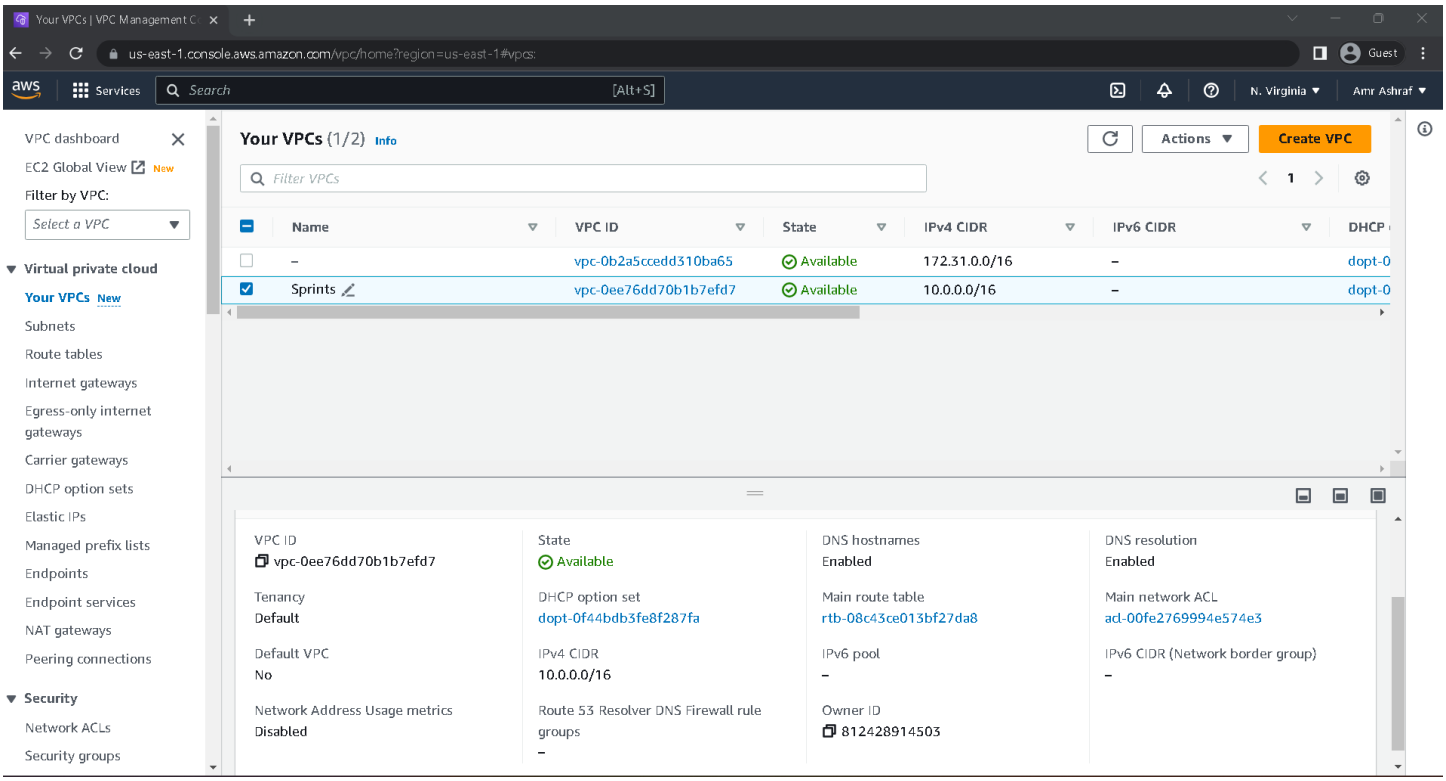
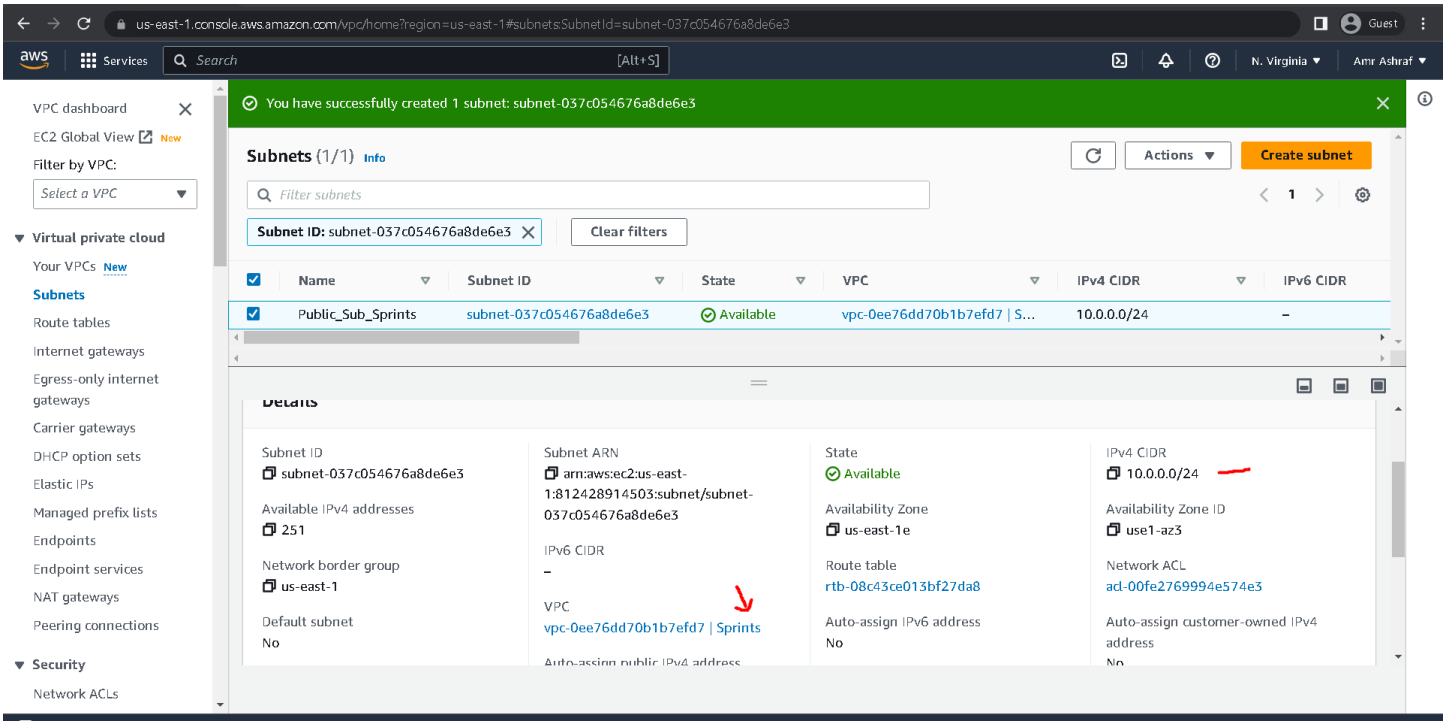
Aws Task Lab 3

