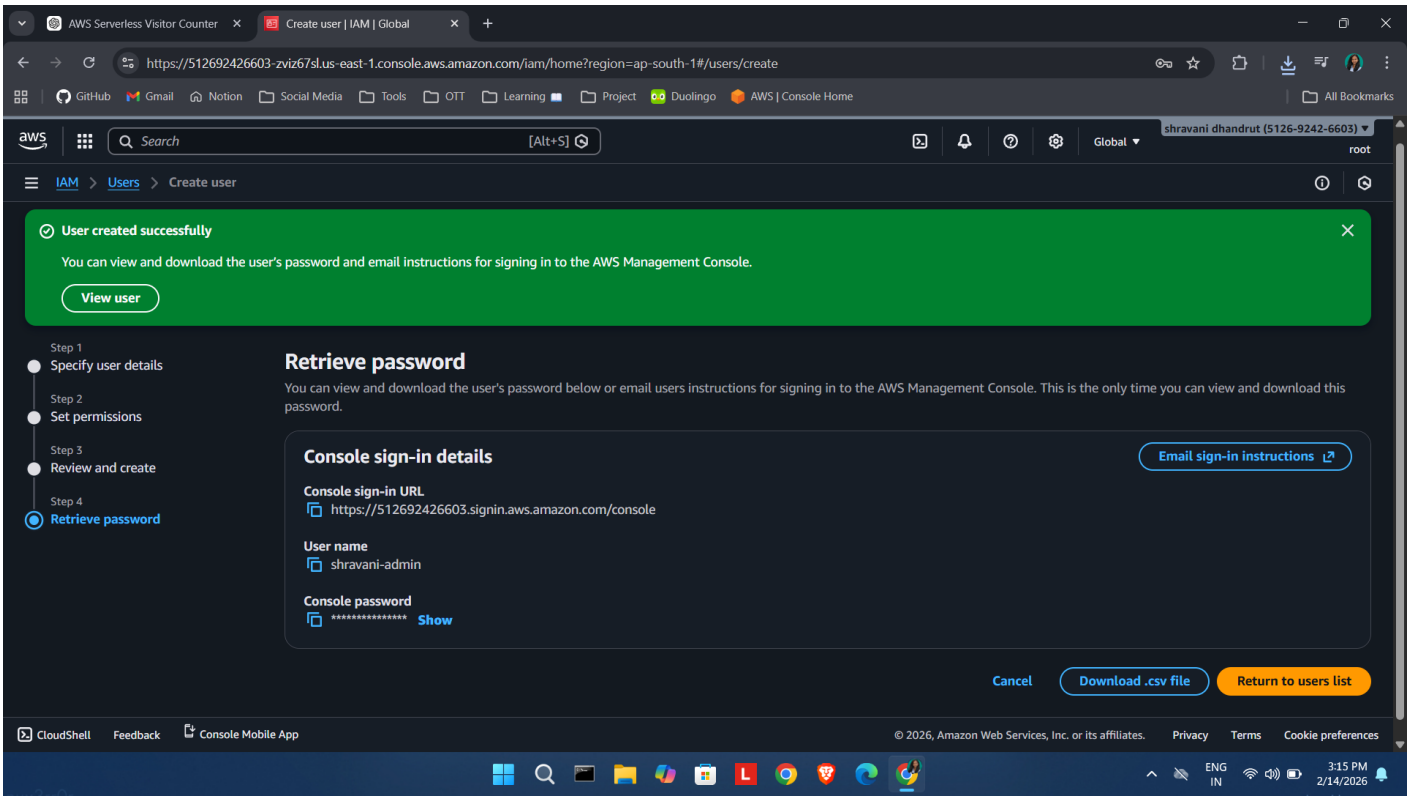
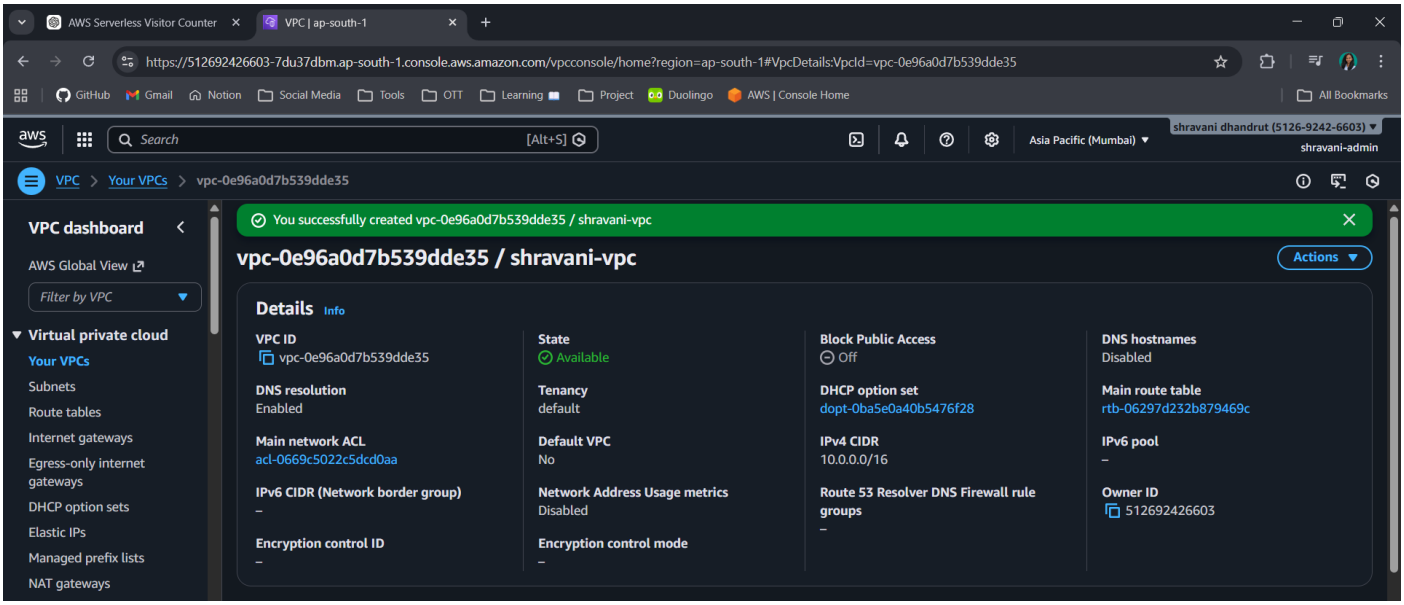
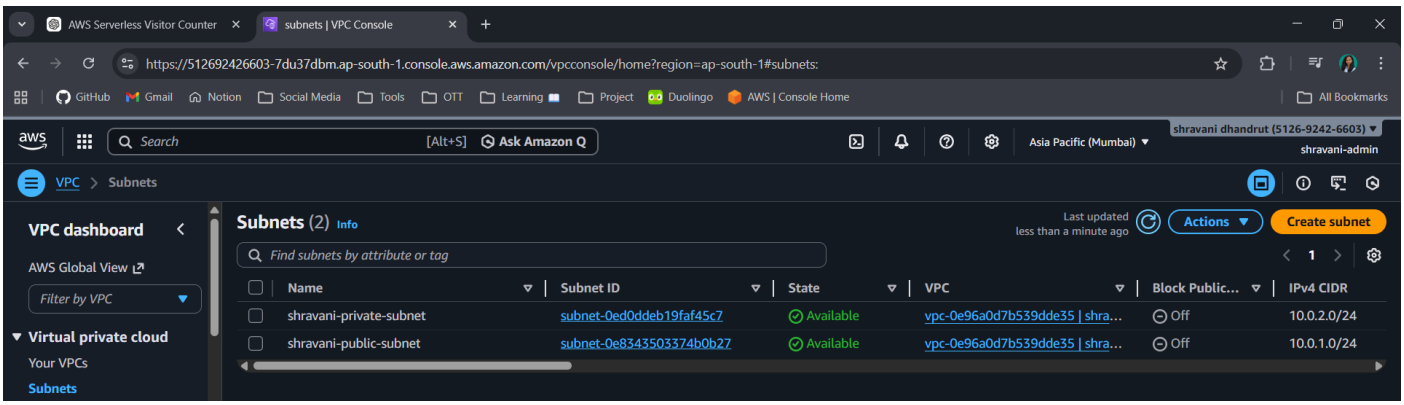
Create IAM user



