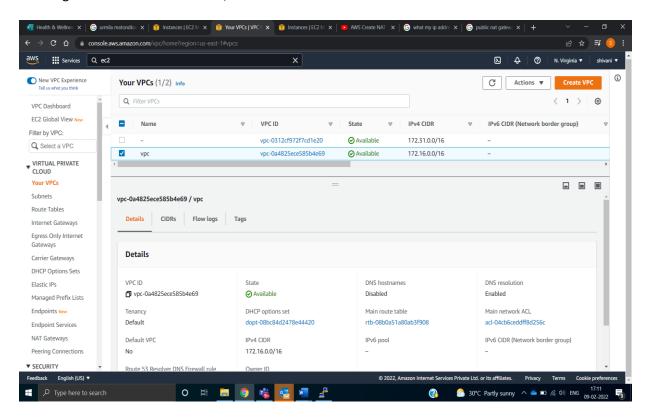
create VPC with 192.168.0.0/16 -Vaibhav, 10.0.0.0/16 (Mounica and Sruthi), 172.16.0.0/16 Shivani, CIDR and divide them in to 6 subnets 1-subnets per each AZ and create only 1 public and reset all are private subnet and create Security groups per each subnet, NAT Gateway, ,IGW Internet Gateway using AWS Console and Terraform both for time being please allow both ingress and egress rule to your ISP public IP only. Make sure that you use variables in all your terraforms code and use tags for all your resources.

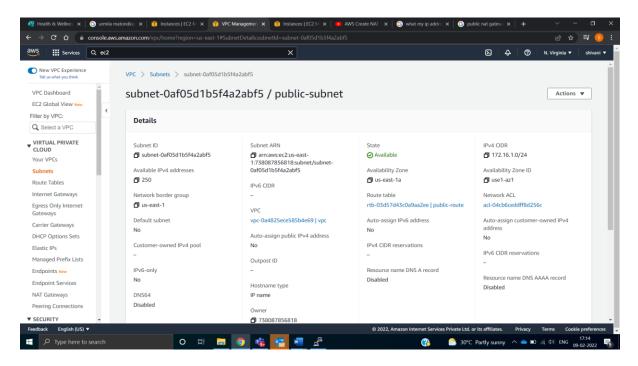
### **Using AWS console:**

### Steps:

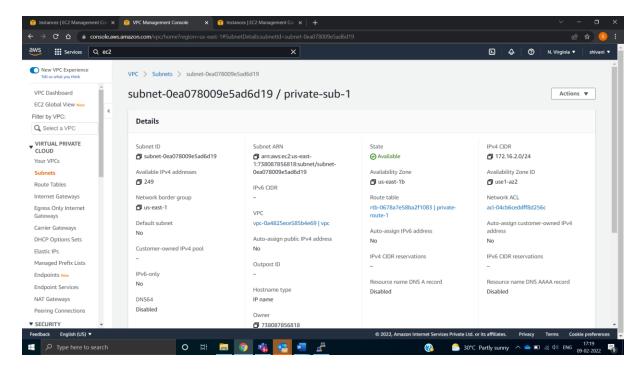
1. Creating VPC with CIDR 172.16.0.0/16:

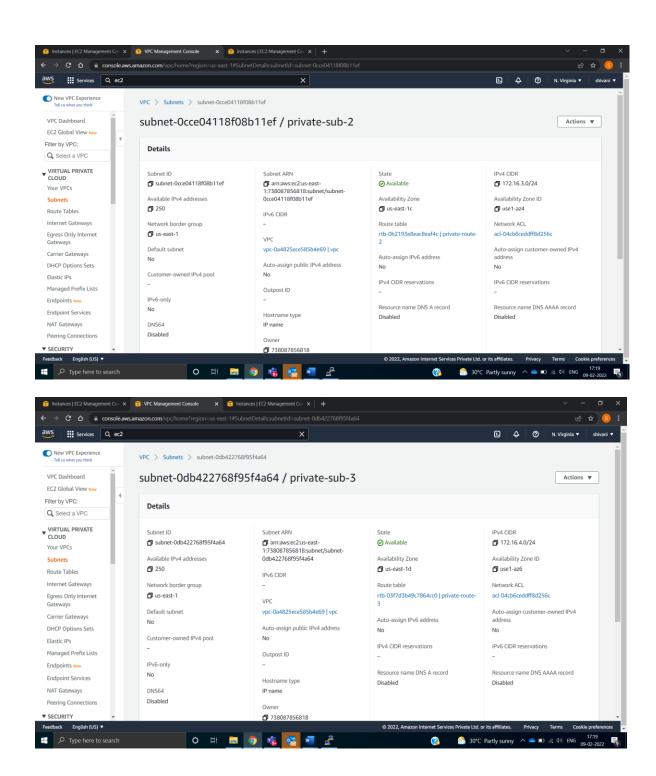


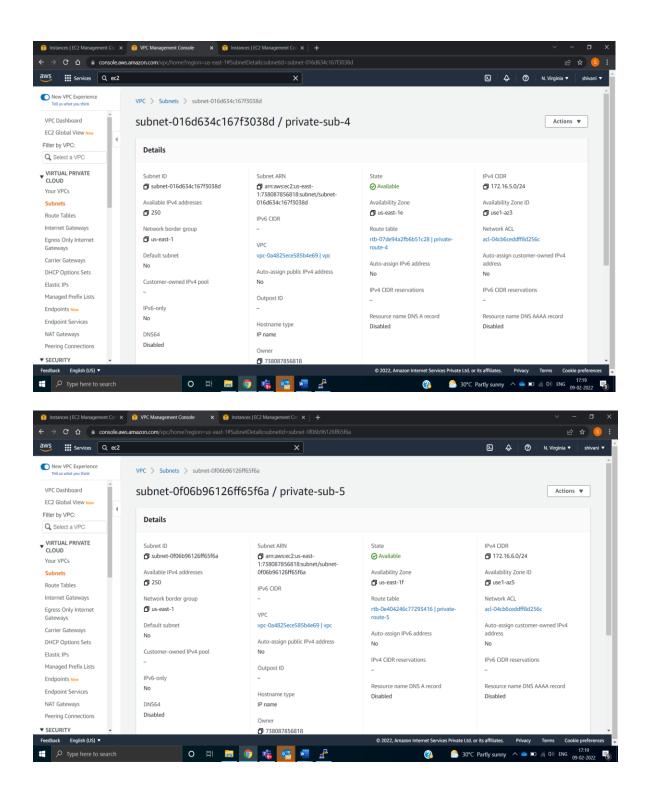
2. Creating public subnet with CIDR 172.16.1.0/24:



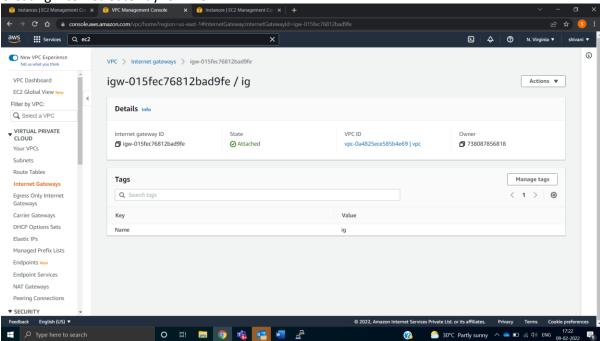
3. Creating 5 private subnets with CIDR: 172.16.2.0/24, 172-16.3.0/24, 172-16.4.0/24, 172-16.5.0/24, 172-16.6.0/24:



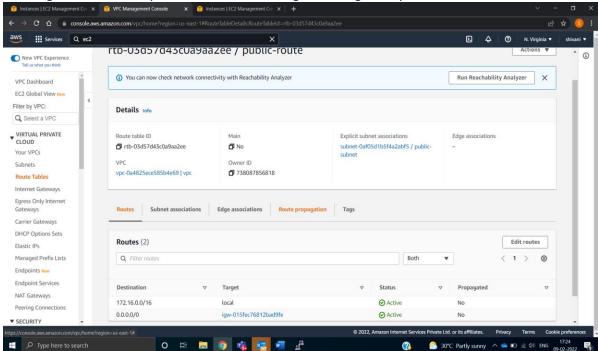




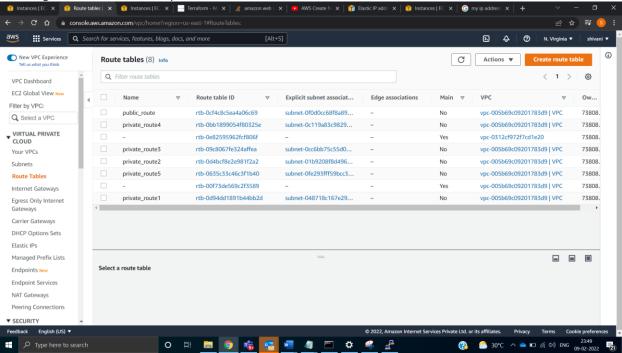
4. Creating Internet Gateway for VPC:



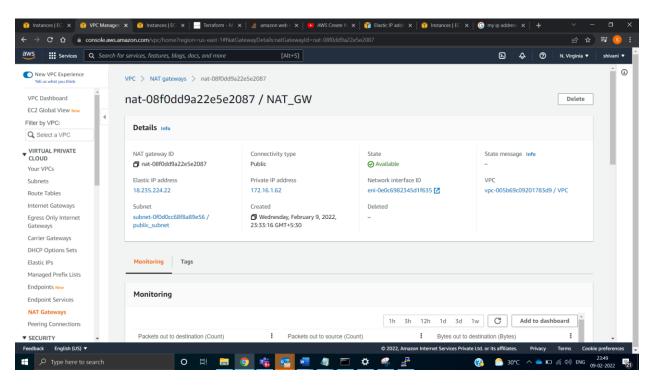
5. Creating Route table for public subnet and adding internet gateway in the routes:



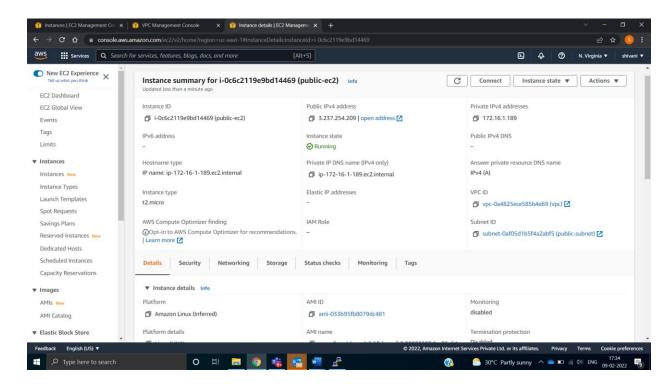
6. Creating 5 route tables for 5 private subnets:



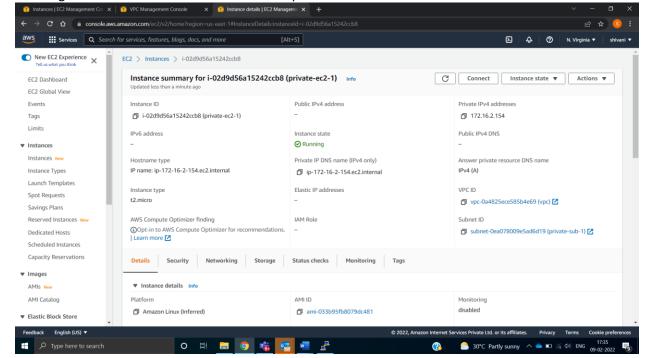
7. Creating NAT gateways for private subnets:

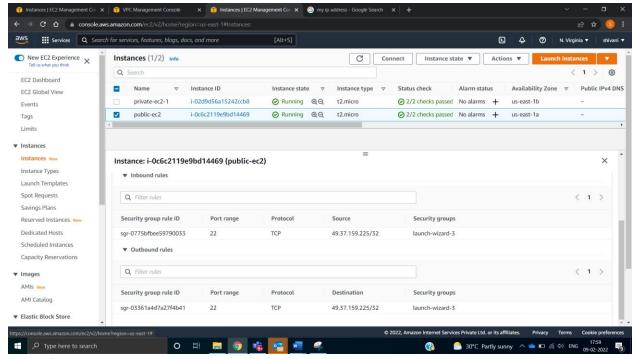


8. Creating EC2 instance with custom VPC and public subnet and giving my IP address in inbound and outbound rule:



9. Creating EC2 instance with custom VPC and in private subnet:





NOTE: for private EC2, we need to give public subnet CIDR in private EC2 security group.

## 10. Connecting to public EC2 and private EC2:

NOTE: We can't directly connect to private EC2,

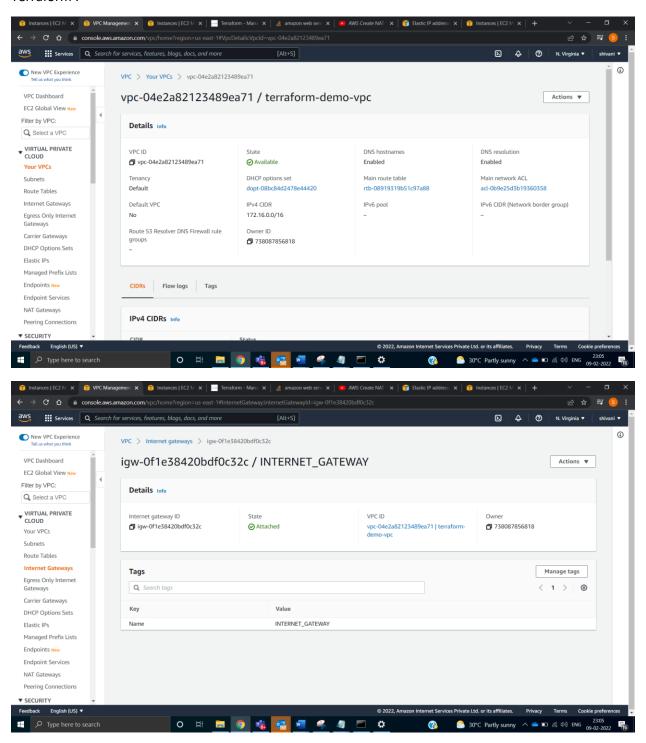
To open private EC2, in public EC2 only we need to add .pem key

