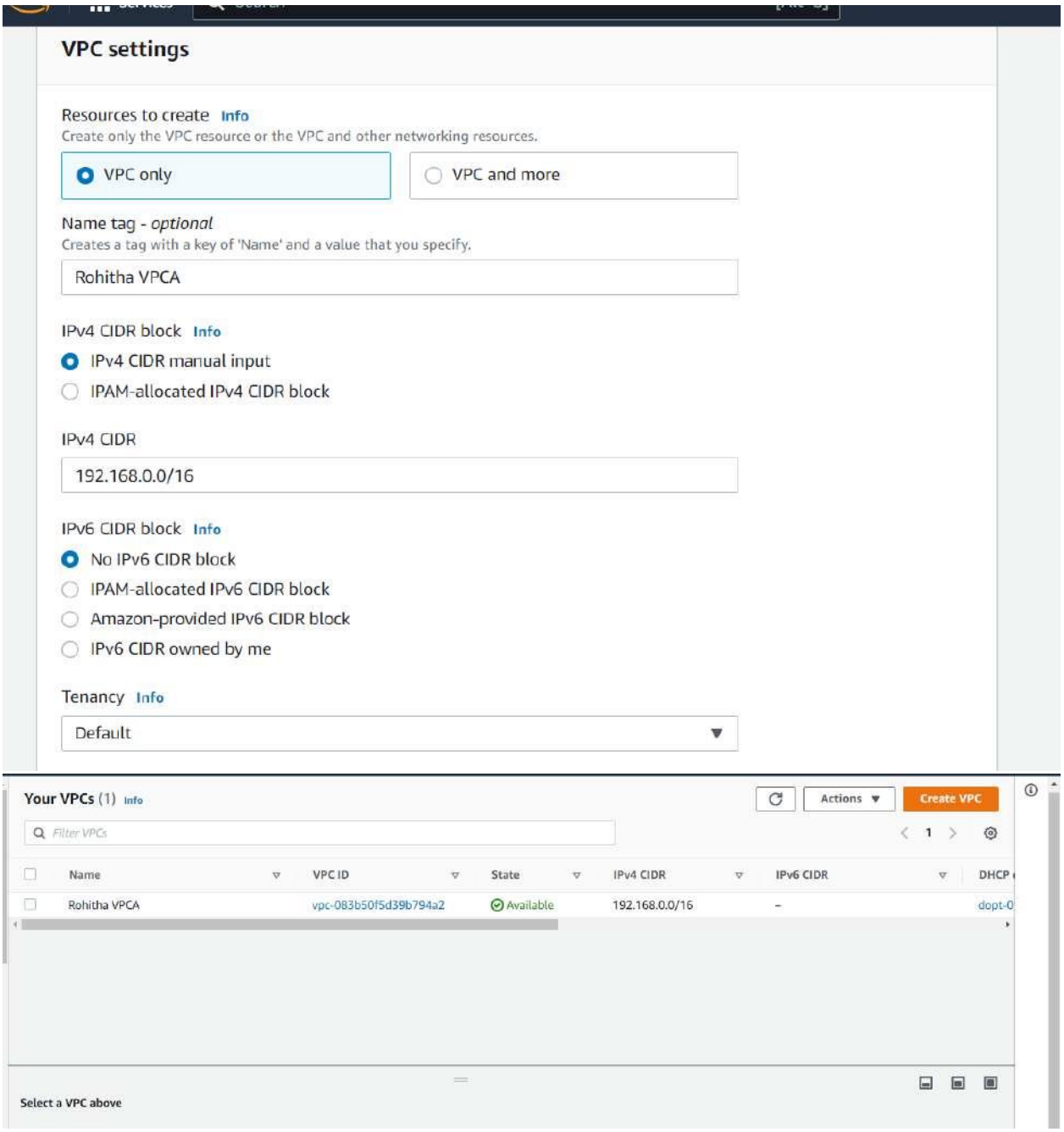
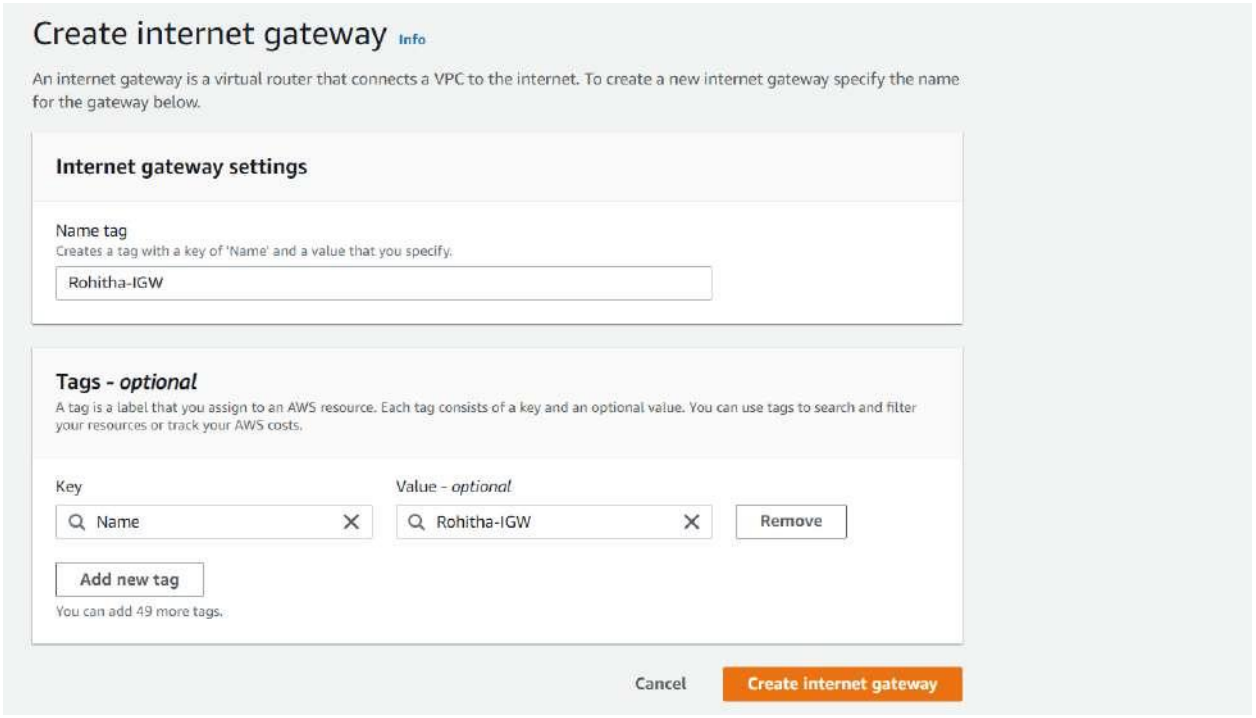
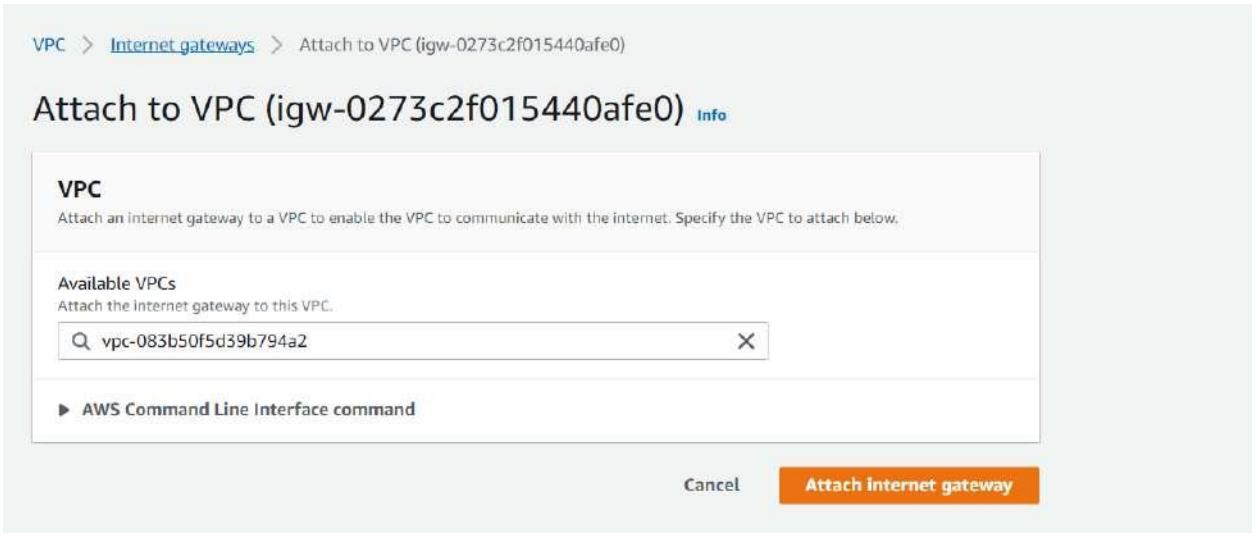
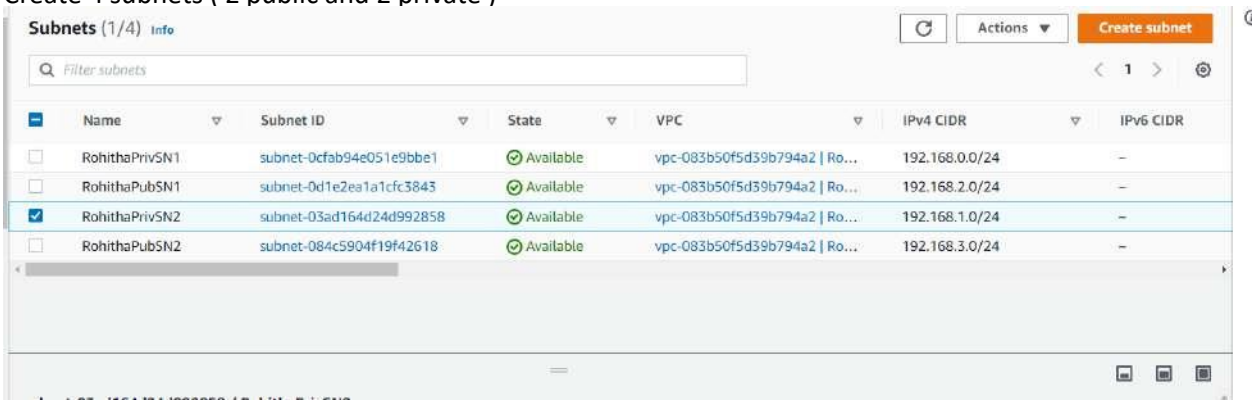