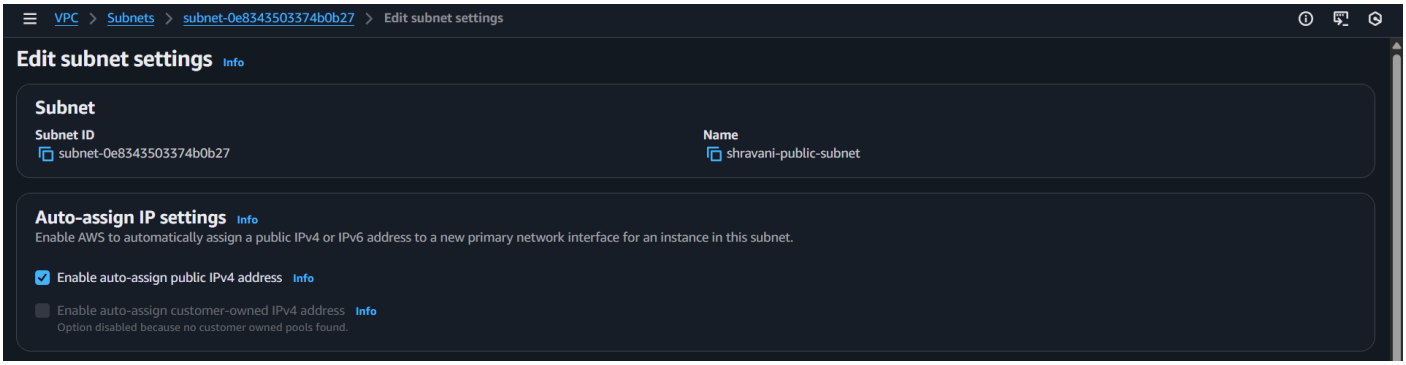
Create VPC



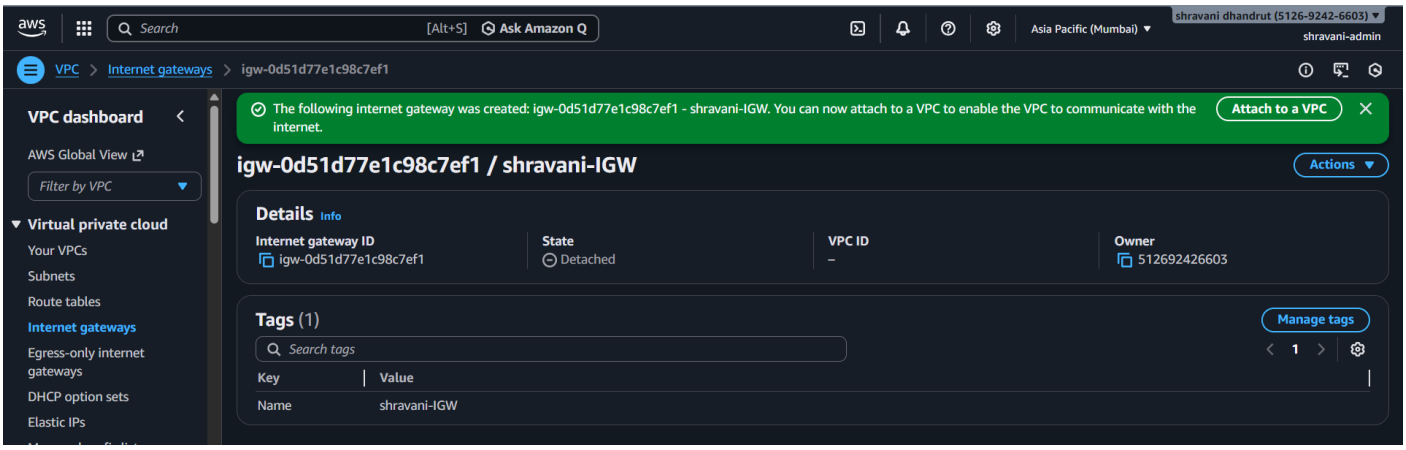
Create subnet



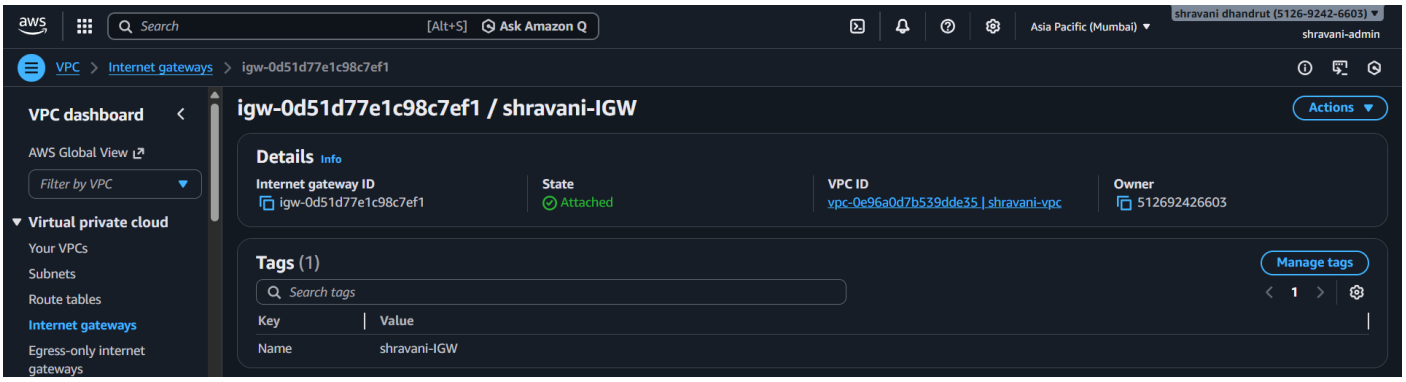
Enabling auto-assign IP for Public subnet



