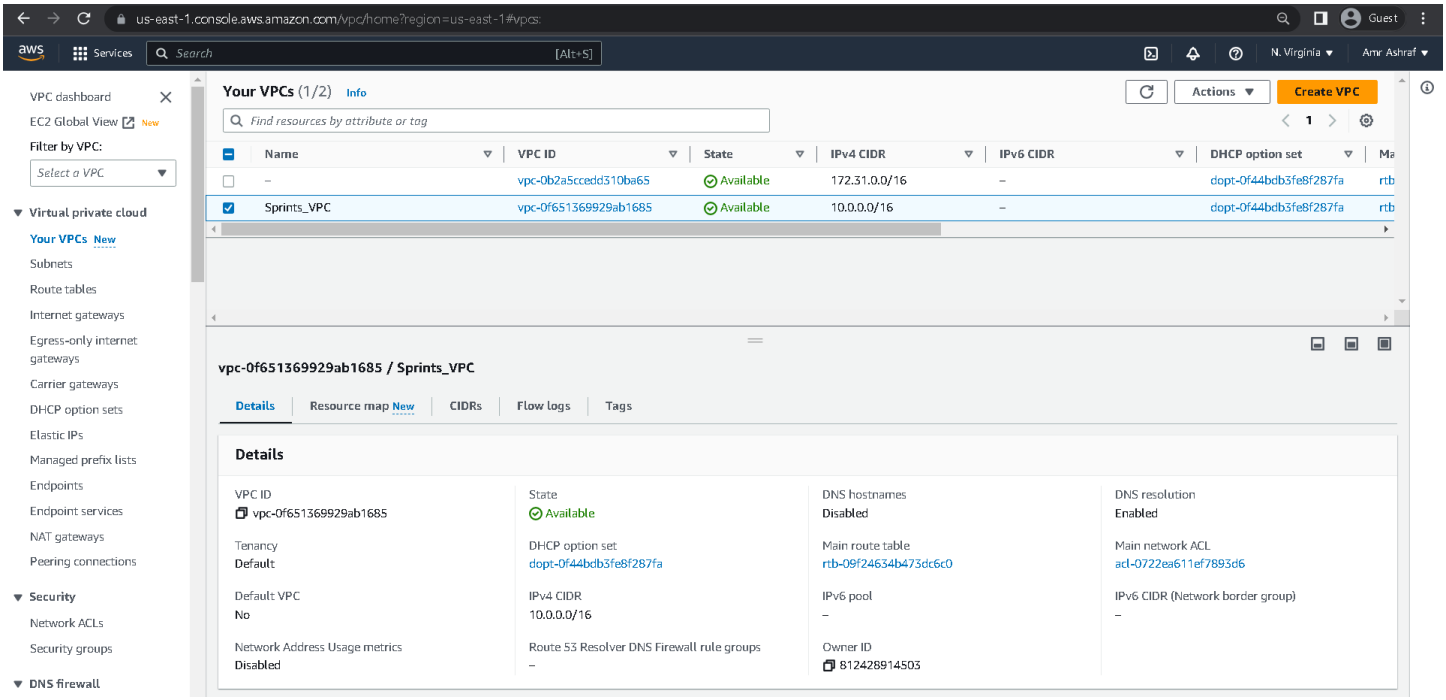
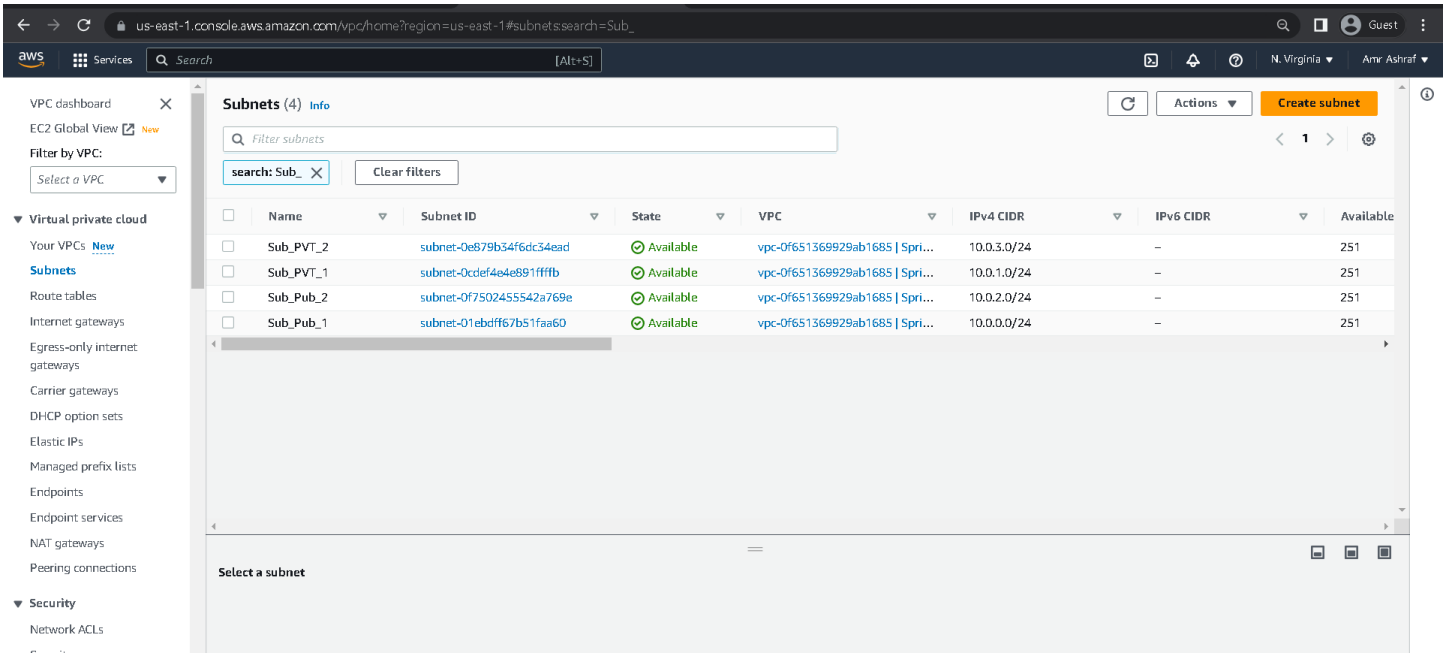
Lab 4