2. Create an internet gateway and attach it to VPC.

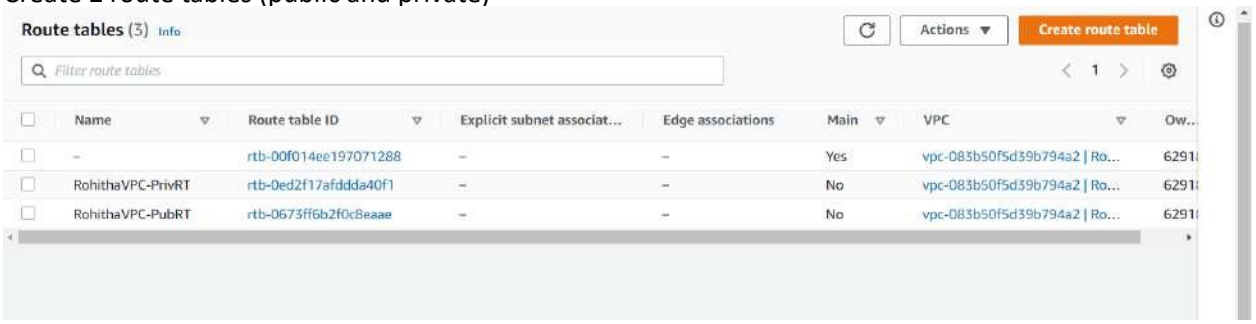




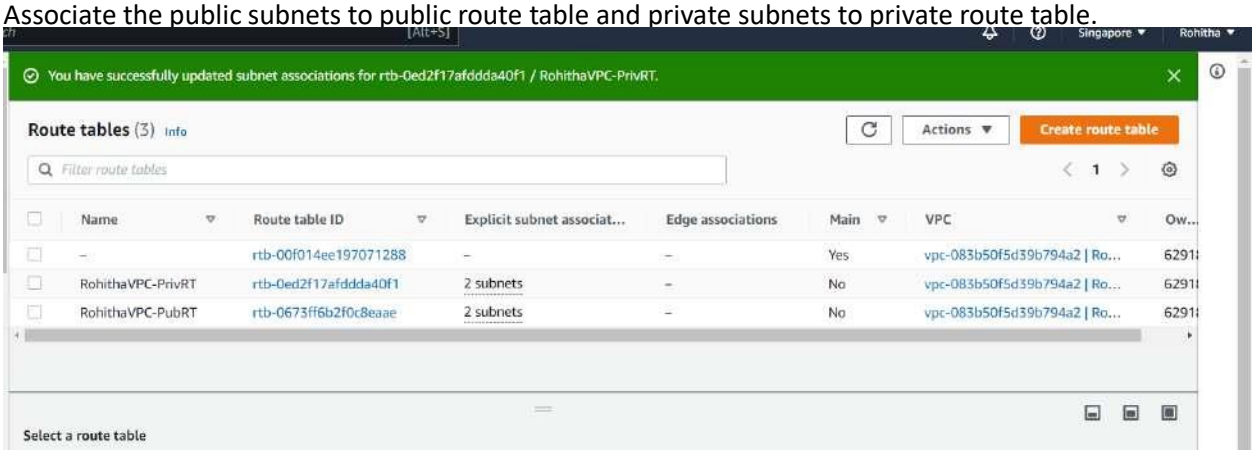
3. Create 4 subnets (2 public and 2 private)



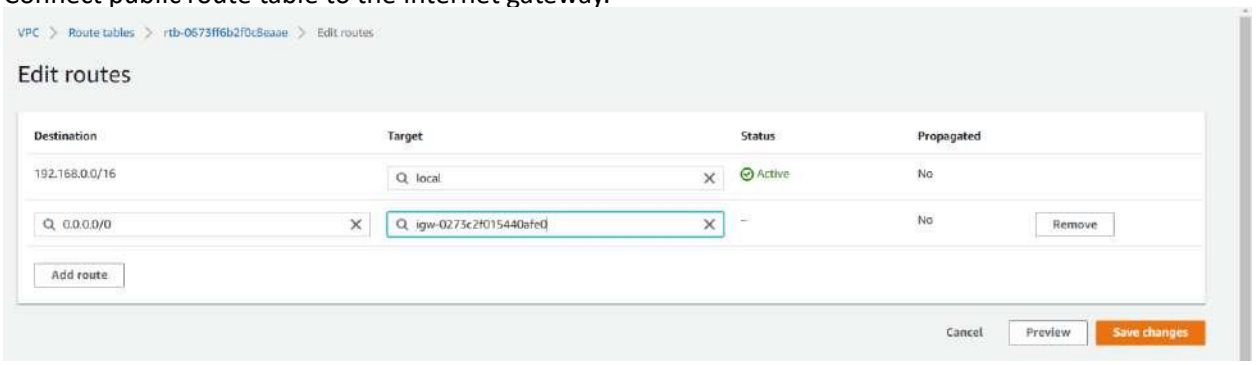
4. Create 2 route tables (public and private)