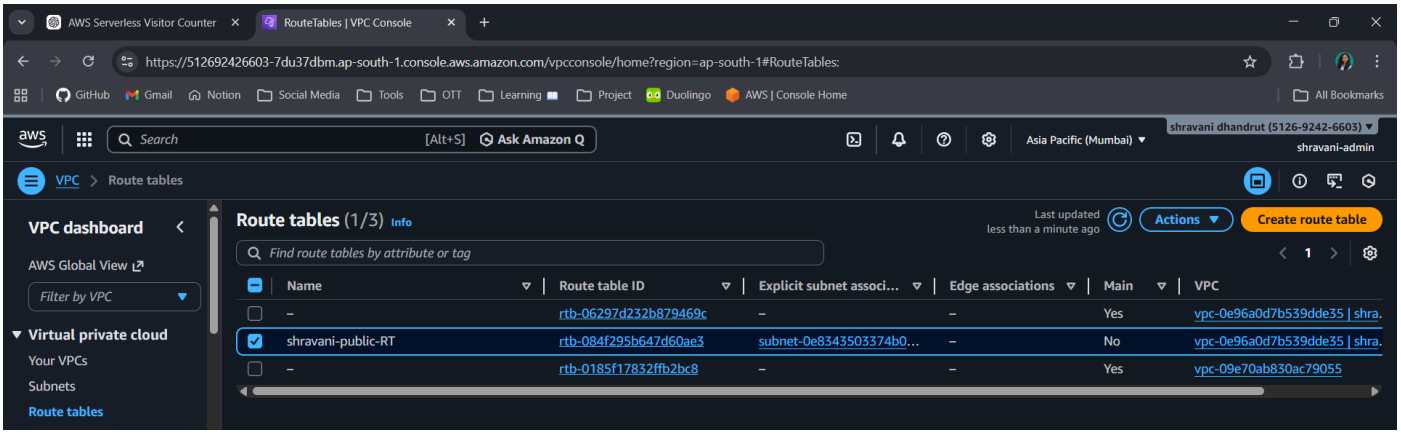
Create Internet Gateway



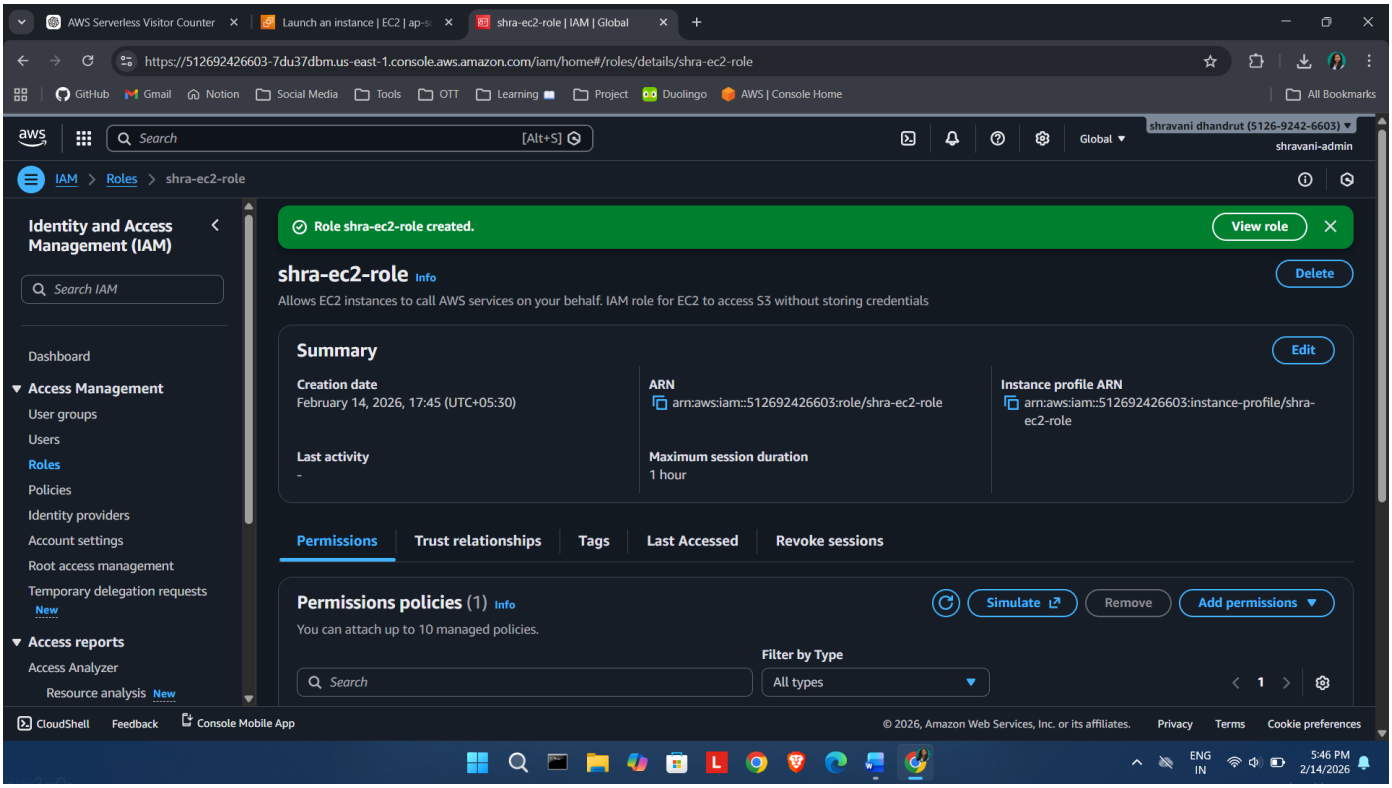
Attach Internet Gateway to VPC



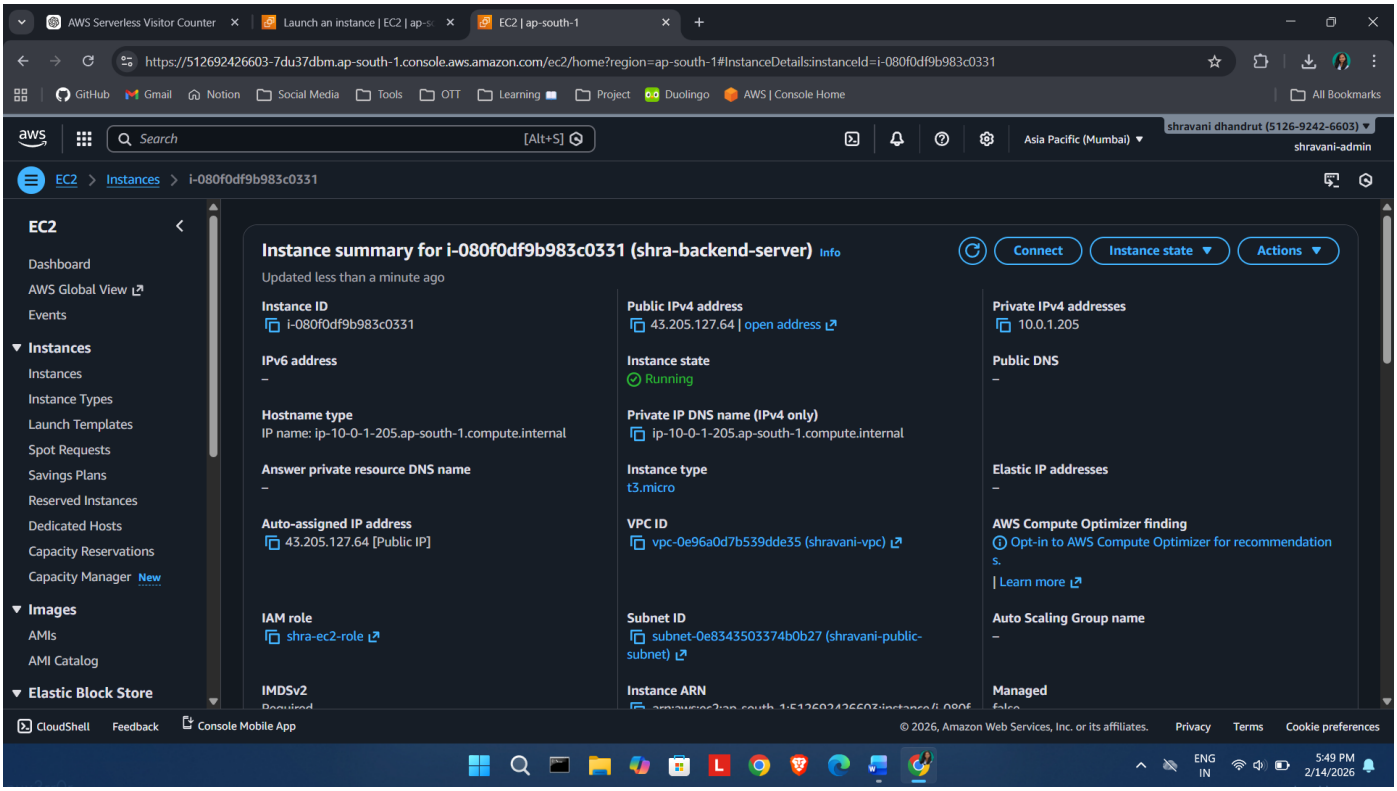
Create route table -> Edit route -> edit subnet association.