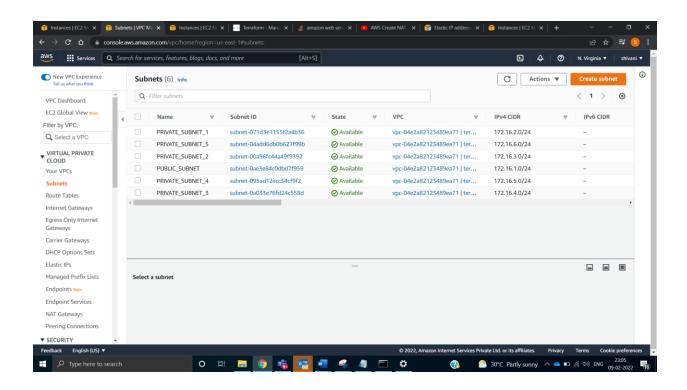
\$ sudo nano key\_name.pem( copy private key)

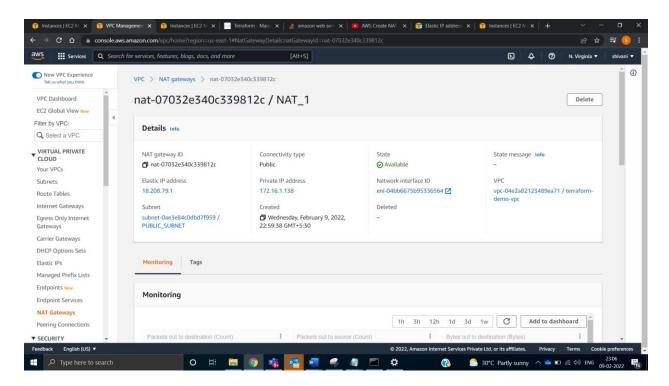
\$ sudo chmod 400 key\_name.pem (changing only read mode)

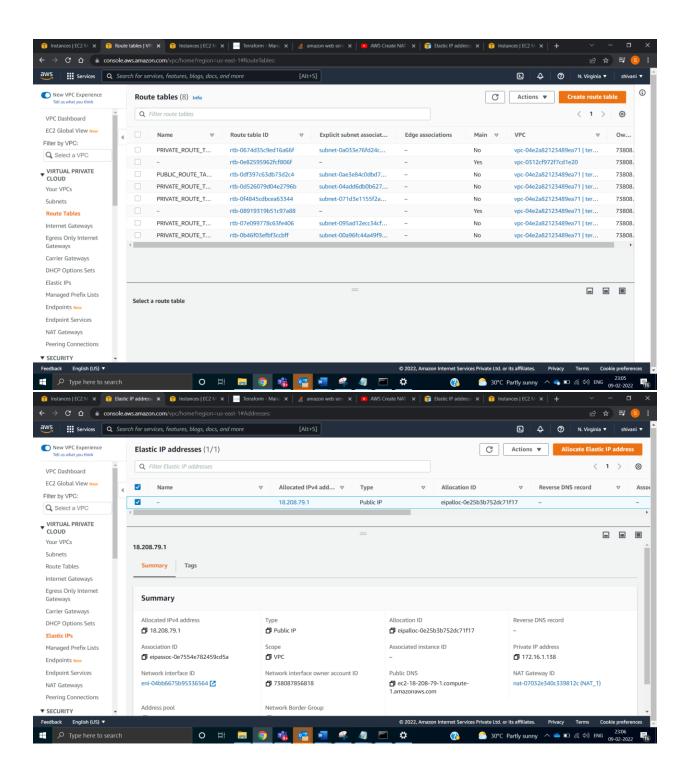
\$ sudo ssh -i key name.pem ec2-user@172.16.2.154

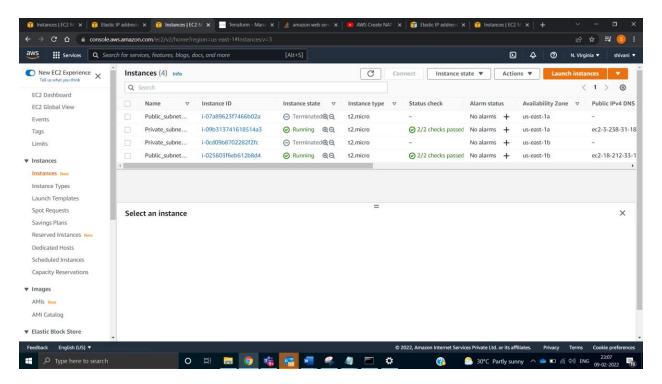
#### Terraform:











# ec2-user@ip-172-16-1-21:~