The Solutions:

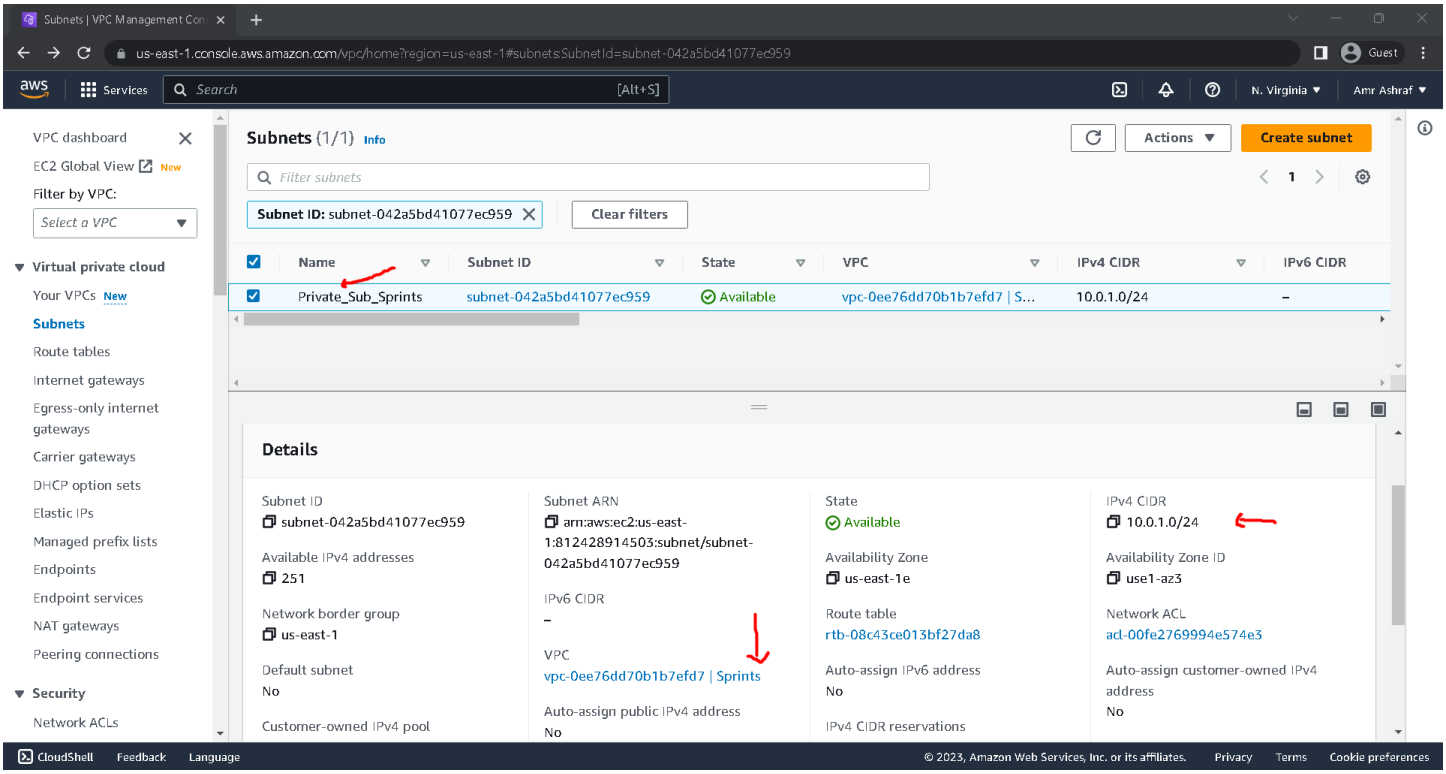
1 - Click on Create VPC and enter Sprints as the name and 10.0.0.0/16 as the CIDR block then click create vpc.