Create an IAM role for EC2 with full S3 access



Launch EC2 Instance



Configure Apache server over EC2

Commands:

yum install httpd* -y

systemctl status httpd

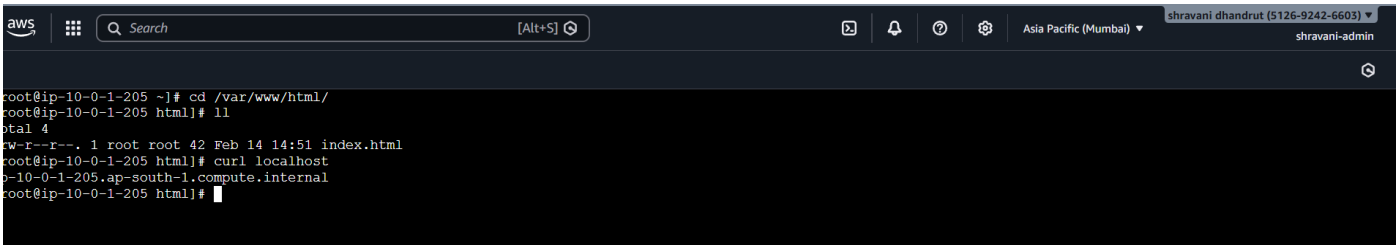
systemctl enable httpd

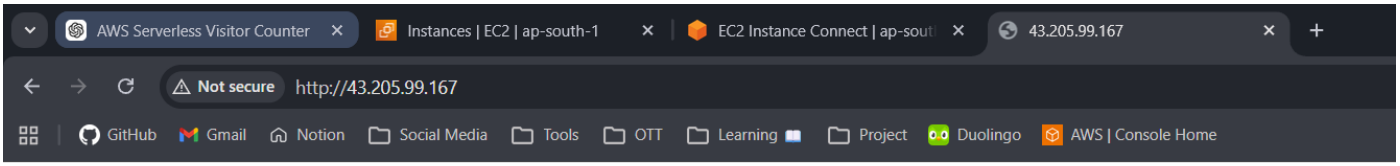
systemctl start httpd

cd /var/www/html/

ls

echo $(hostname -f) > index.html

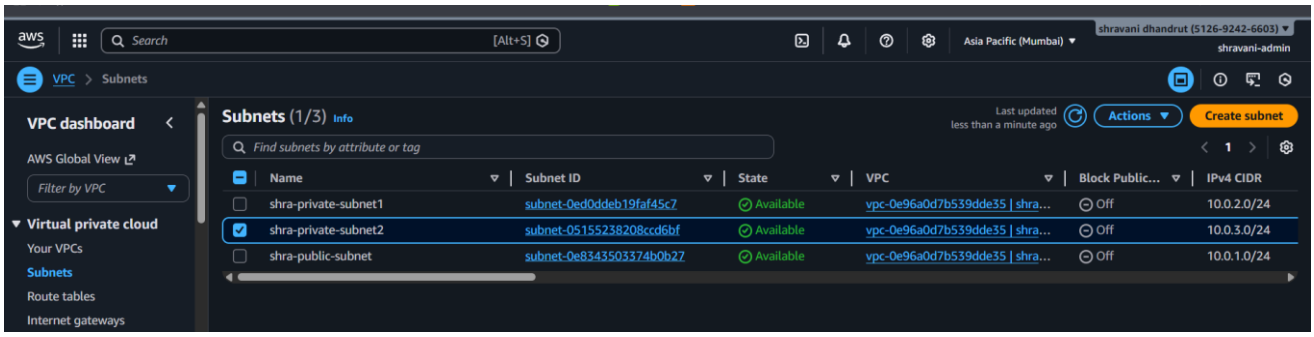




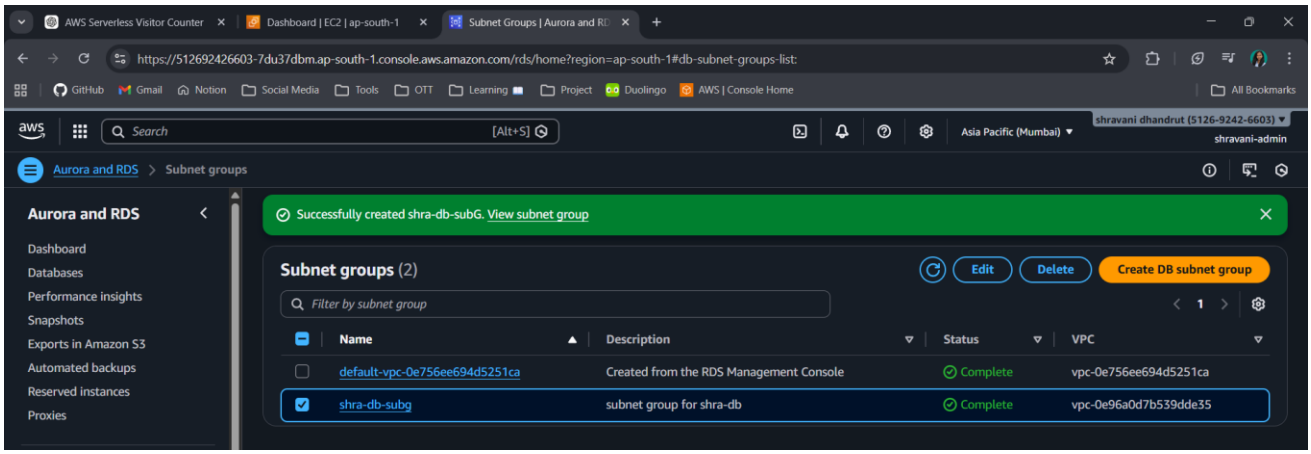
ip-10-0-1-205.ap-south-1.compute.internal