The Solution:

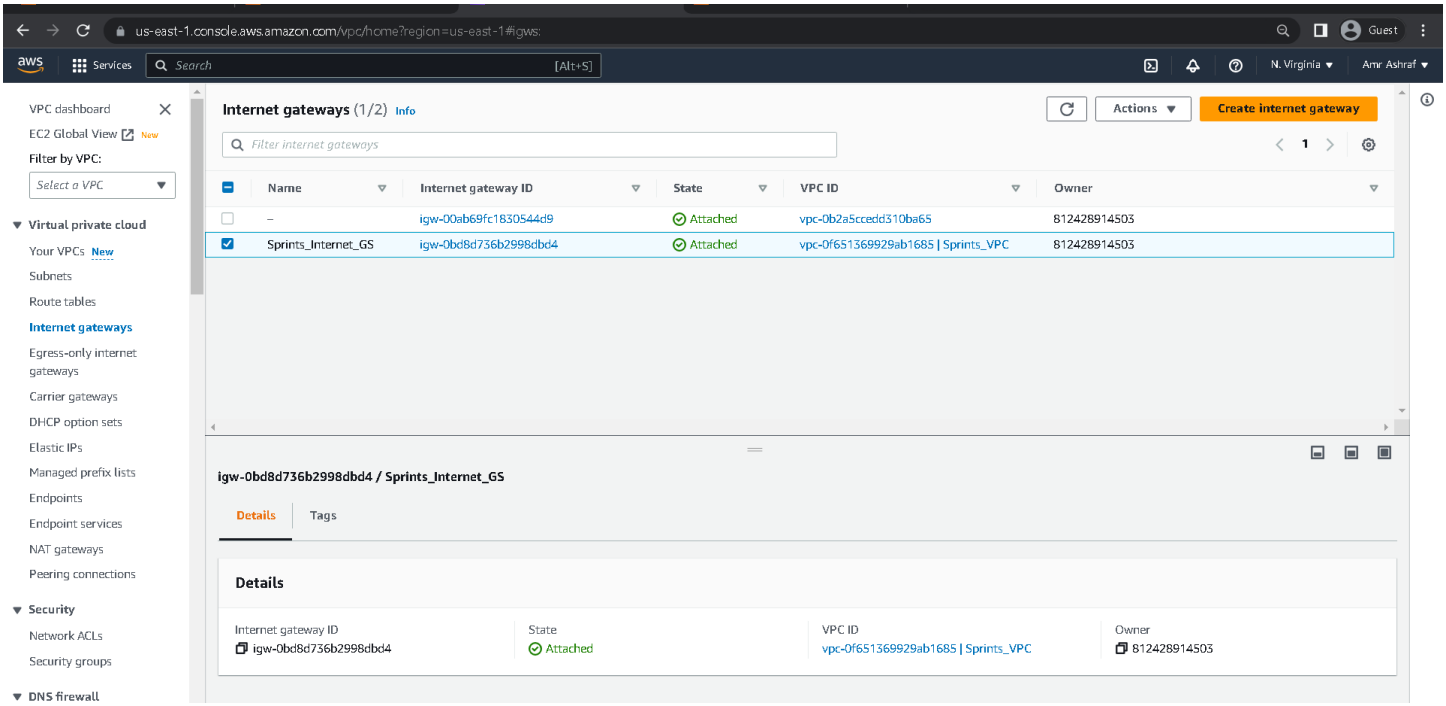
1 – Create 1 VPC



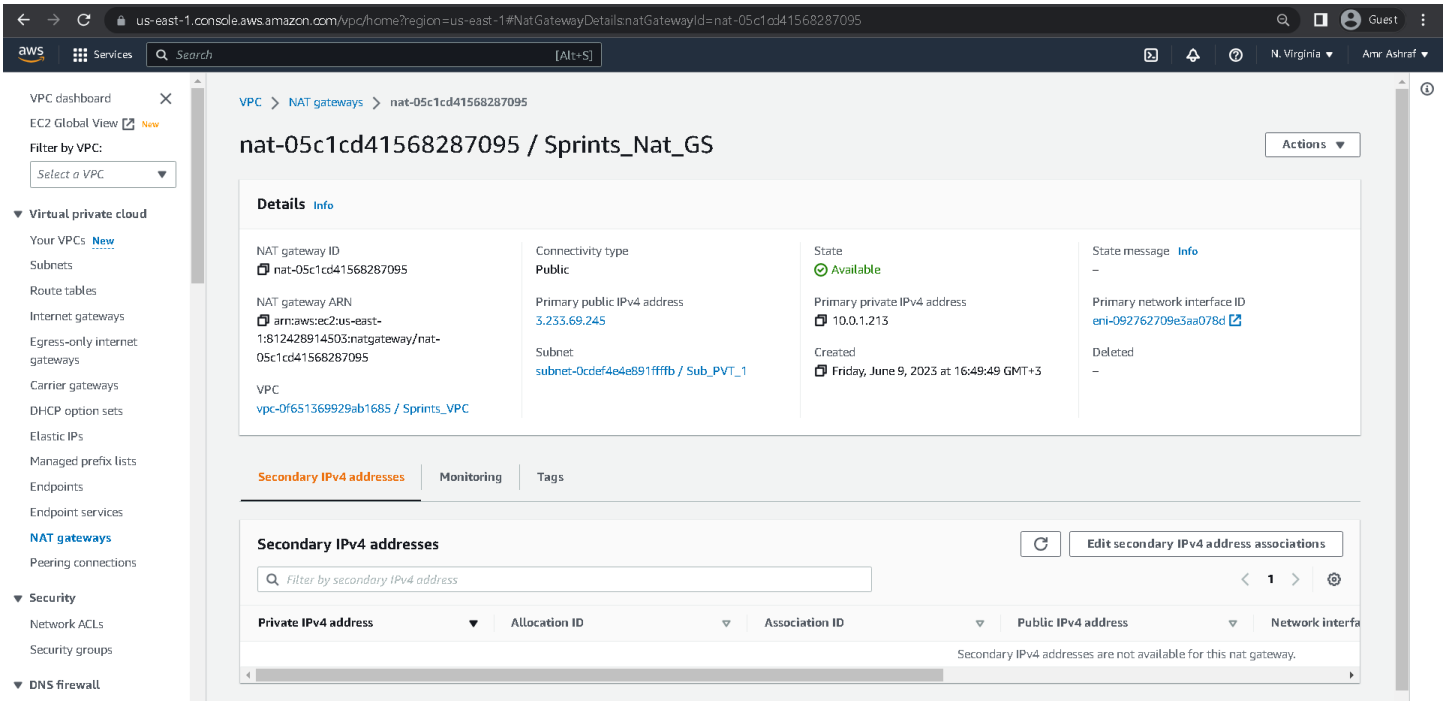
2 – Create 4 Subnet



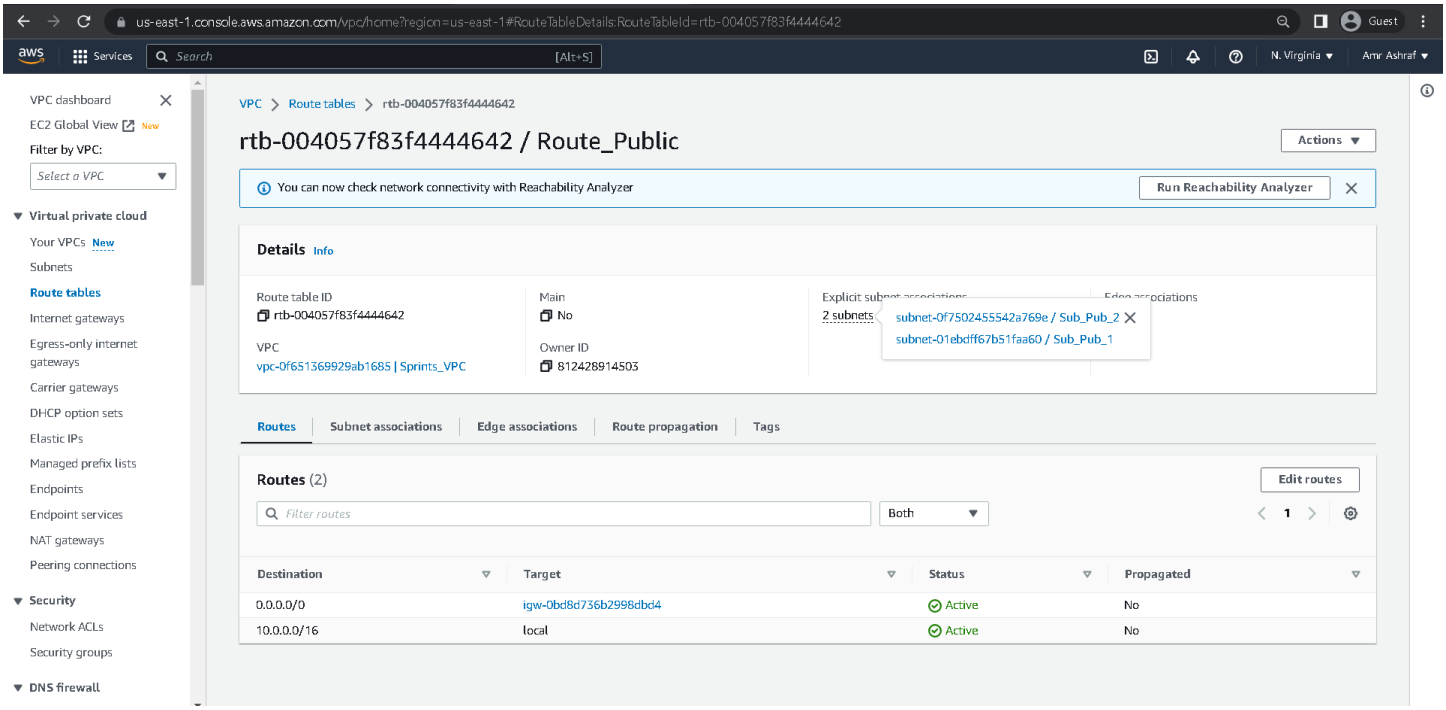
3 – Internet Gateway

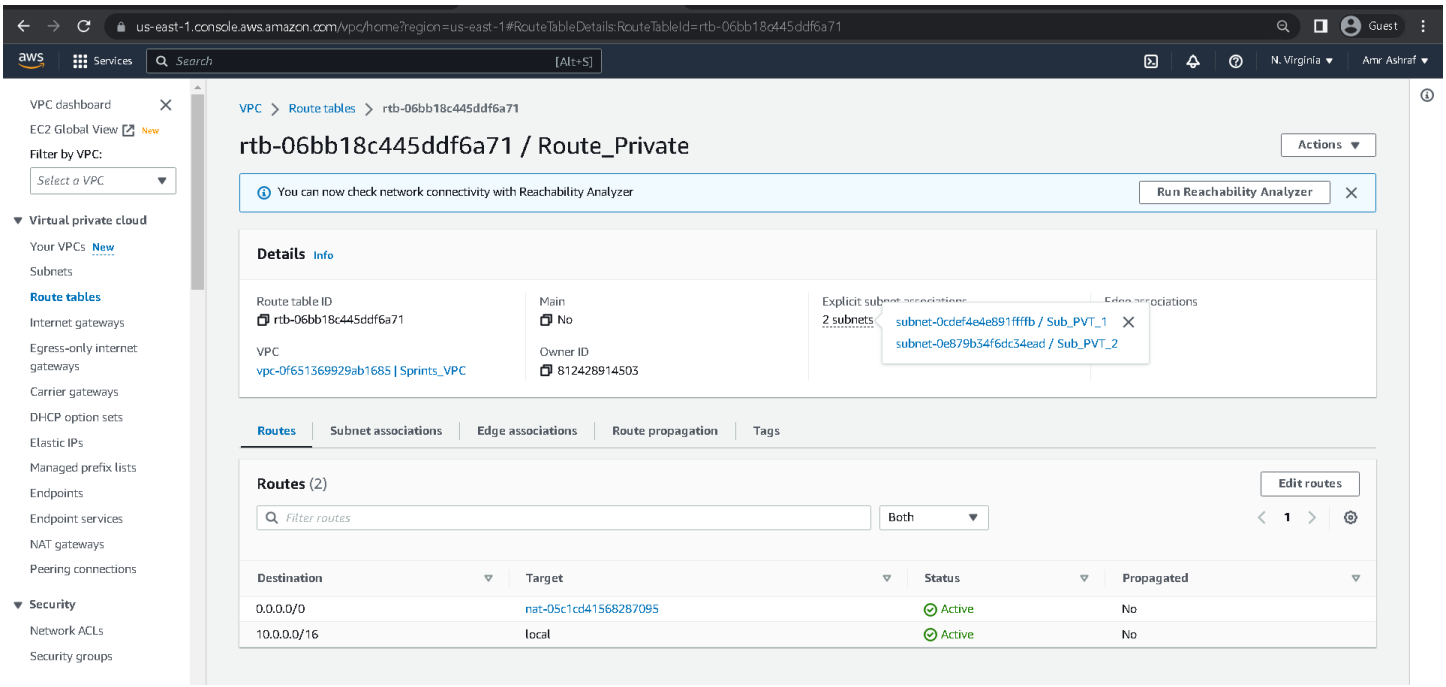


4 – Create Nat Gateway

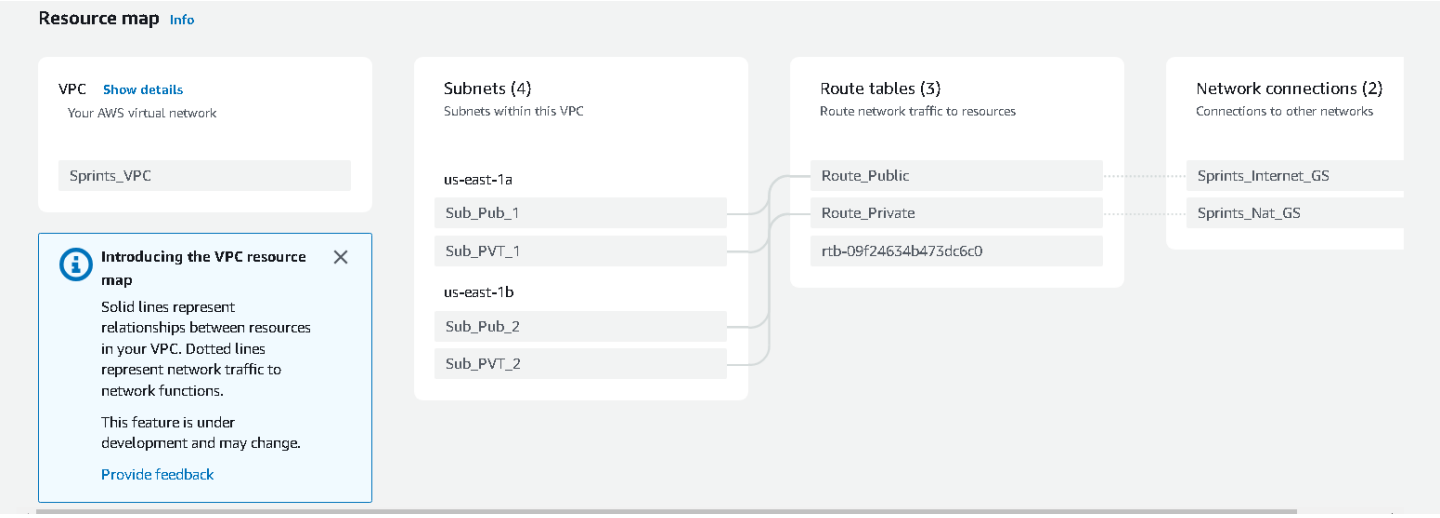