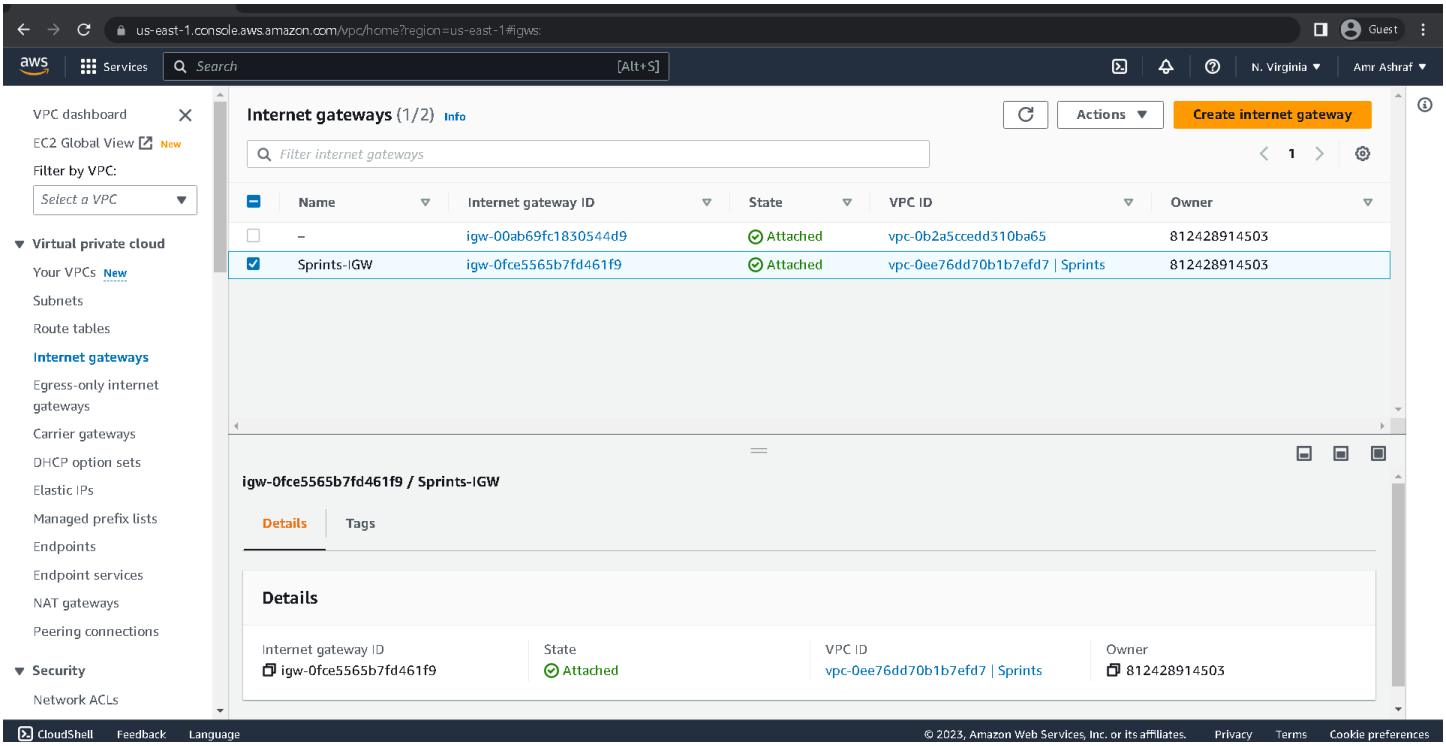
2 - Click on "Create Subnet" and enter "Public_Sub_Sprints" as the name, "10.0.0.0/24" as the CIDR block, and select the sprints VPC.



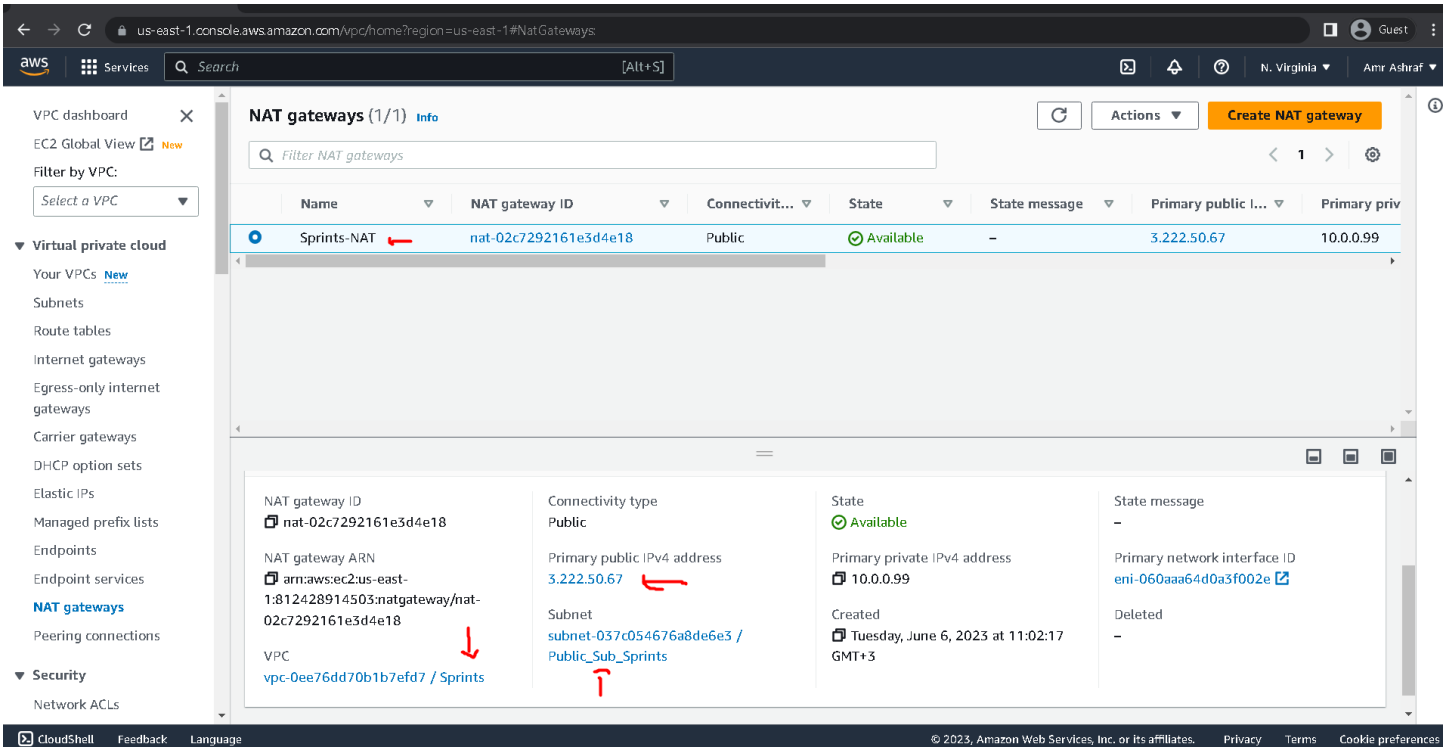
3 - Click on "Create Subnet" and enter "Private_Sub_Sprints" as the name, "10.0.1.0/24" as the CIDR block, and select the sprints VPC.