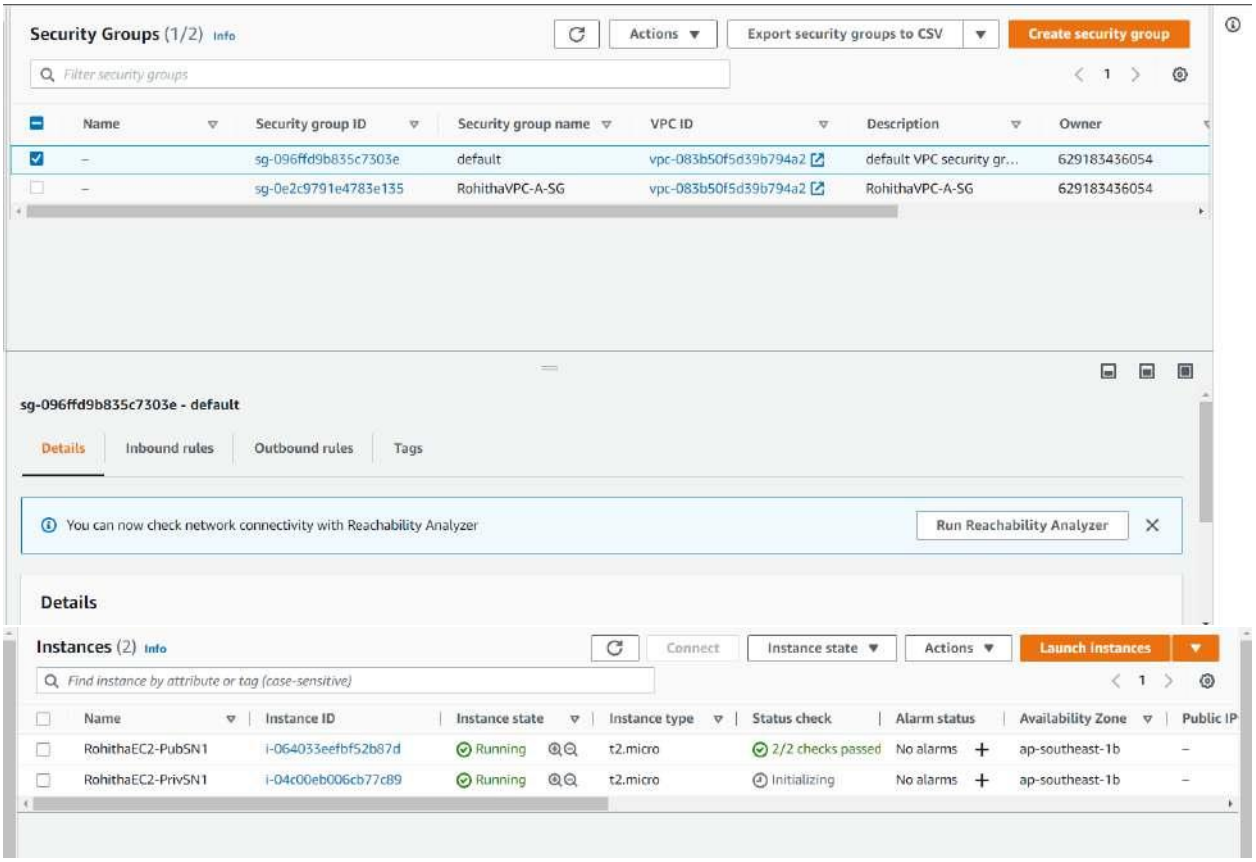
5. Associate the public subnets to public route table and private subnets to private route table.



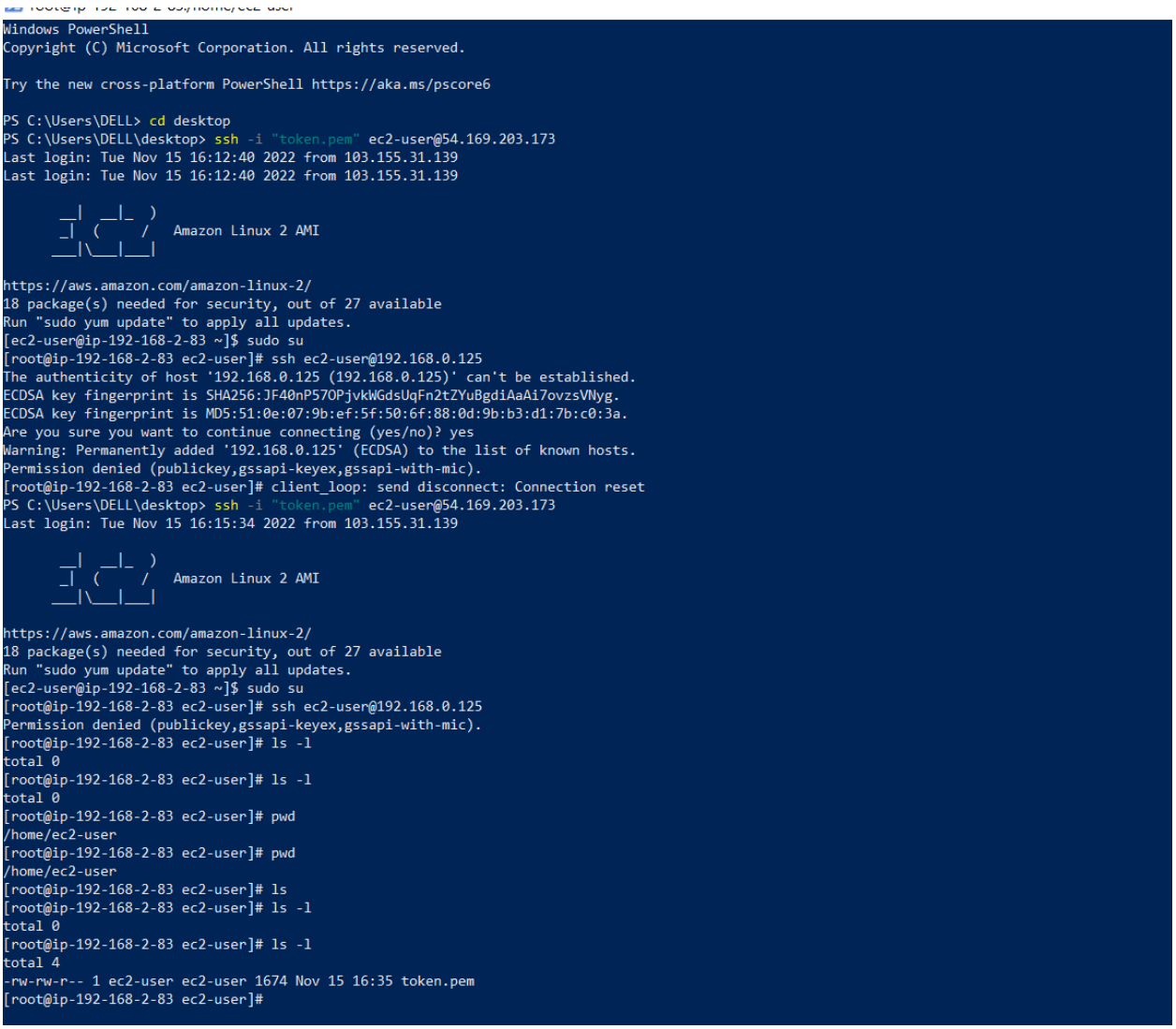
6. Connect public route table to the internet gateway.