5 – Create 2 Route Tables

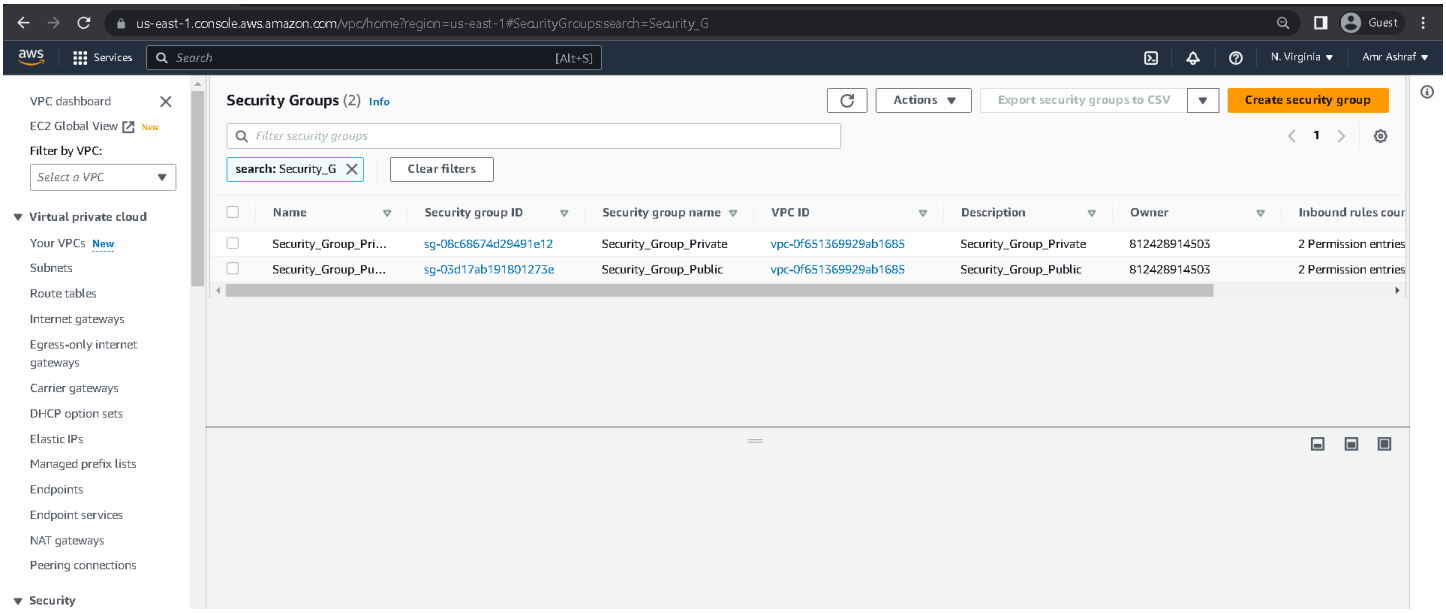




6 – VPC Should Like This

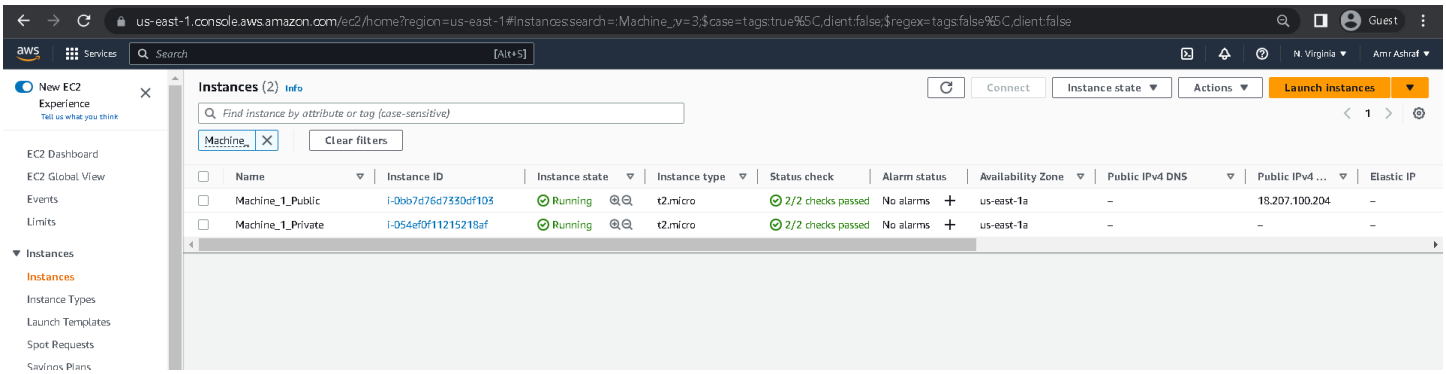


7 – Create 2 Security Groups

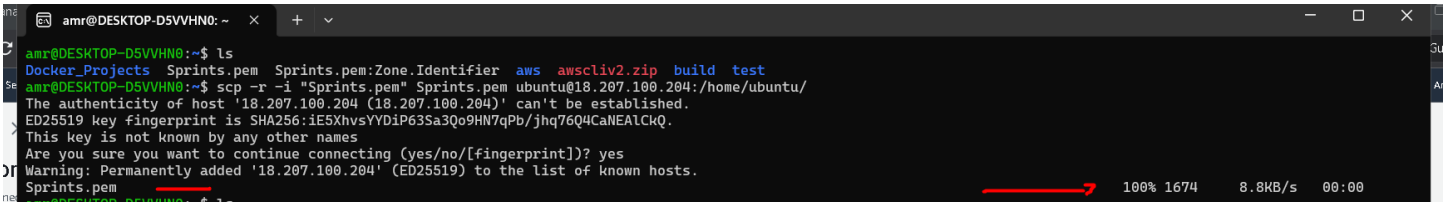


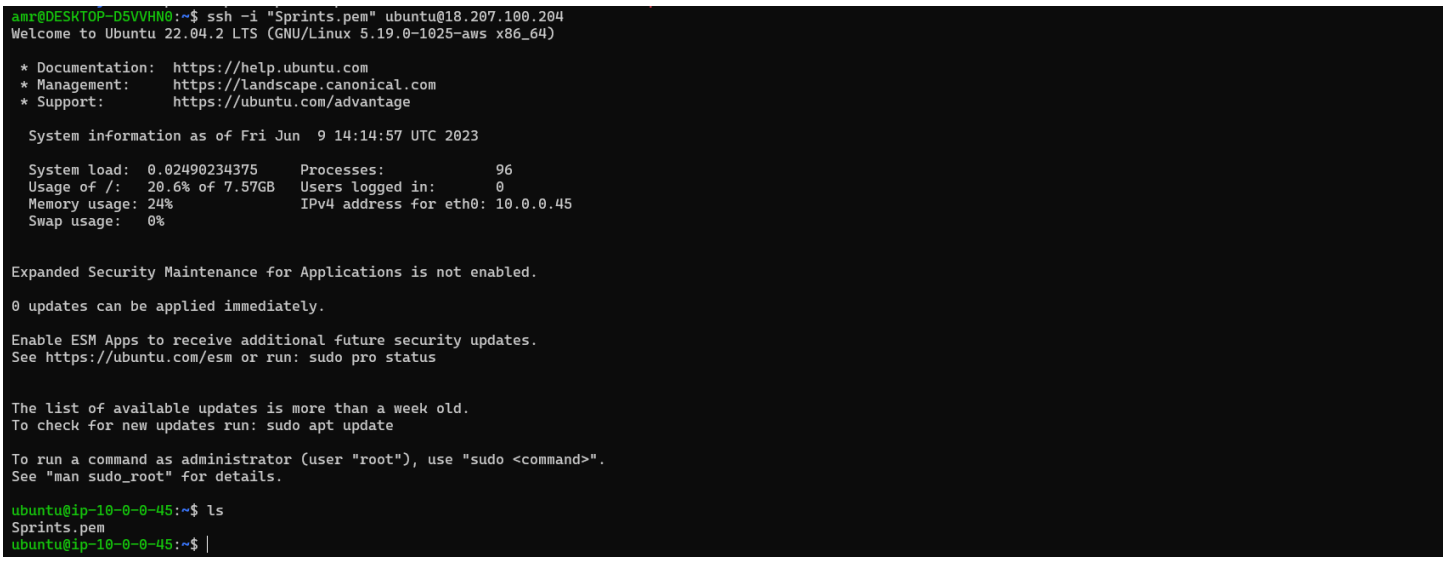
For First Question