Create a Mysql Database using RDS

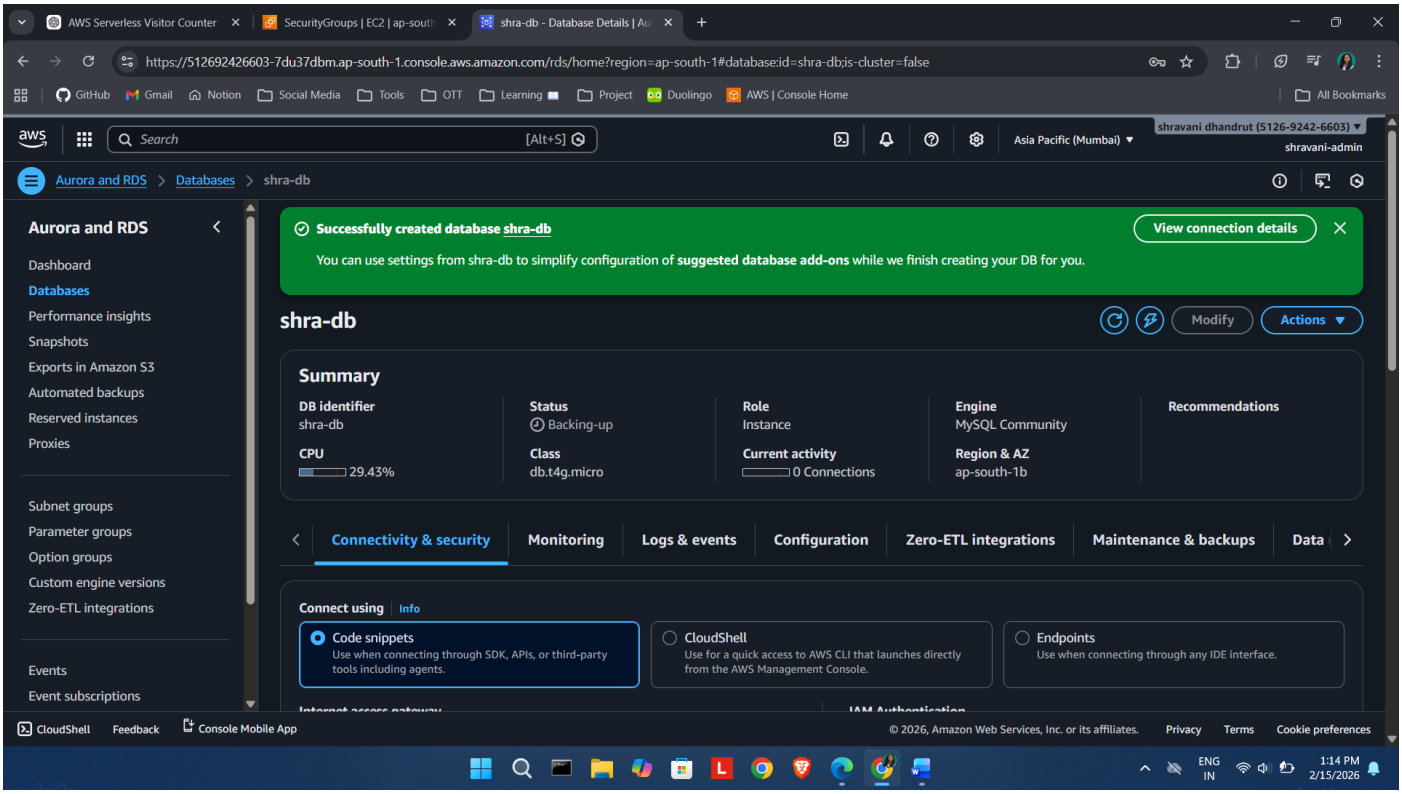
1. Create one more private subnet in another AZ