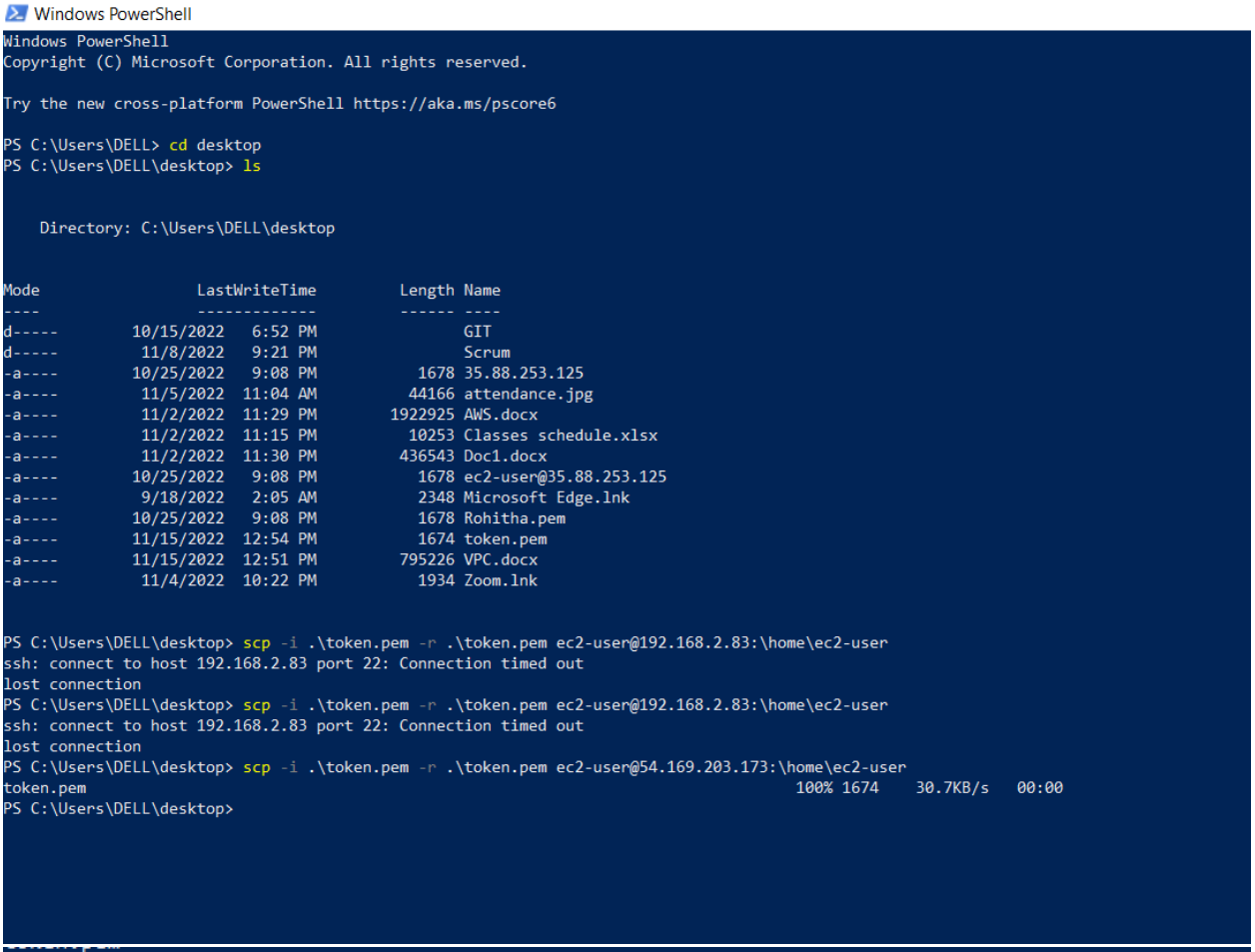
7. Create 2 instances (public subnet 1, private subnet 1)
   Also create new security group by allowing all traffic.



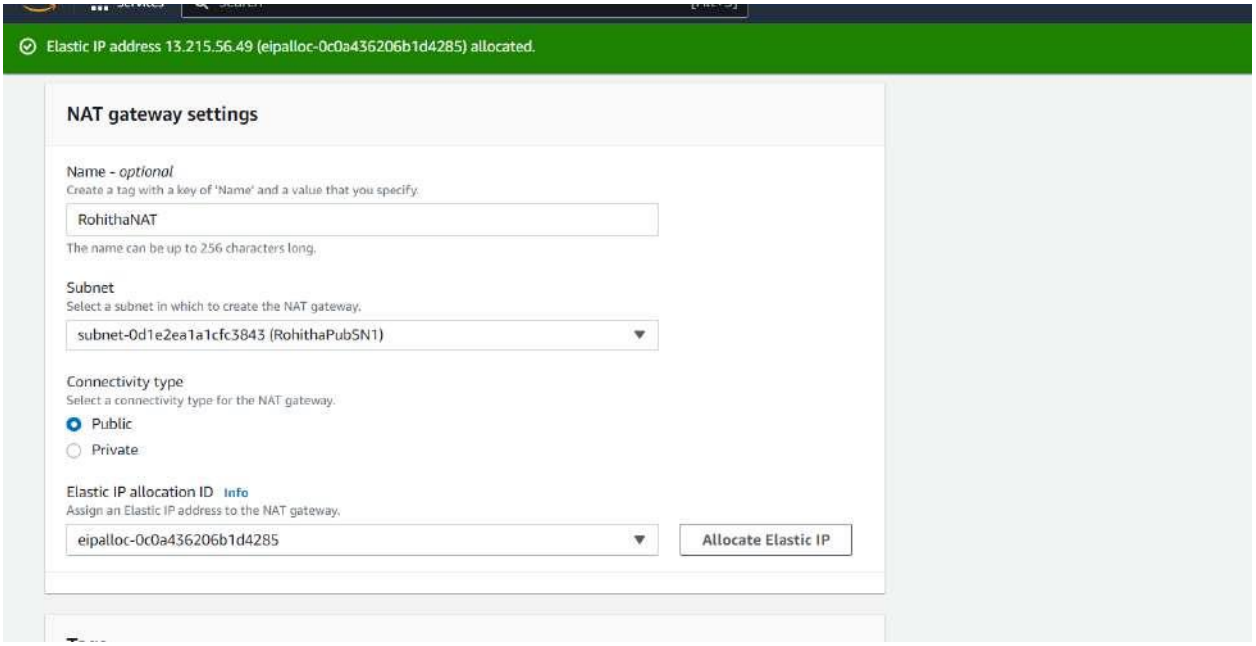
8. Login to Public subnet1 machine and try to ping and ssh (ping will get success and where ssh will fail as there is no key)



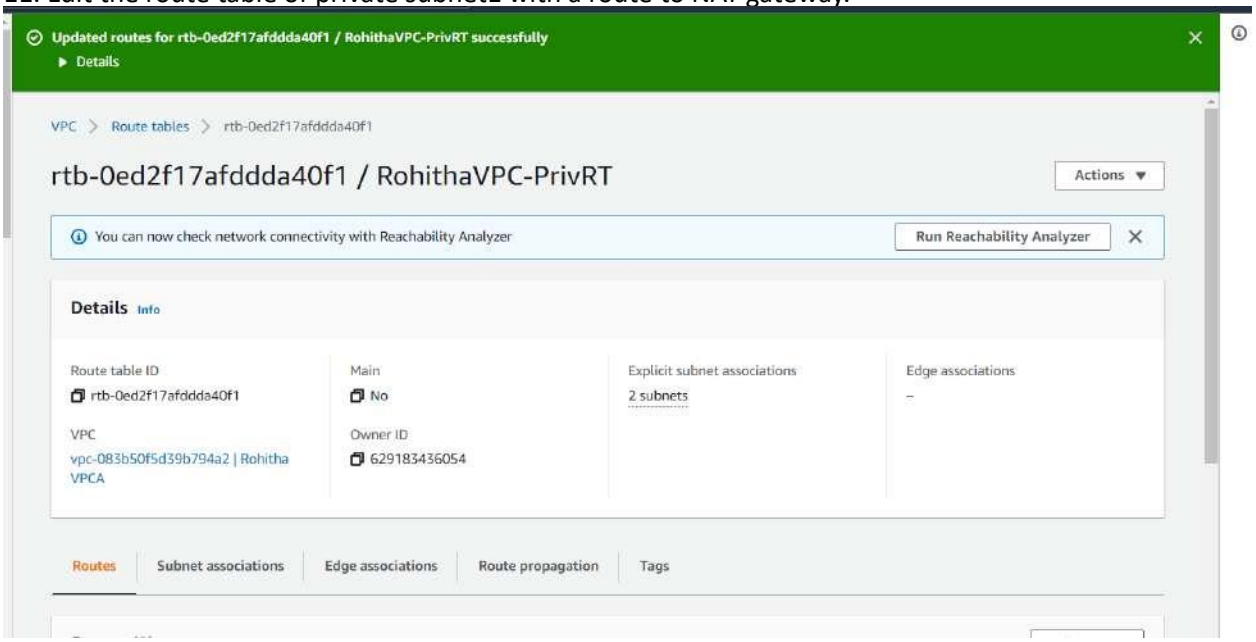
9. Copy the key pair on to Public subnet machine1 and then from Public subnet machine try to connect private subnet machine with SSH.

