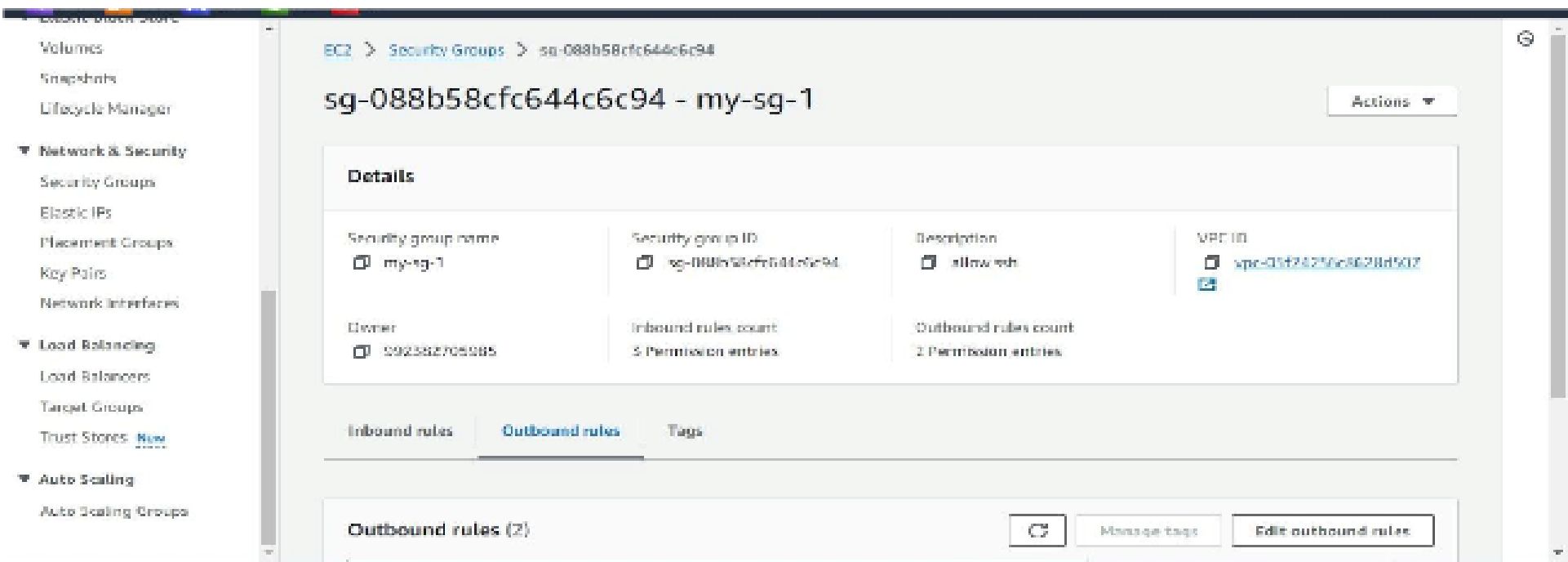
- Create auto -scaling groups with following settings
    1) Attach the created template
    2) Select the my-3 tier-vpc along with two public subnets
    3) Create a new application load balancer
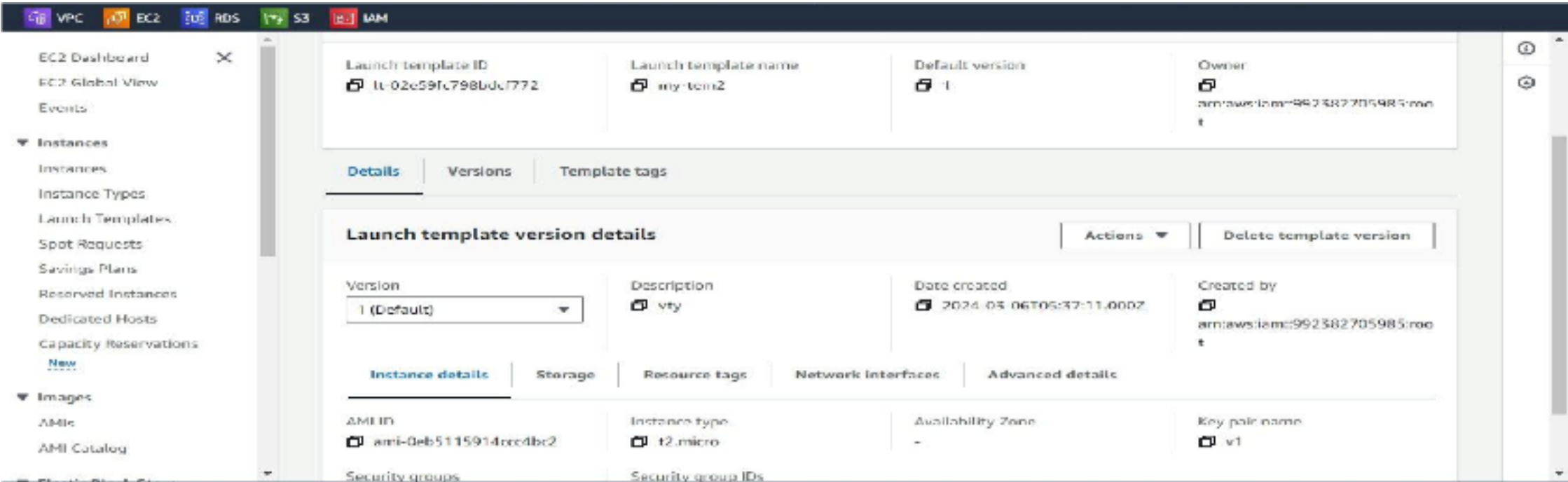