2. Create db subnet group

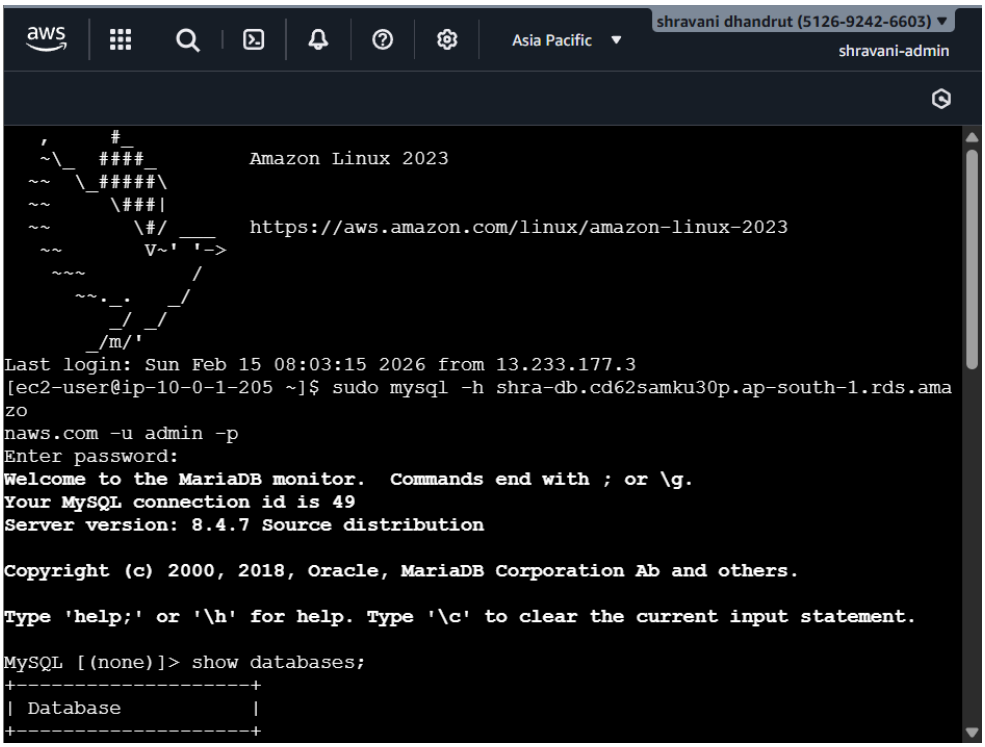


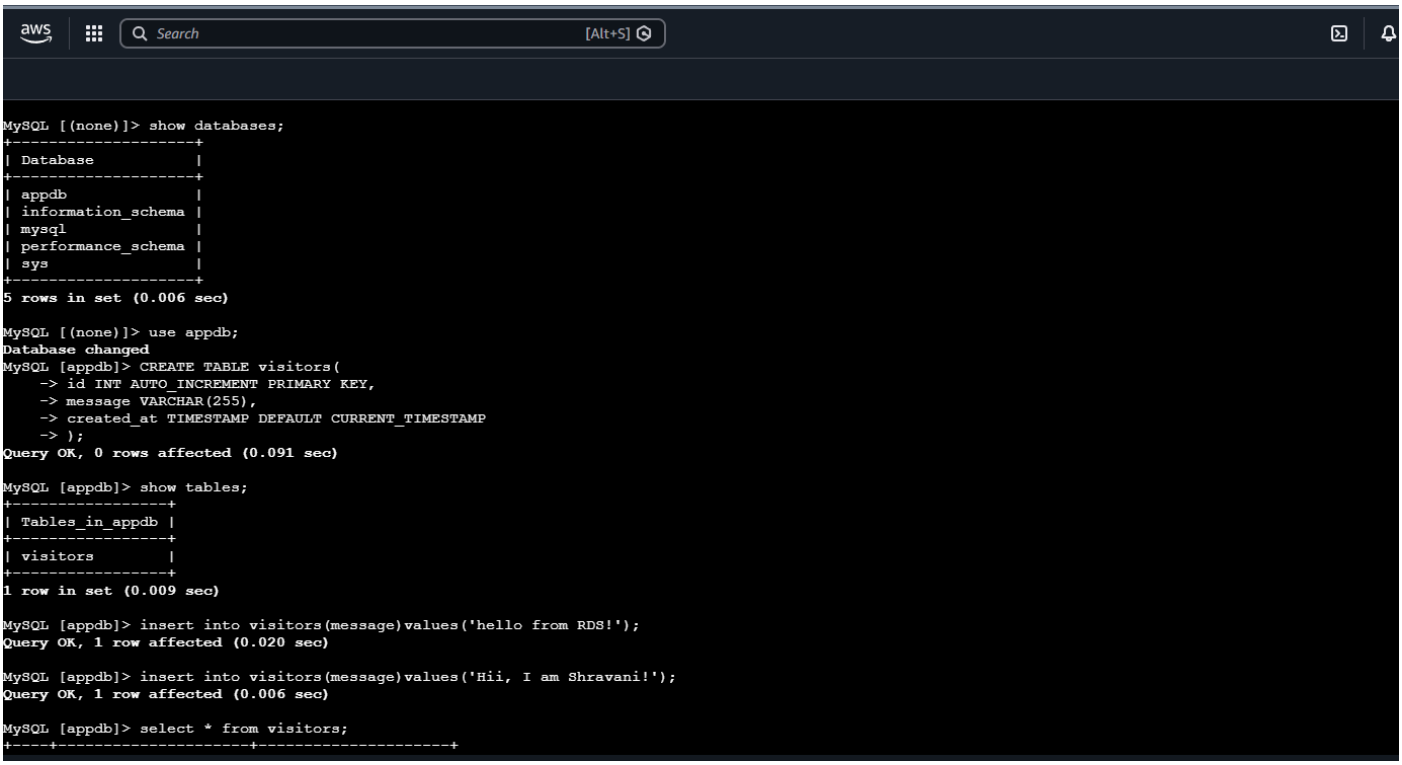
Create Database



Installand open mysql in EC2

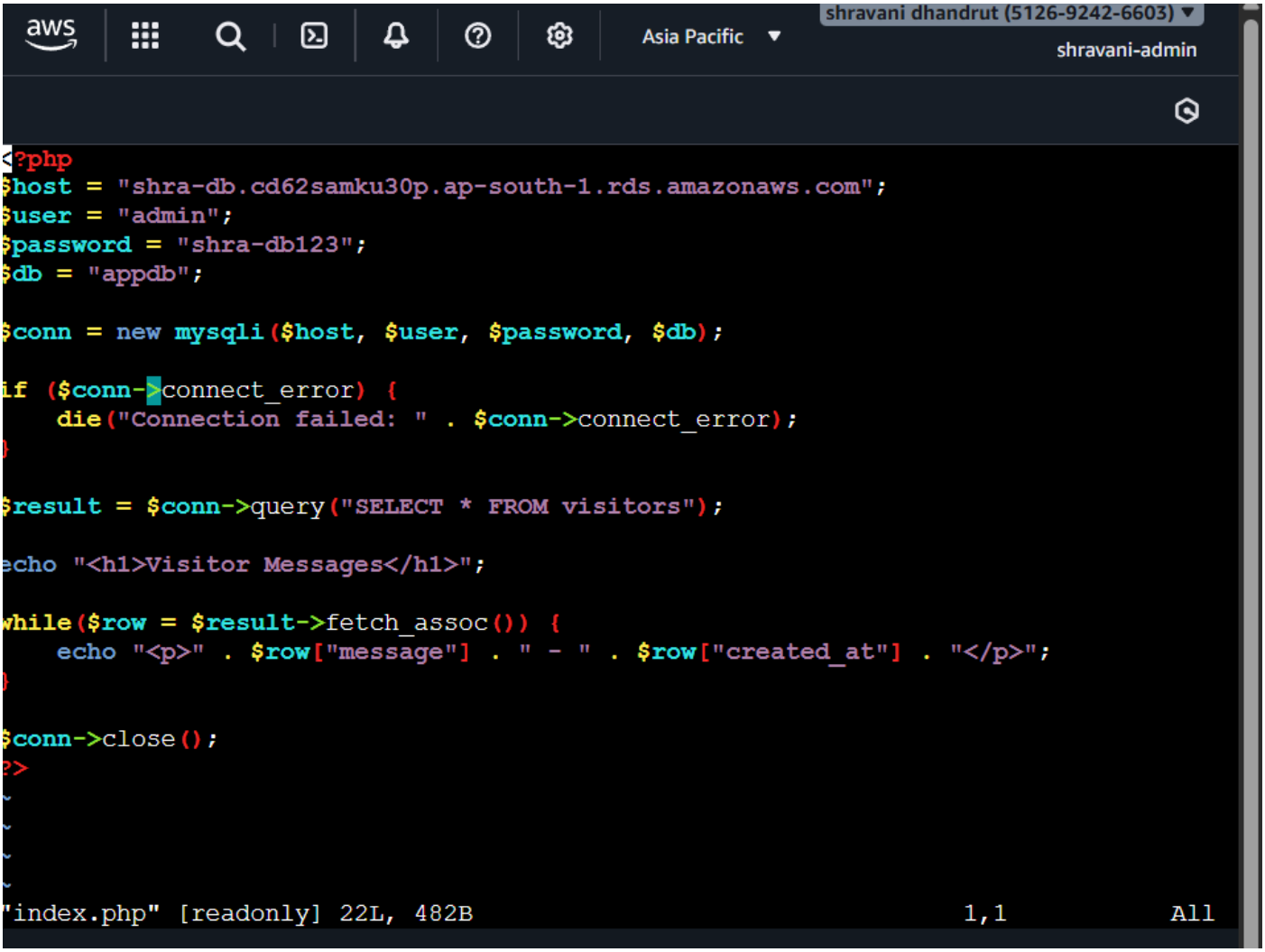
- Yum install mysql -y OR yum install mariadb
- mysql -h shra-db.cd62samku30p.ap-south-1.rds.amazonaws.com -u admin -p



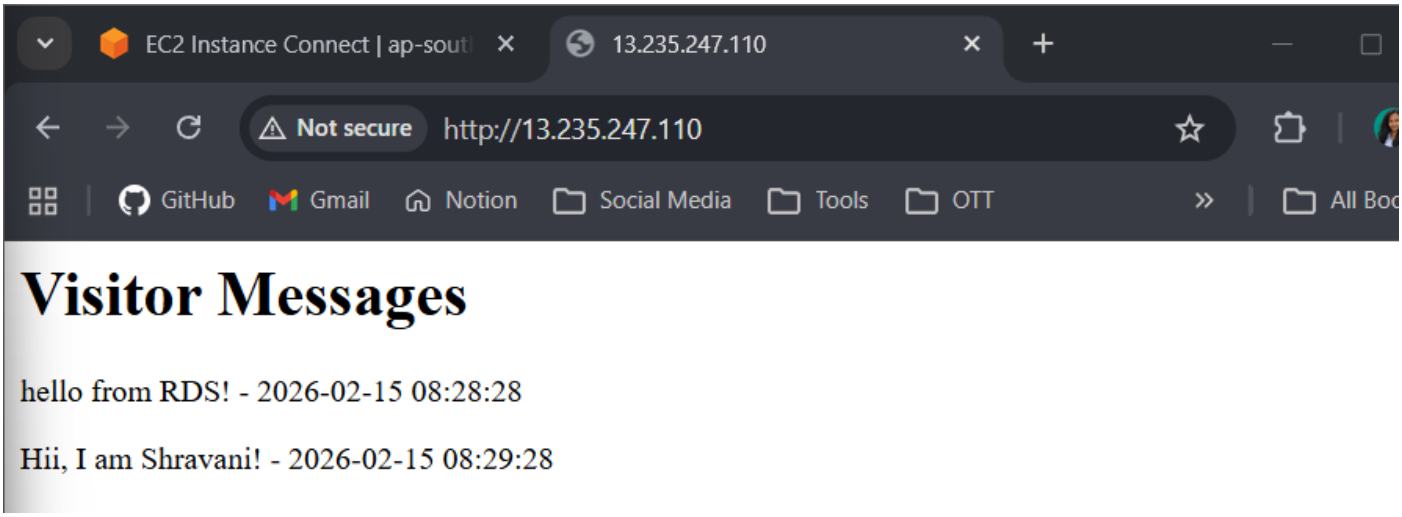


Install php in ec2

- dnf install php php-mysqlnd -y
- cd /var/www/html
- rm -f index.html
- sudo nano index.php
- write a php code inside index.php