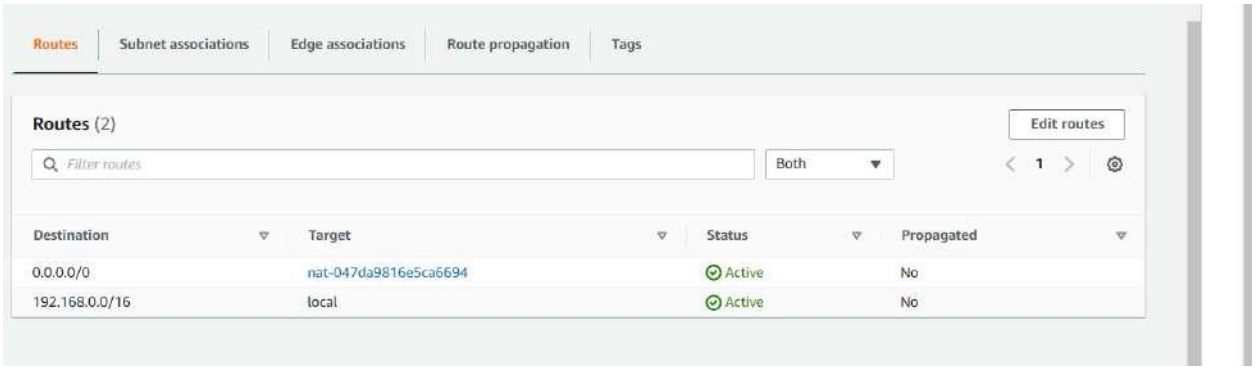


10. In order to get internet on your Private subnet machine then we have to Create a NAT gateway in Public subnet1.

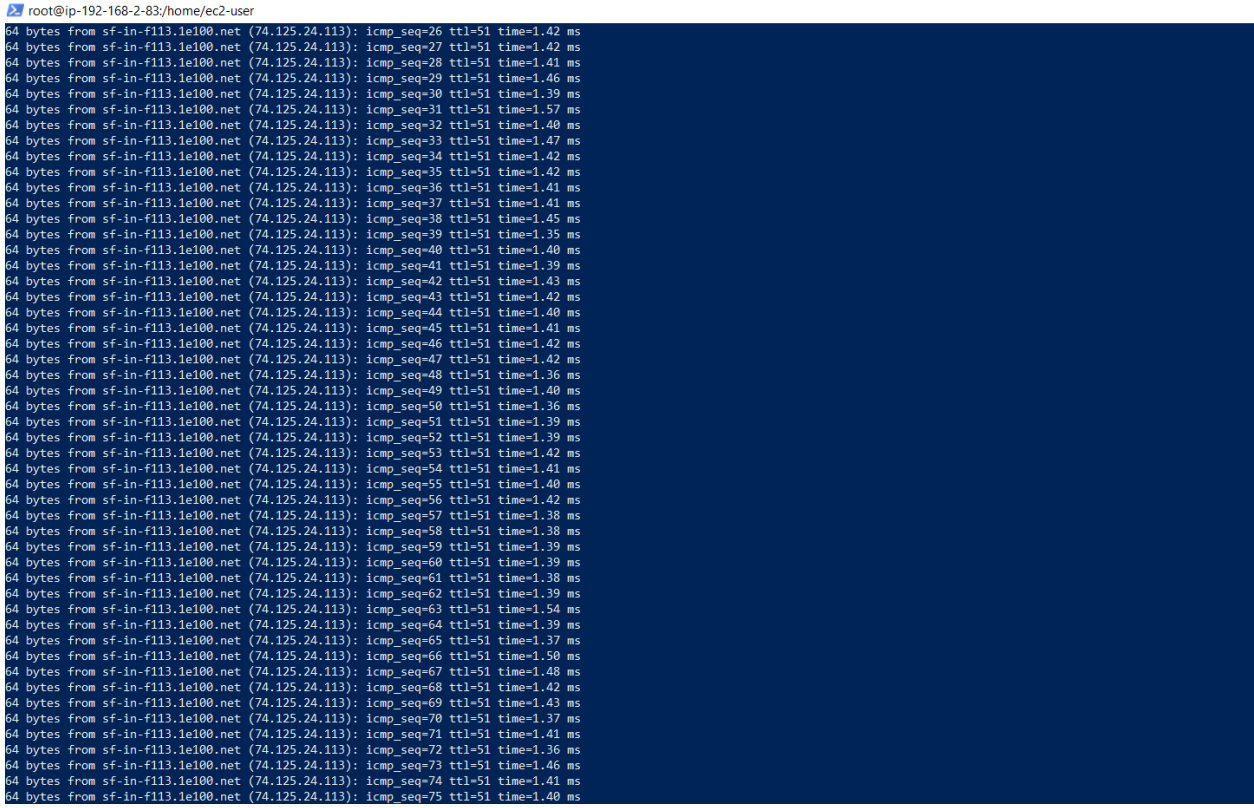


11. Edit the route table of private subnet1 with a route to NAT gateway.



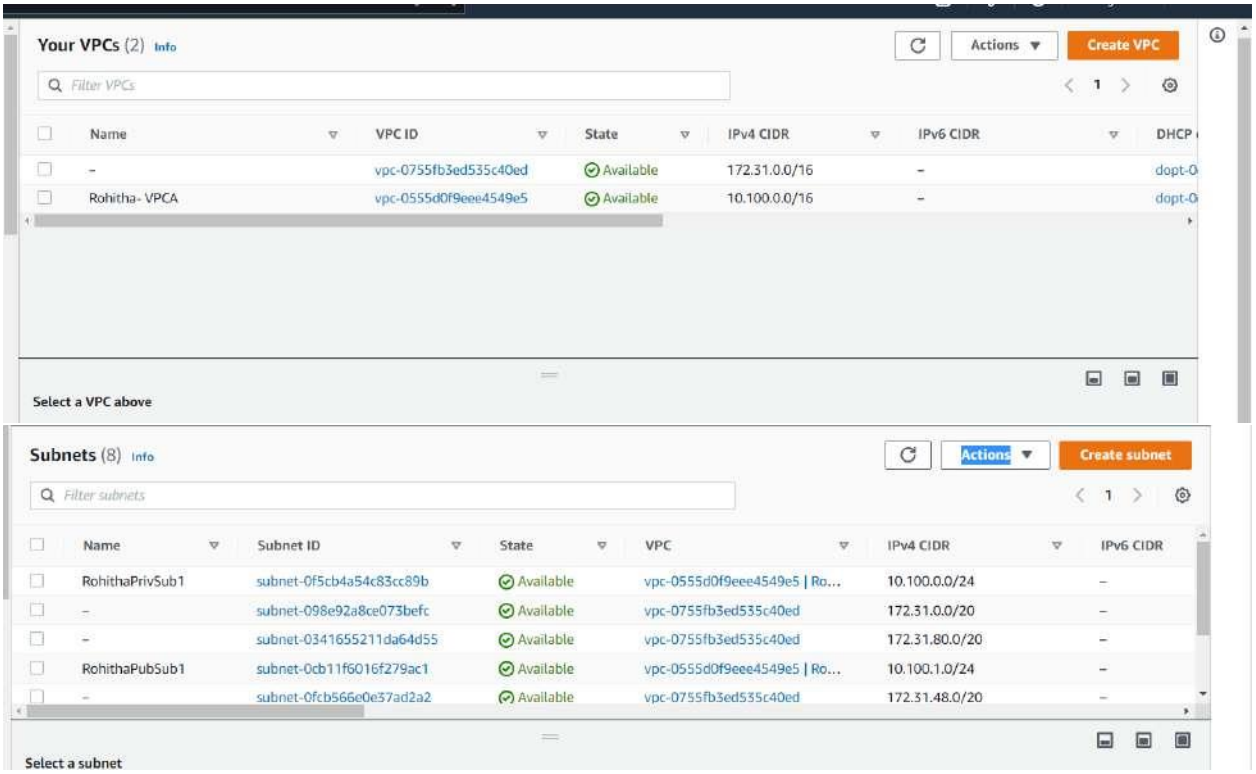


12. Login to private subnet machine and try to ping google.com