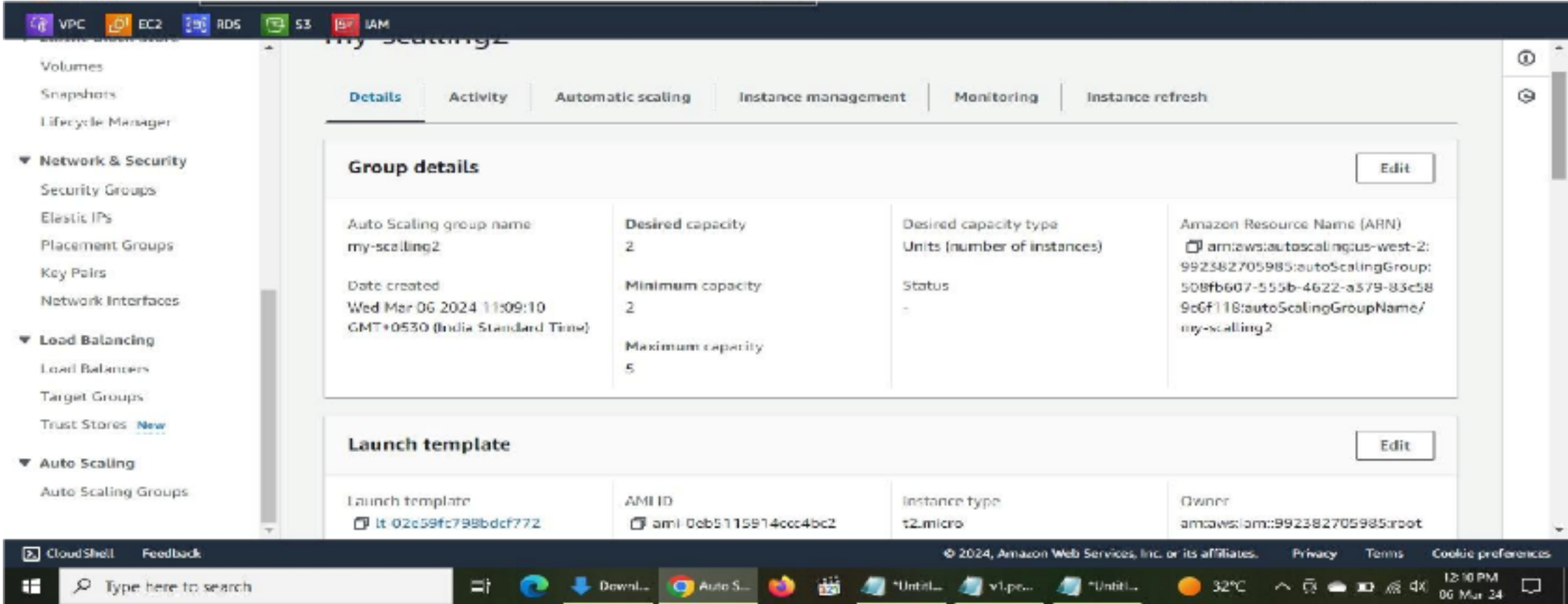- Now, Lets launch the SSh to see if the application is working

Application Tier:

- Launch an Template to define EC2 instance type

- An auto scaling to dynamically provision Ec2
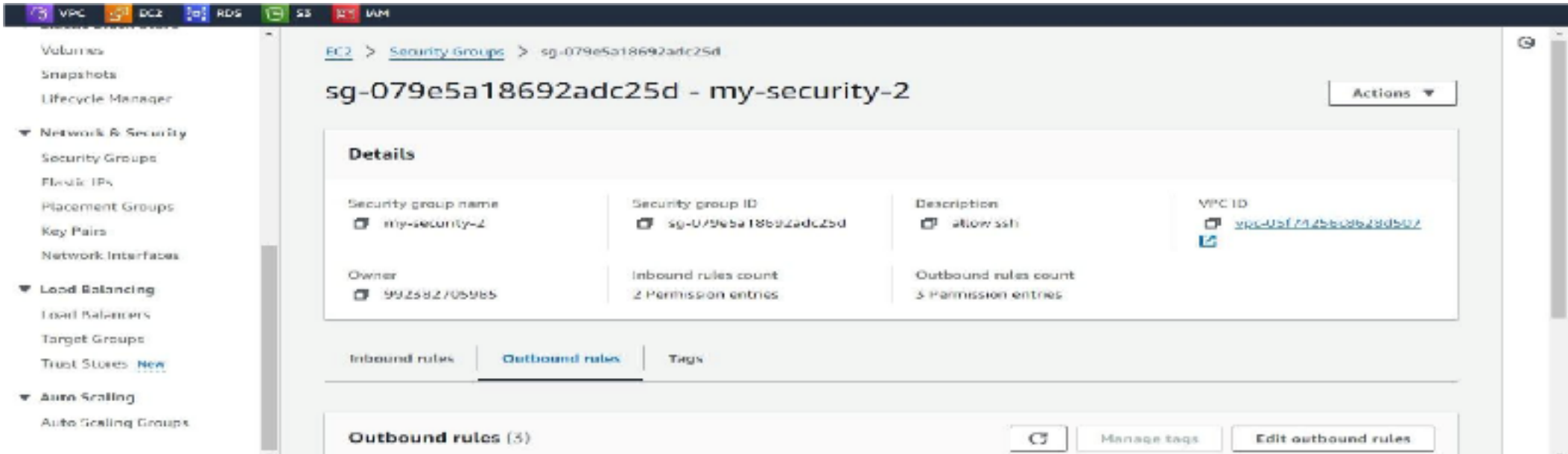- An application Load Balancer to route the traffic from web tier
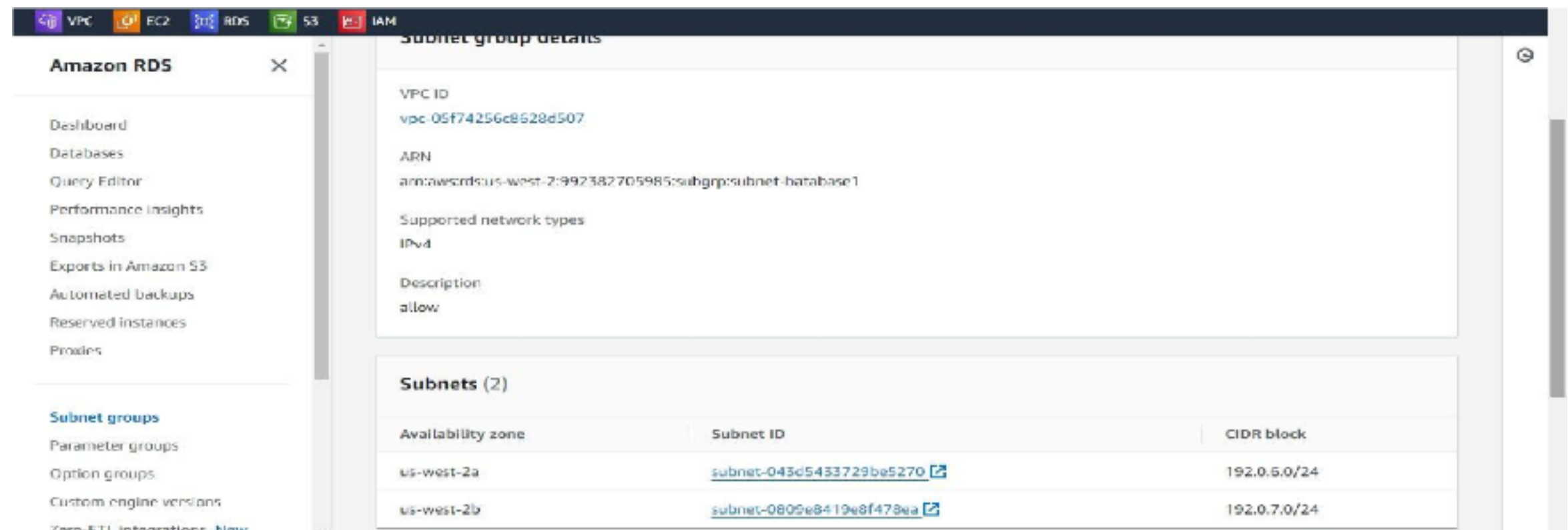