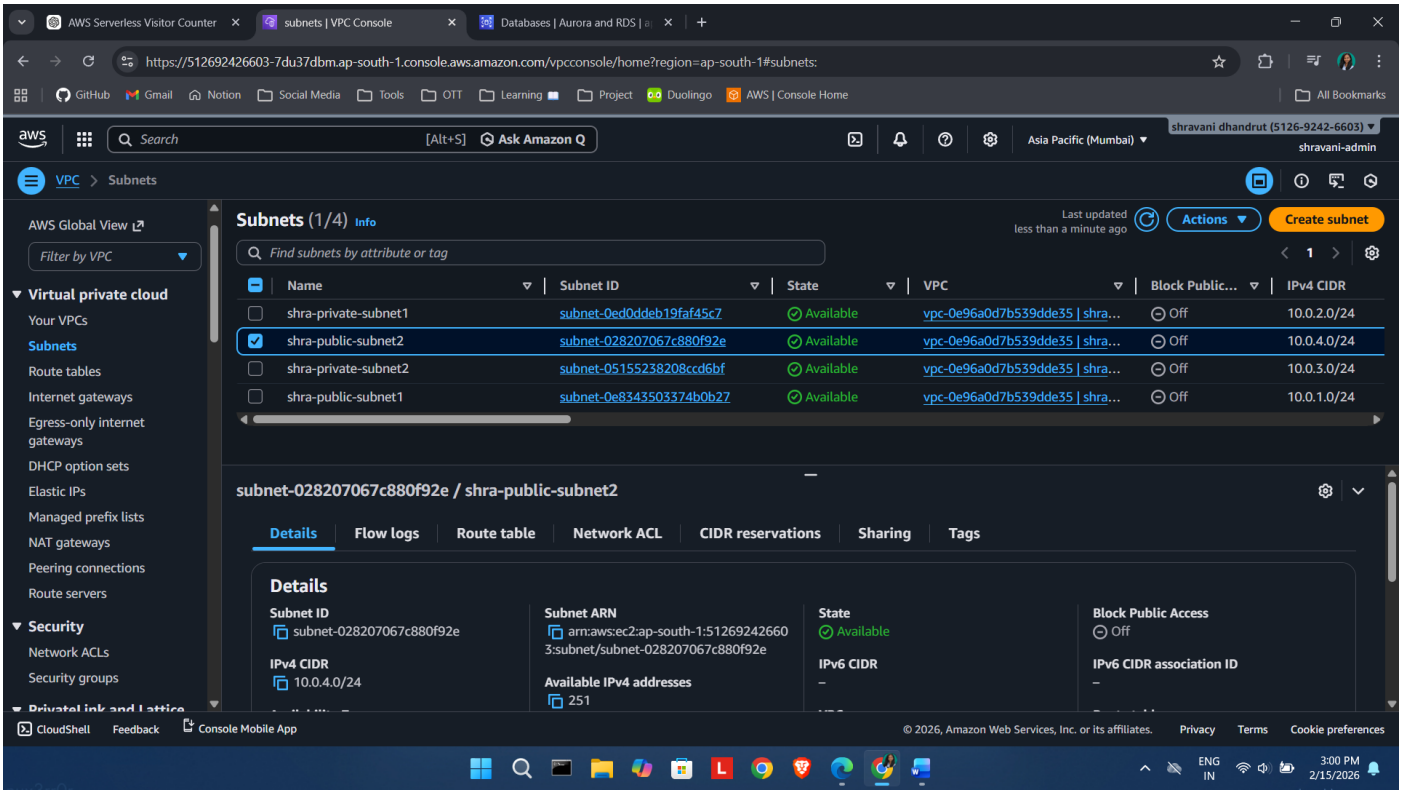


- check it works or not -> open browser -> enter EC2 public IP



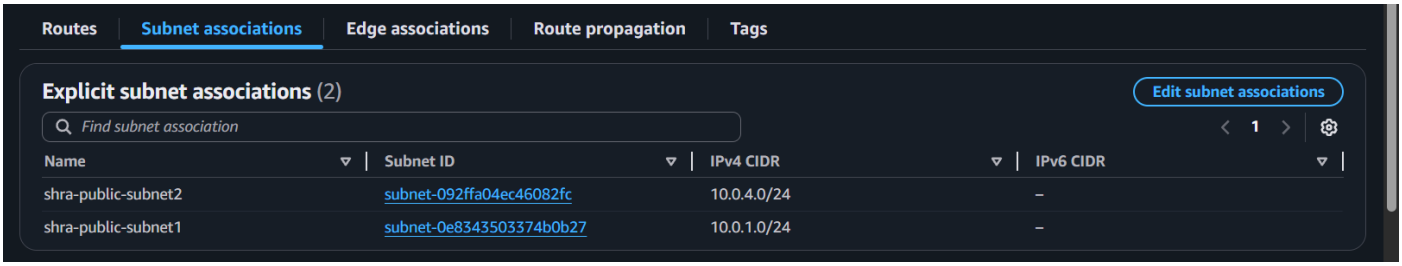
Scaling

Create a second public subnet 10.0.4.0/24

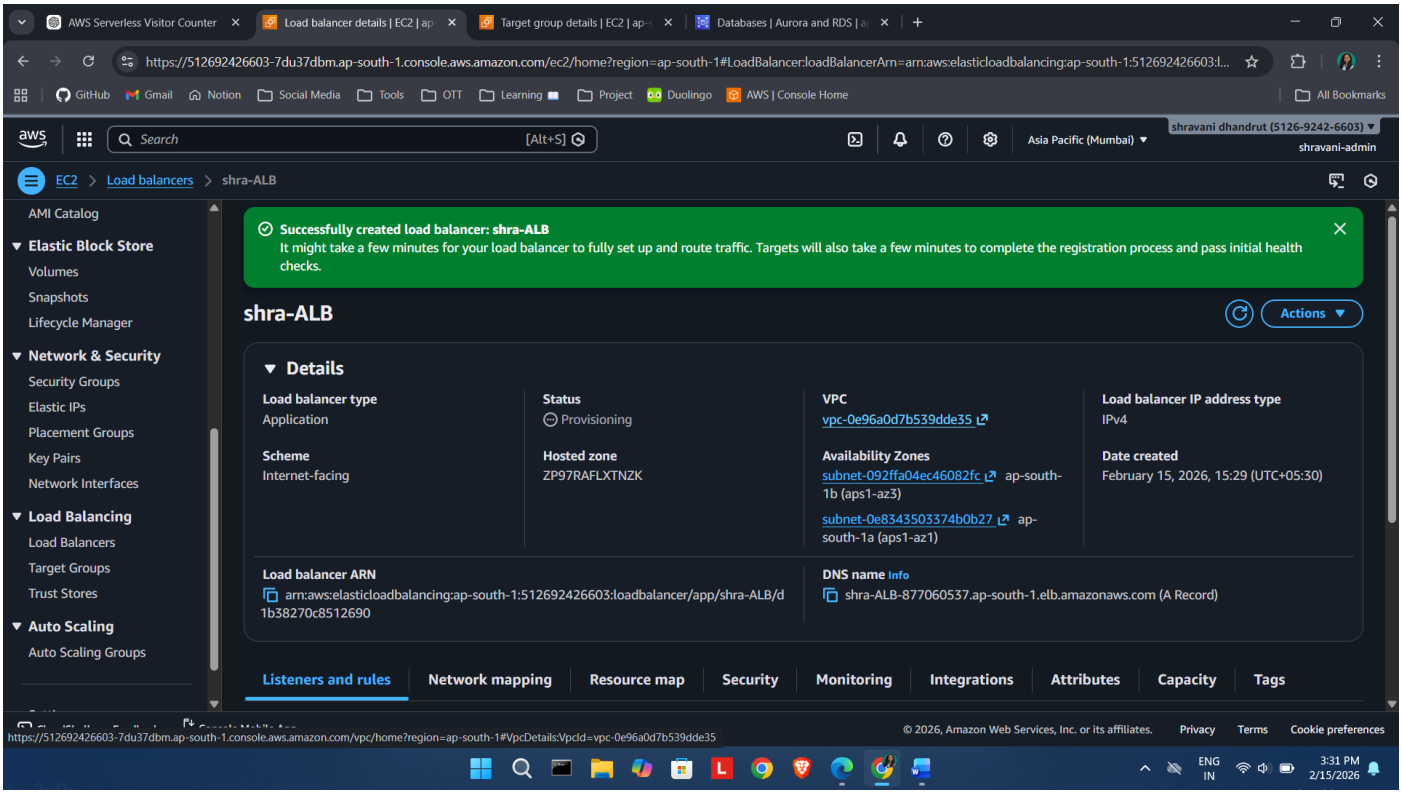


Enable Auto-assign IP

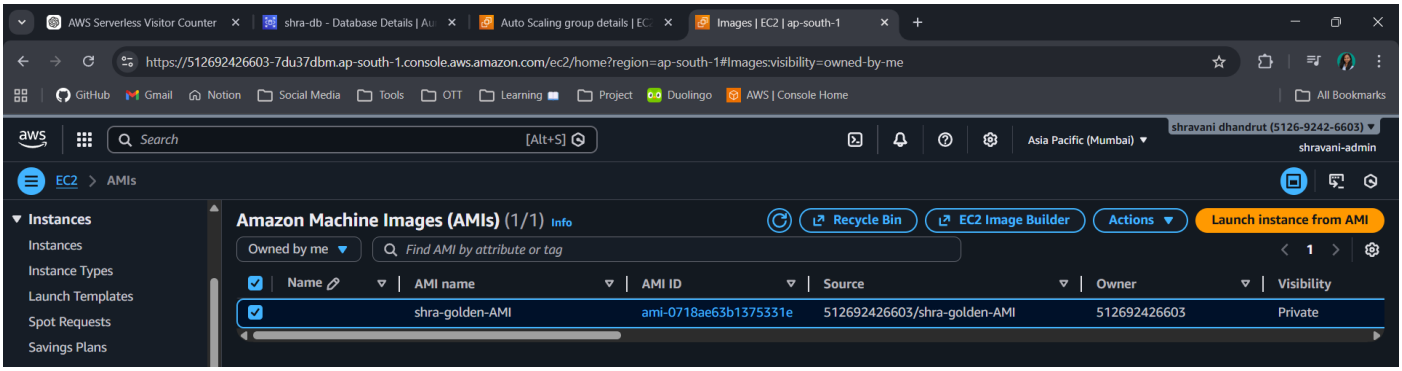
Route table -> Edit subnet association -> add shra-public-subnet2



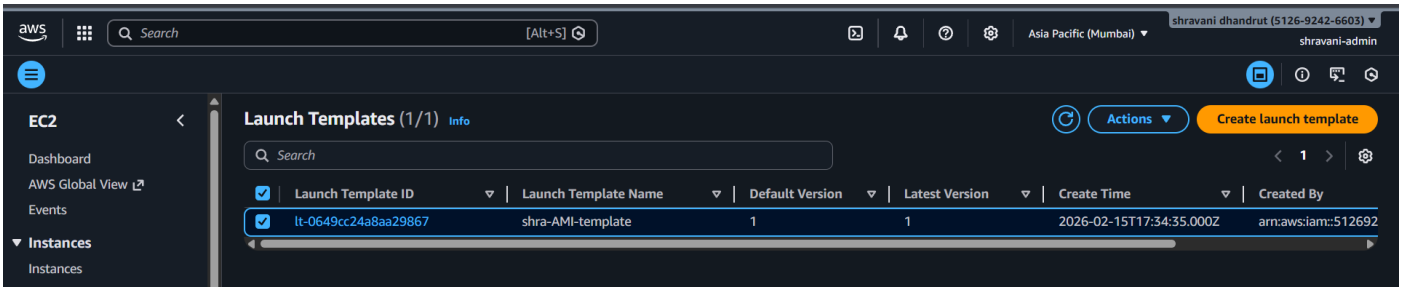