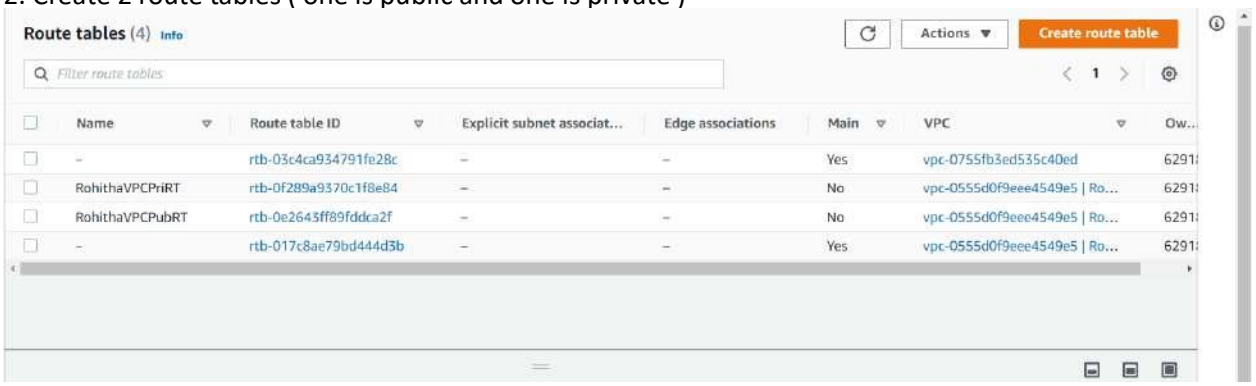


7. VPC Peering :

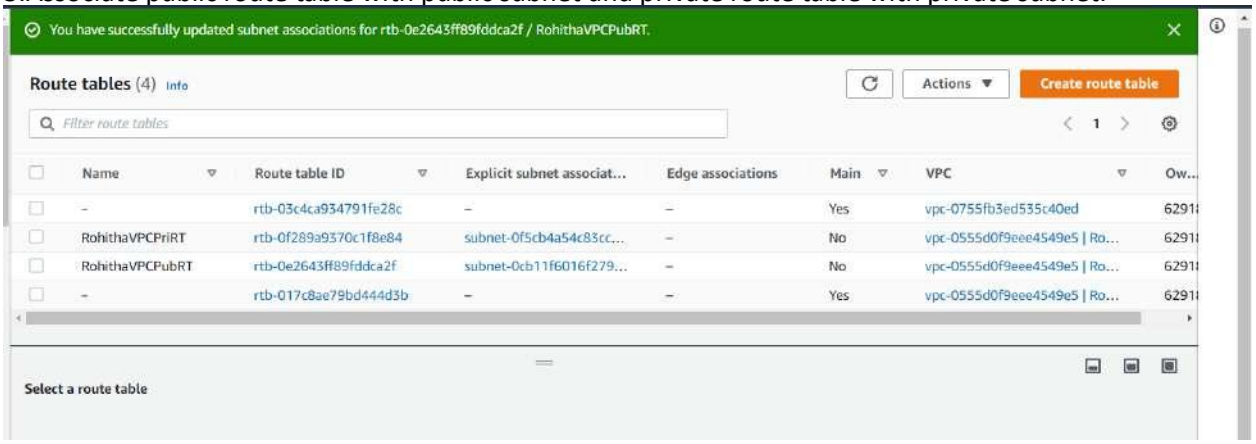
1. Create VPC A and 2 subnets (one is public and one is private)



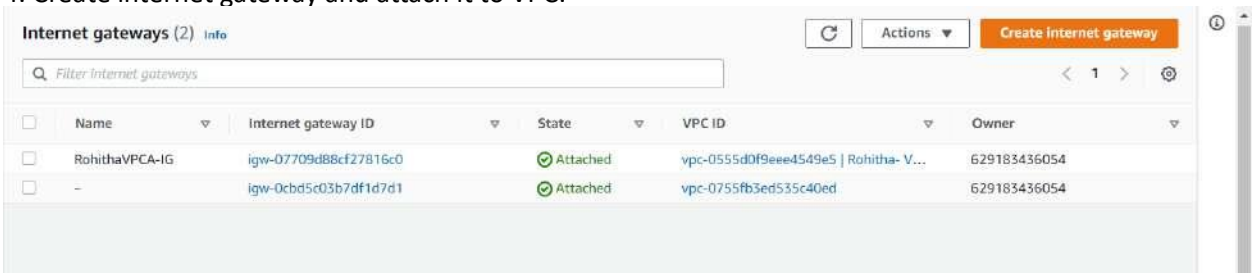
2. Create 2 route tables (one is public and one is private)



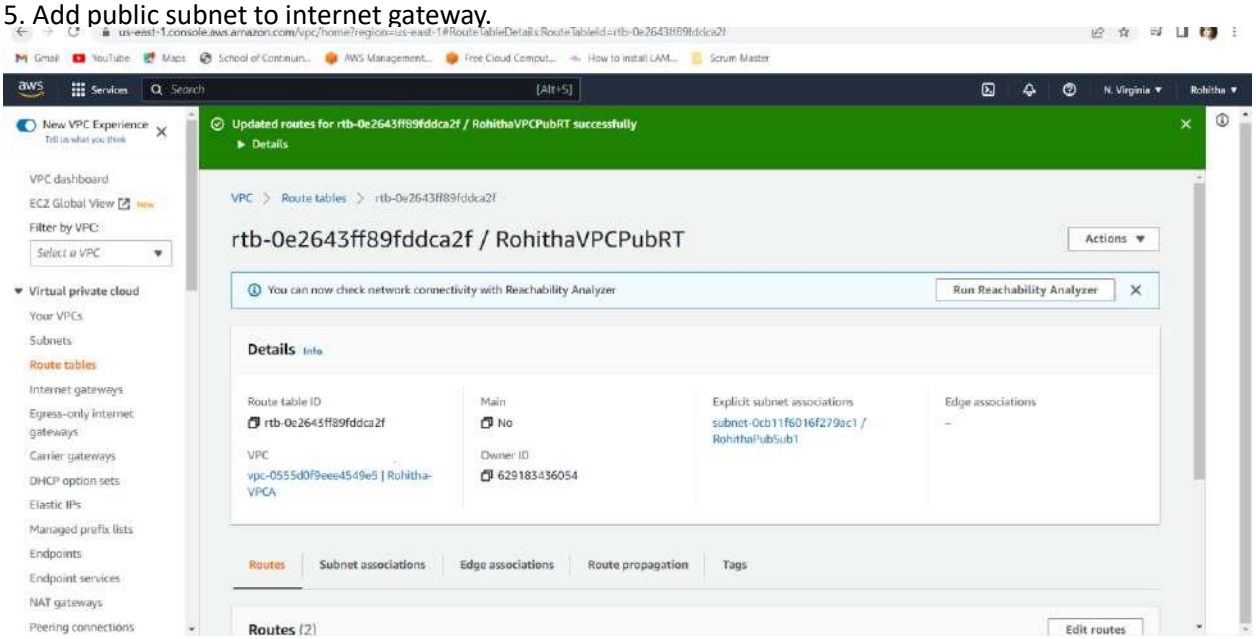
3.Associate public route table with public subnet and private route table with private subnet.