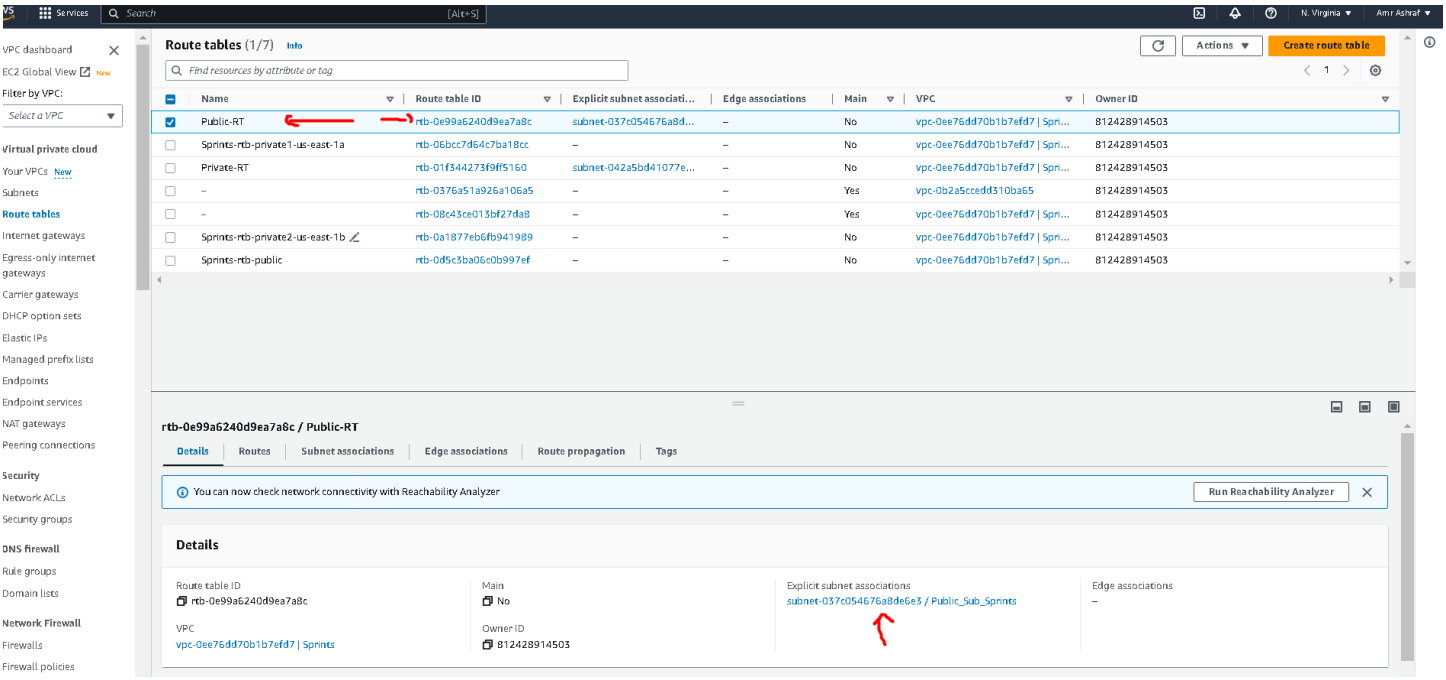
4 - Create Internet Gateway Then Put "Sprints-IGW" as the name and click on "Create" Then Click On Action And select "Attach to VPC". Choose Sprints click on "Attach".