Create ALB -> create SG for ALB ->



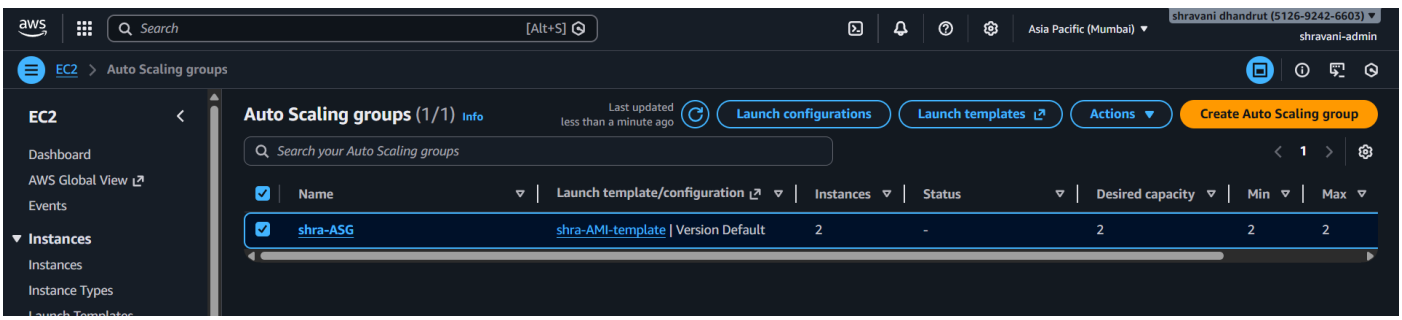
Create Golden AMI from existing EC2 instance (ec2-backend-server)



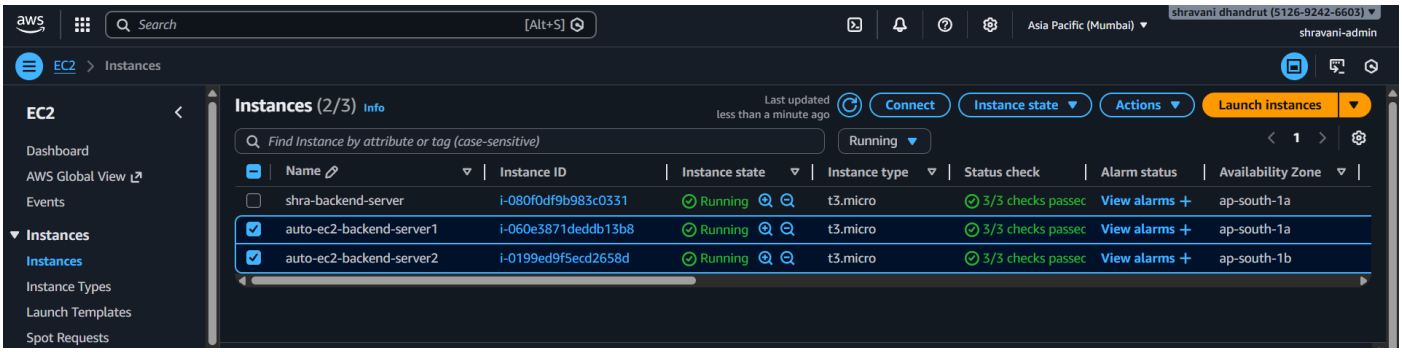
Launch template using Golden AMI



Create auto-scaling group



Instances created automatically



Go to RDS-> security group -> edit inbound rule -> add(custom=auto-scaling SG)

Check if it is working properly using ALB dns name