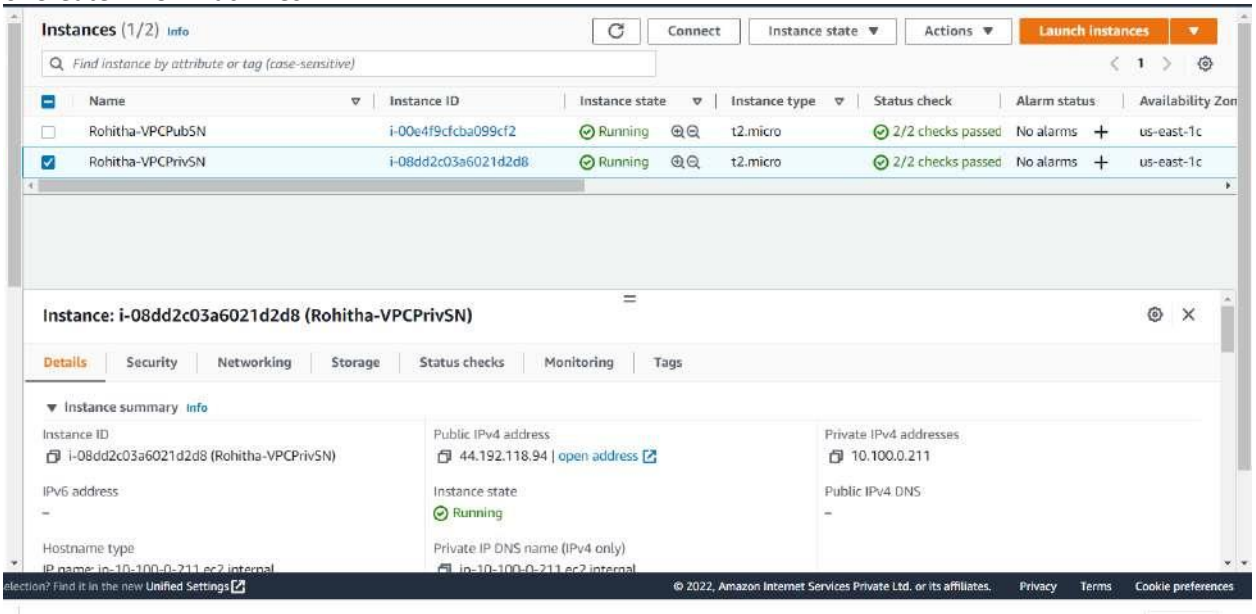
4. Create internet gateway and attach it to VPC.



5. Add public subnet to internet gateway.



6. Create 2 EC2 machines.



root@ip-10-100-1-55:/home/ec2-user

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\DELL> cd desktop
PS C:\Users\DELL\desktop> ssh -i "peering.pem" ec2-user@44.195.1.130
Last login: Thu Nov 17 06:20:28 2022 from 103.155.31.155

       __|  __|_  )
Last login: Thu Nov 17 06:20:28 2022 from 103.155.31.155

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
1 package(s) needed for security, out of 1 available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-10-100-1-55 ~]$ sudo su
[root@ip-10-100-1-55 ec2-user]# ssh 10.100.0.211
The authenticity of host '10.100.0.211 (10.100.0.211)' can't be established.
ECDSA key fingerprint is SHA256:fL+yn3nPY1JkO1D7c2ohky0TWanx4ivvA+5R1imlbp4.
ECDSA key fingerprint is MD5:b6:00:77:d8:3d:80:07:fd:a4:8a:b0:a7:f4:f5:0c:5c.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.100.0.211' (ECDSA) to the list of known hosts.
Permission denied (publickey,gssapi-keyex,gssapi-with-mic).
[root@ip-10-100-1-55 ec2-user]# pwd
/home/ec2-user
[root@ip-10-100-1-55 ec2-user]# ls -l
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1674 Nov 17 06:30 peering.pem
[root@ip-10-100-1-55 ec2-user]#
```
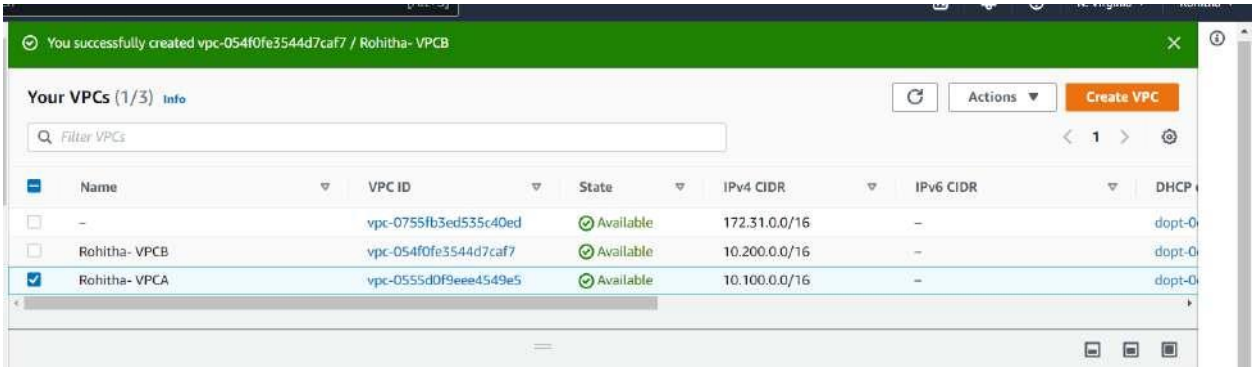

Windows PowerShell

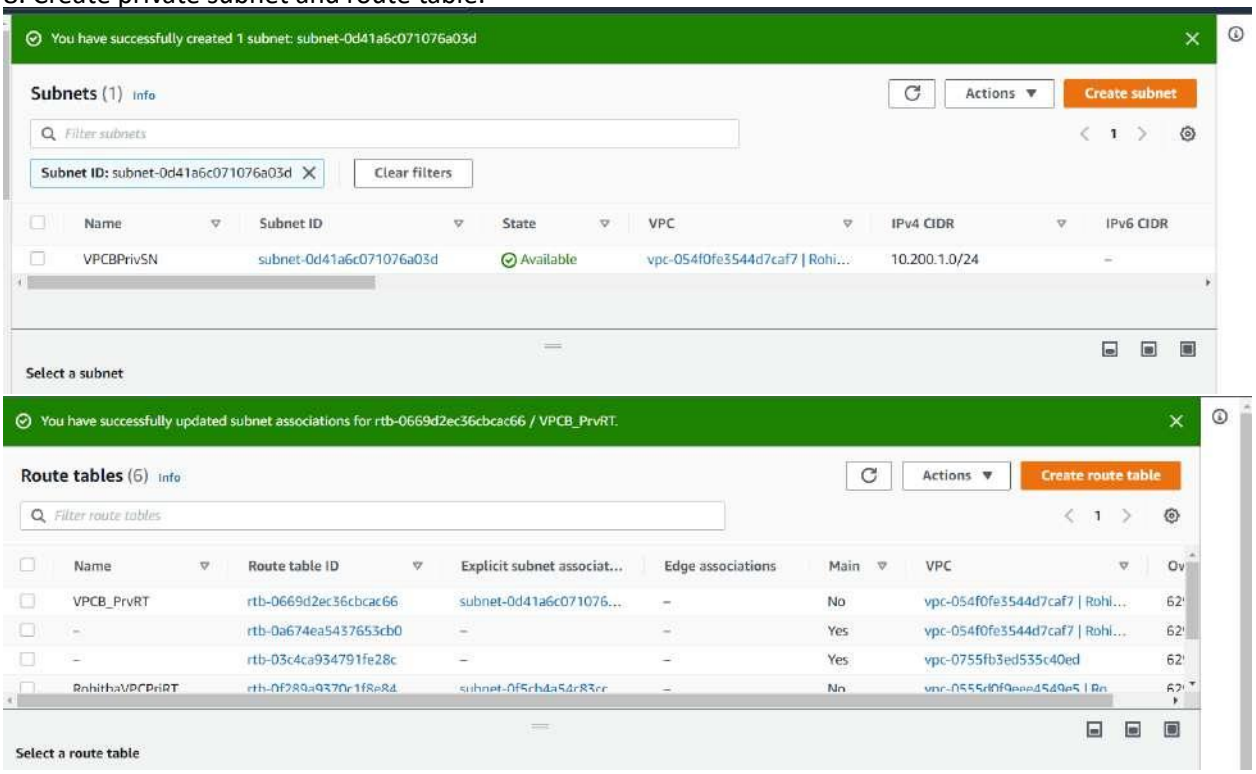
```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\DELL> cd desktop
PS C:\Users\DELL\desktop> scp -i peering.pem -r .\peering.pe  ec2-user@44.195.1.130:/home/ec2-user
./peering.pe: No such file or directory
PS C:\Users\DELL\desktop> scp -i peering.pem -r .\peering.pem  ec2-user@44.195.1.130:/home/ec2-user
peering.pem                                                                   100% 1674     5.2KB/s   00:00
PS C:\Users\DELL\desktop>
```