- Now connect to the public instance and connect using .pem to the private instance
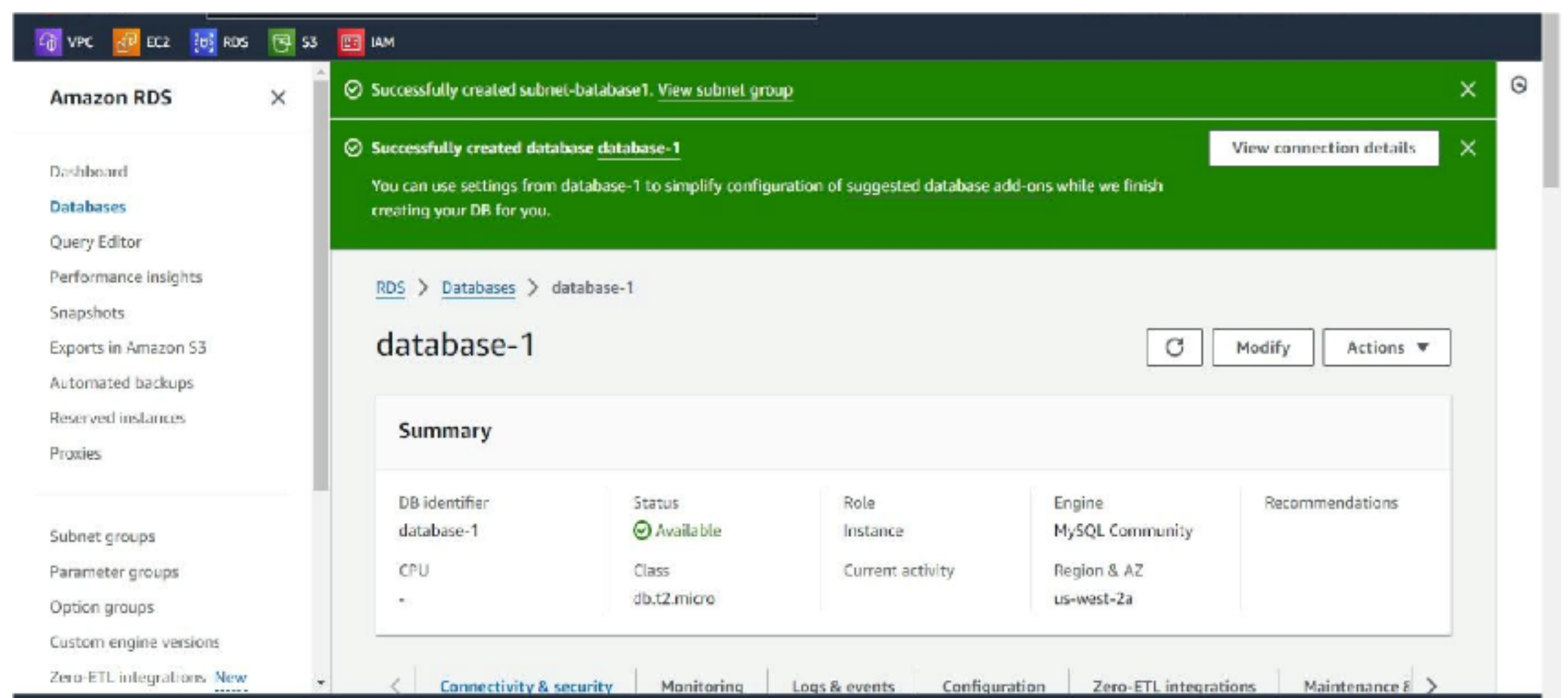
Database Tier:-

- Create a security group add inbound and outbound rules for mysql/Arora

- Create database subnet groups by attaching the 2 private subnets which are in different availability zones in RDS and attach the my-vpc-01

- Now, create RDS DataBase

- Connect to the database
    1) Connect to the server
    2) Install mysql
    3) And enter command `mysql -h YOUR_DB_ENDPOINT -P 3306 -u YOUR_DB_USERNAME -p` in these command instead of your_dB_endpoint we should enter our database endpoint and also edit username as well after that enter password that you have given while creating a relational database.