1 – Create 2 Instance [1 Public >> Machine_1_Public] [1 Private >> Machine_1_Private]



2 – Copy Key File From my pc to Public Machine



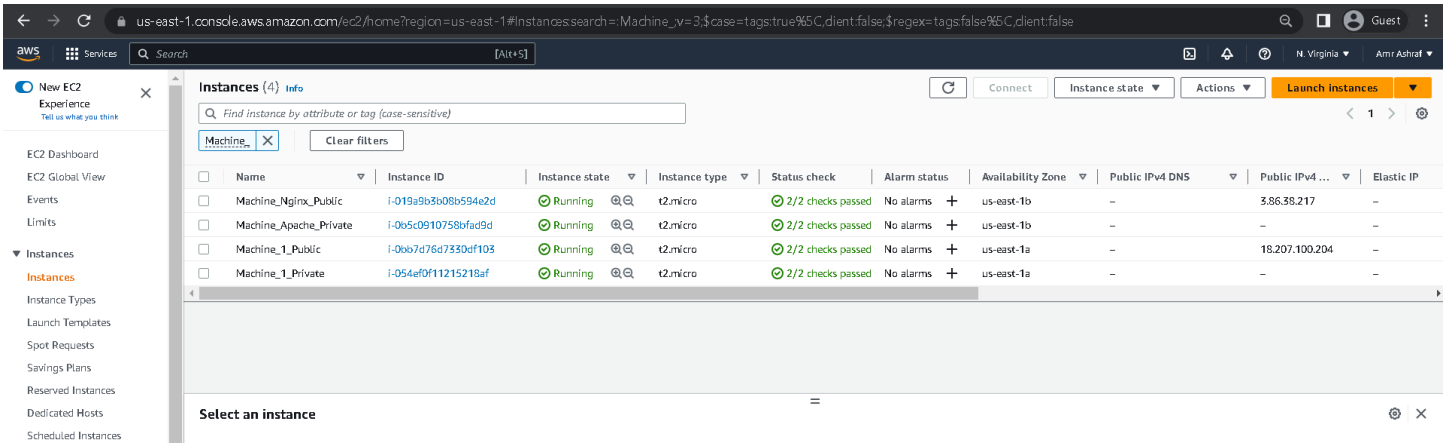


3 – Connect ssh from Public to the Private machine

```
ubuntu@ip-10-0-0-45:~$ ls
Sprints.pem
ubuntu@ip-10-0-0-45:~$ ssh -i "Sprints.pem" ubuntu@10.0.1.88
The authenticity of host '10.0.1.88 (10.0.1.88)' can't be established.
ED25519 key fingerprint is SHA256:0qzSKDxpHtw4LqL/Zfh6KGyREk5m7Ql7yLeDdjcF26I.
This key is not known by any other names
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.0.1.88' (ED25519) to the list of known hosts.
Welcome to Ubuntu 22.04.2 LTS (GNU/Linux 5.19.0-1025-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Fri Jun  9 14:16:51 UTC 2023

  System load:  0.080078125       Processes:             95
  Usage of /:   20.6% of 7.57GB   Users logged in:       0
  Memory usage: 23%               IPv4 address for eth0: 10.0.1.88
  Swap usage:   0%

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status


The list of available updates is more than a week old.
To check for new updates run: sudo apt update


The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

ubuntu@ip-10-0-1-88:~$
```

For The Next Question:

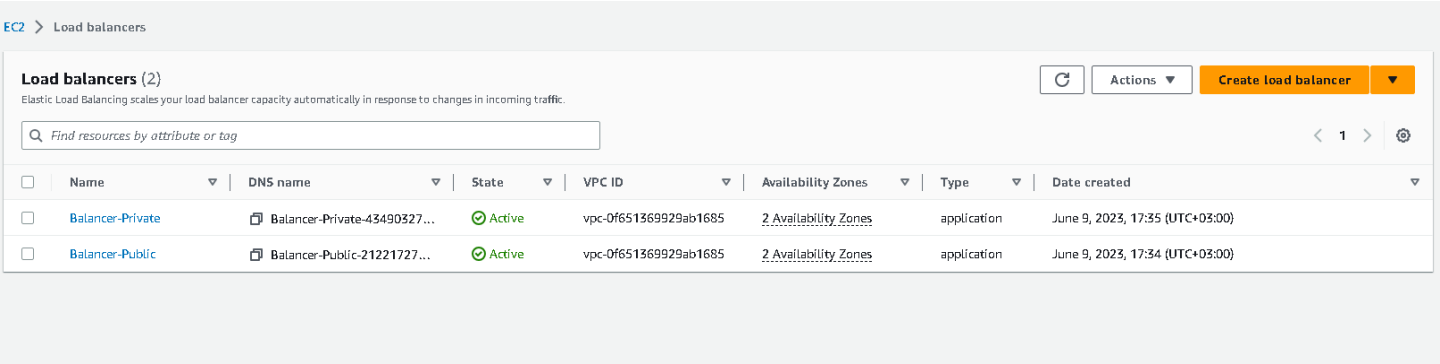
1 – Create 2 Instance [1 Public >> Machine_Nginx_Public] [1 Private >> Machine_Apache_Private]



2 – Create 2 Load Balancer

1 – Balancer For Public Machines

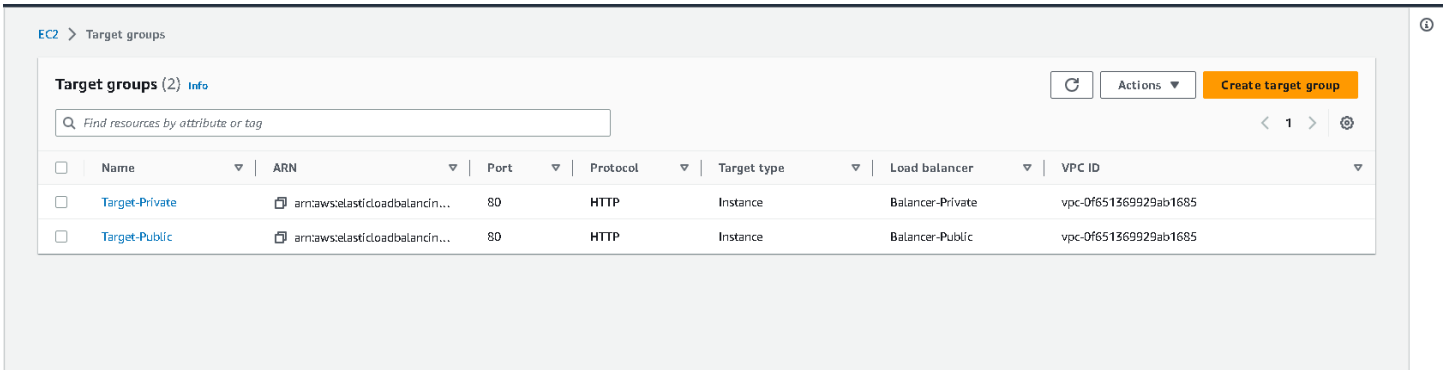
2 – Balancer For Private Machines



3 – Create 2 Target Groups

1 – Target For Public Machines

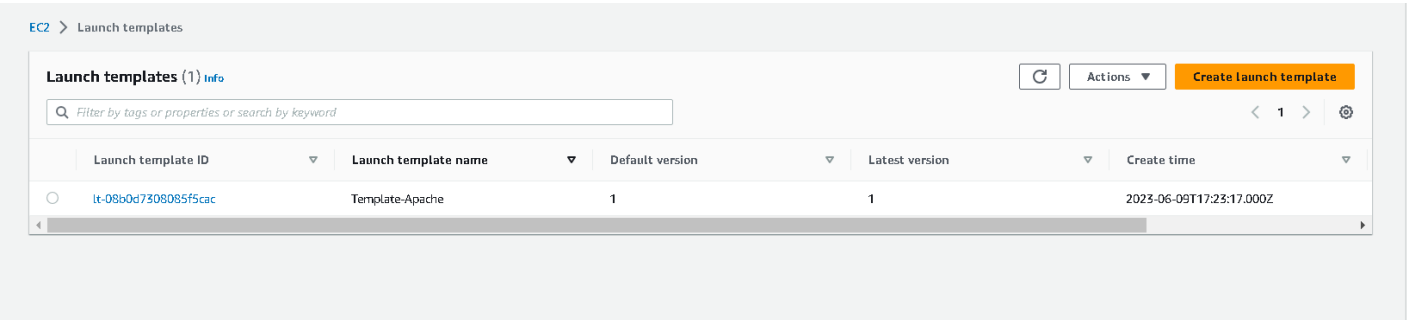
2 – Target For Private Machines



Hello From Machine 1 Public

Hello From Machine inginx Public

4 – Create Template



5 – Create Auto Scaling For Private Load Balancer [Private Machines]