```
[root@ip-10-100-1-55 ec2-user]# ls -l
total 4
-rw-rw-r-- 1 ec2-user ec2-user 1674 Nov 17 06:30 peering.pem
[root@ip-10-100-1-55 ec2-user]# chmod 777 peering.pem
[root@ip-10-100-1-55 ec2-user]# ls -ltr
total 4
-rwxrwxrwx 1 ec2-user ec2-user 1674 Nov 17 06:30 peering.pem
[root@ip-10-100-1-55 ec2-user]# ssh -i peering.pem ec2-user@10.100.0.211

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-100-0-211 ~]$
```

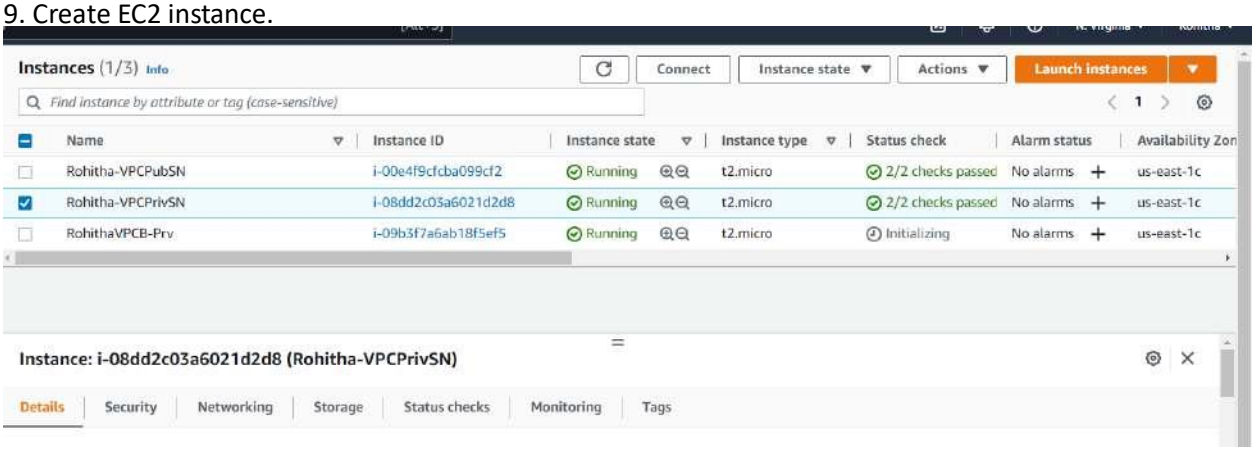
7. Create VPC B machine.



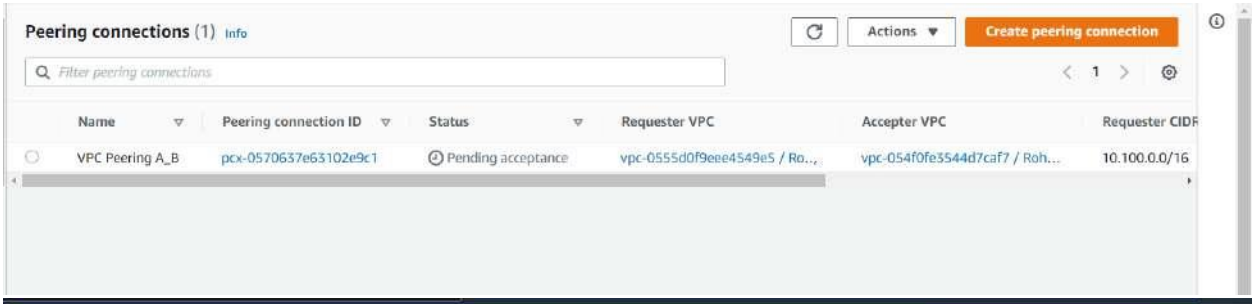
8. Create private subnet and route table.

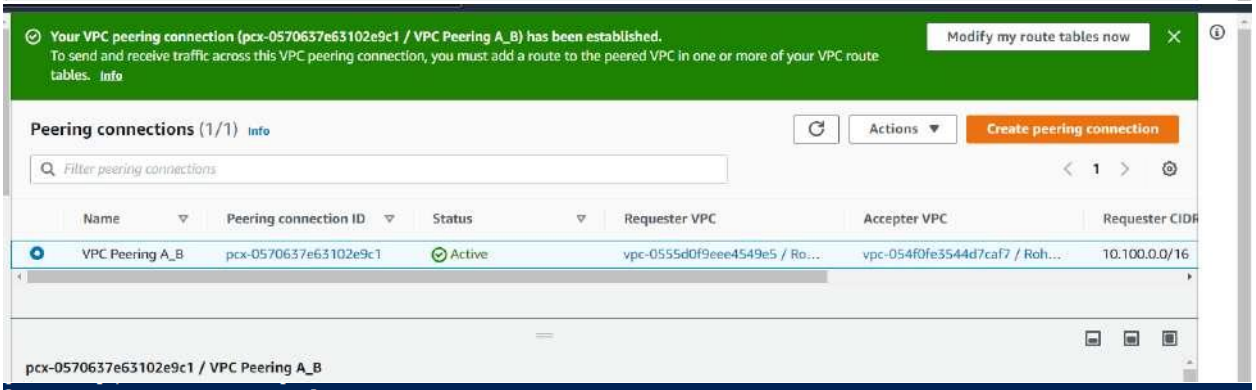


9. Create EC2 instance.



10. Create peering connection.






```
[root@ip-10-100-0-211 ec2-user]# ssh ec2-user@10.200.1.174
ssh: connect to host 10.200.1.174 port 22: Connection timed out
[root@ip-10-100-0-211 ec2-user]# exit
exit
[ec2-user@ip-10-100-0-211 ~]$ exit
logout
Connection to 10.100.0.211 closed.
[root@ip-10-100-1-55 ec2-user]# ls -ltr
total 4
-rwxrwxrwx 1 ec2-user ec2-user 1674 Nov 17 06:30 peering.pem
[root@ip-10-100-1-55 ec2-user]# scp -i peering.pem -r peering.pem ec2-user@10.100.0.211:/home/ec2-user
peering.pem
[root@ip-10-100-1-55 ec2-user]# ssh -i peering.pem ec2-user@10.100.0.211
Last login: Thu Nov 17 16:26:50 2022 from 10.100.1.55

       __|  __|_  )
       _|  (     /   Amazon Linux 2 AMI
      ___|\___|___|

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-10-100-0-211 ~]$ sudo su
[root@ip-10-100-0-211 ec2-user]# ls -ltr
total 4
-rwxrwxr-x 1 ec2-user ec2-user 1674 Nov 17 16:58 peering.pem
[root@ip-10-100-0-211 ec2-user]# ssh -i peering.pem ec2-user@10.200.1.174
```