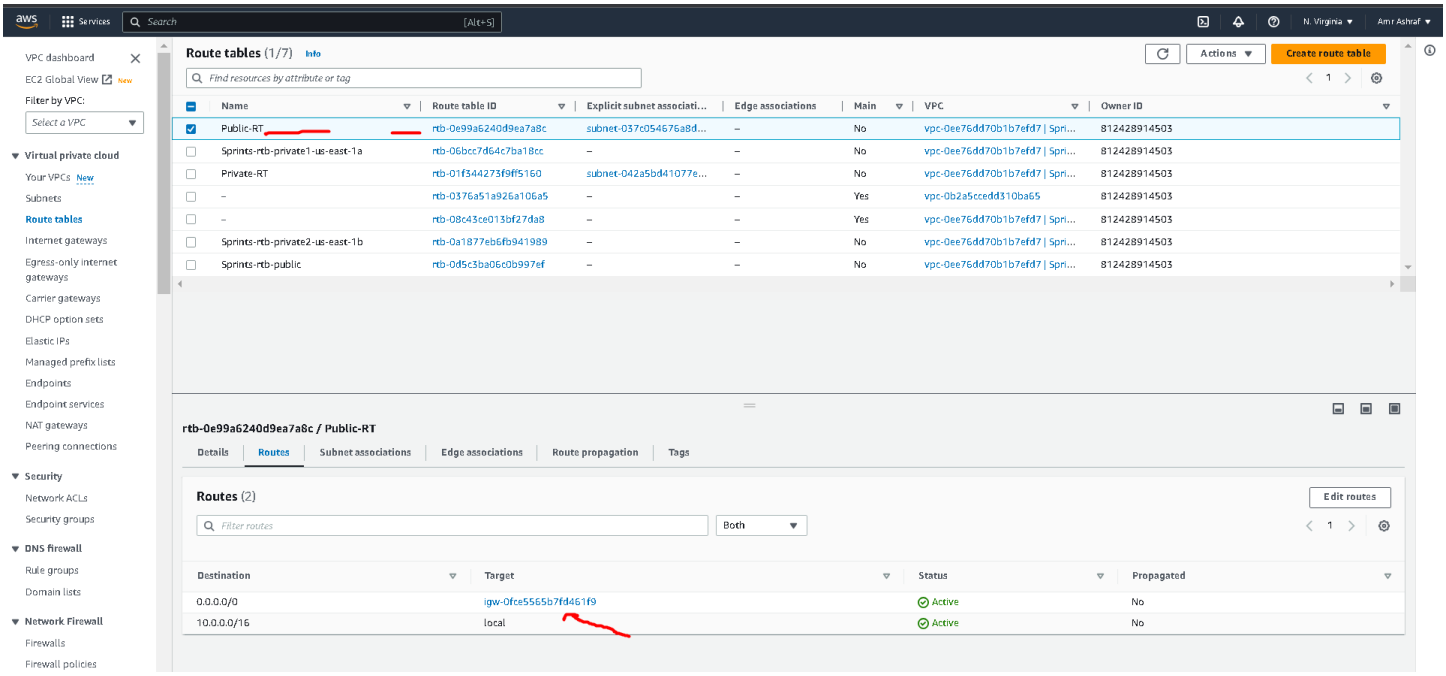
5 - Create NAT Gateway And Put “Sprints-NAT “ as the name Then Choose Sprints-IGW as the gateway, select Public_Sub_Sprints as the subnet, and choose Allocate Elastic IP address Then Create Nat Gateway



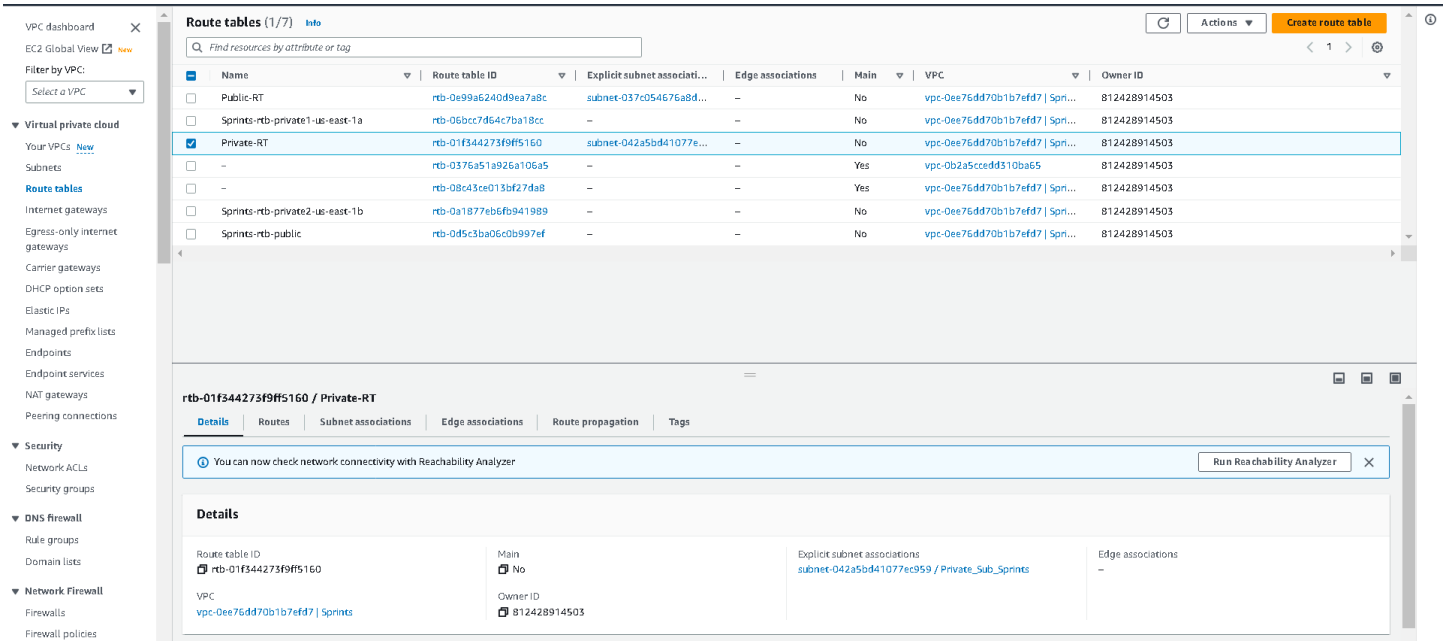
6 - Create Route Table And Put "Public-RT" as the name, select Sprints VPC, and click on Create.



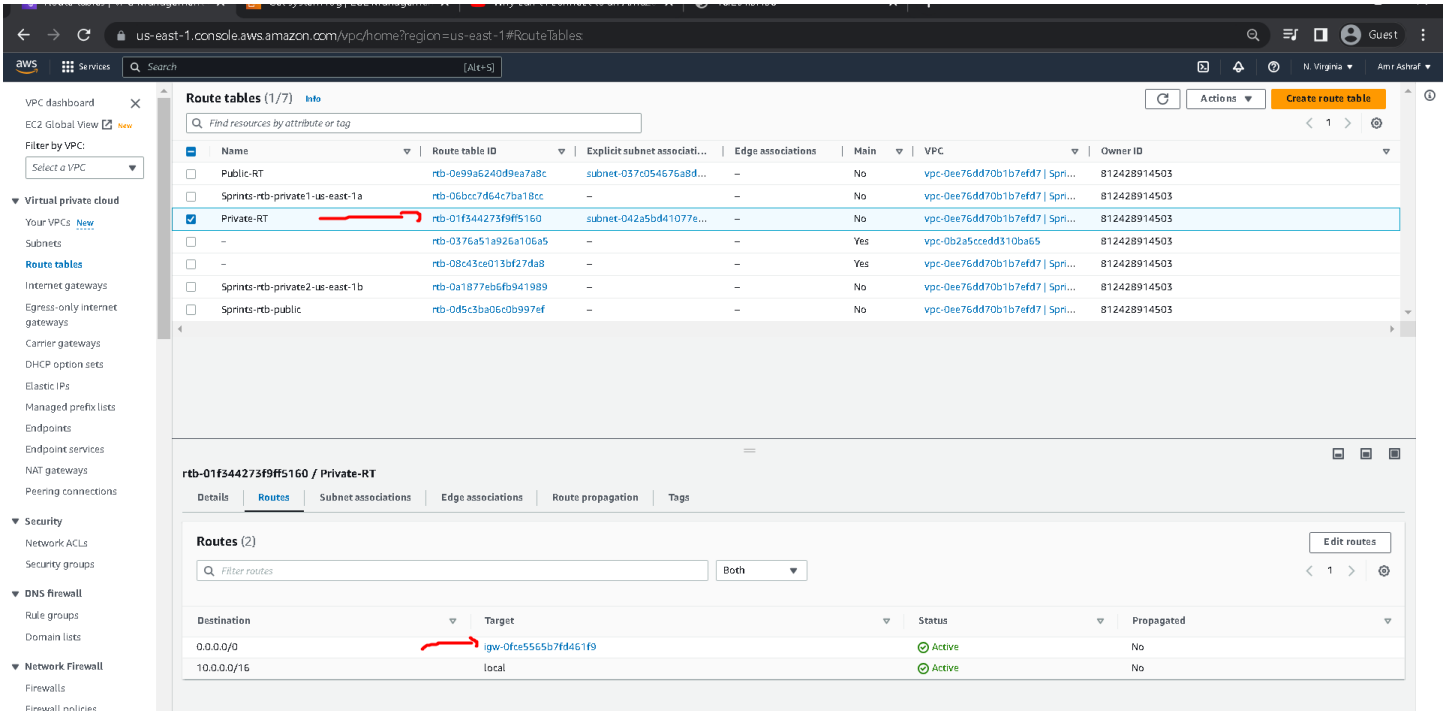
7 - Select Public-RT from the list of route tables, click on Edit routes, add a new route with destination 0.0.0.0./0, target Sprints-NAT gateway, save changes.



8 - Create Route Table And Put "Private-RT" as the name, select Sprints VPC, and click on Create

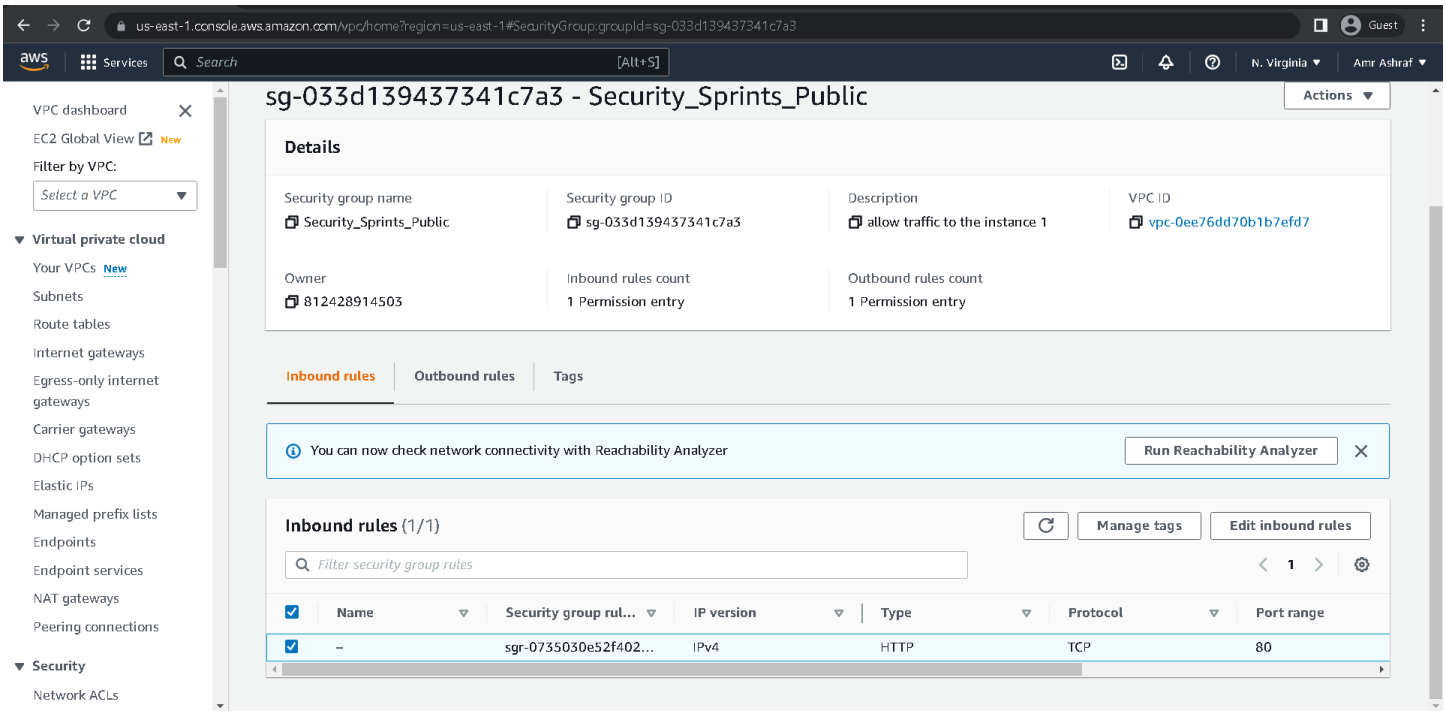


9 - Select Private-RT from the list of route tables, click on Edit routes, add a new route with destination 0.0.0.0./0, target Sprints-NAT gateway, save changes.



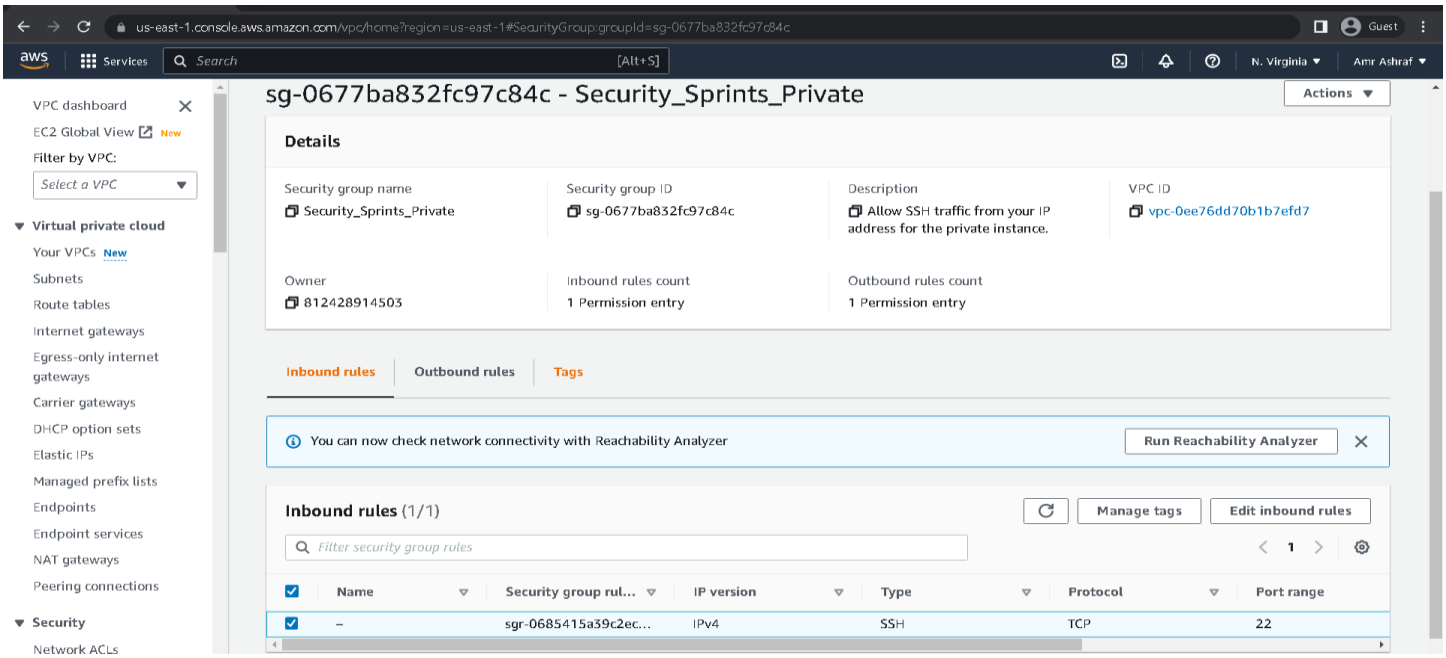
10 – Create 1 Security Group and Put “Security_Sprints_Public” as name and add inbound rules to allow traffic to the instances.

A - Allow HTTP traffic from anywhere (0.0.0.0/0) for the public instance [Instance1_Public]



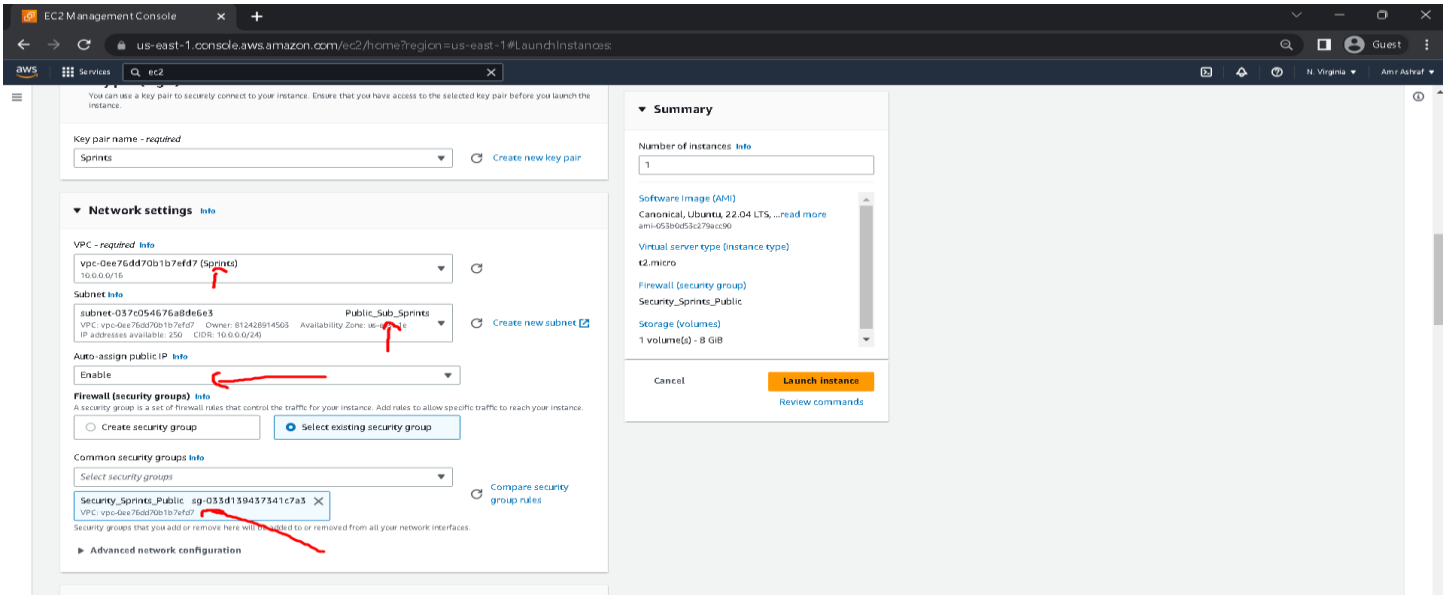
11 – Create 1 Security Group and Put “Security_Sprints_Private” as name and add inbound rules to allow traffic to the instances.

A - Allow SSH traffic from my IP address for the private instance. [Instance1_Public]



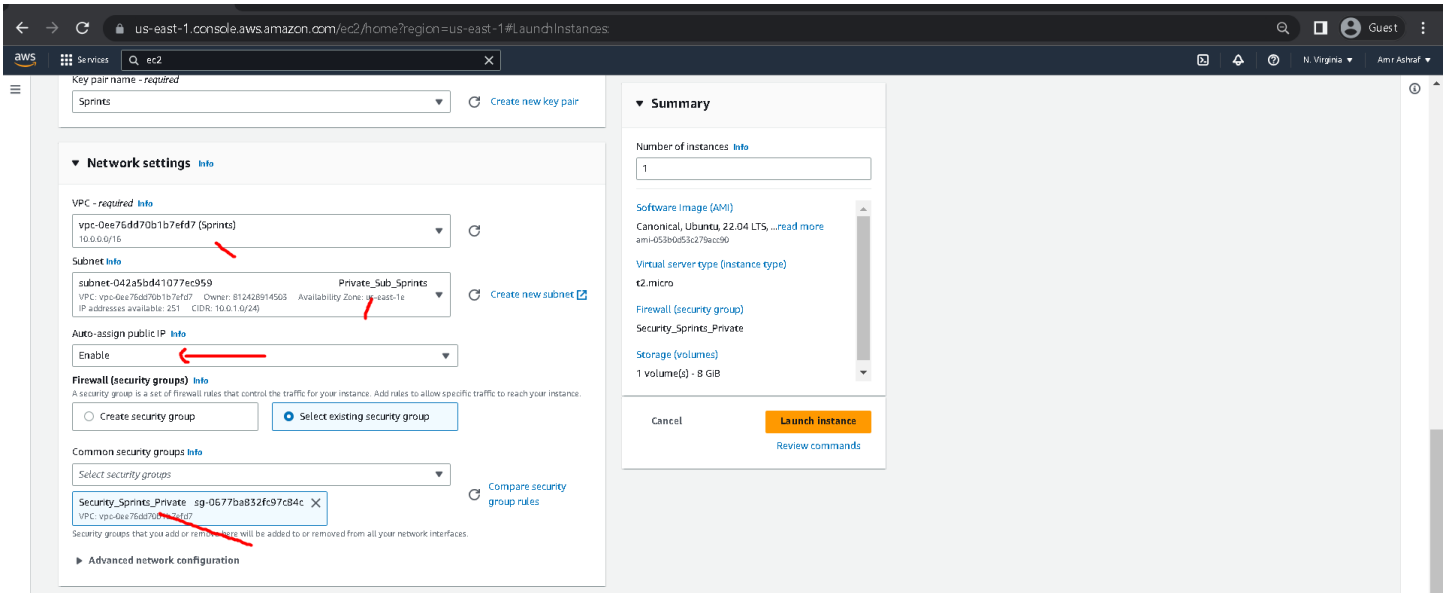
12 - Launch Instance And Put “Instance1_Public” as name of instance and choose an Ubuntu as image.

A – Choose Sprints VPC B – Choose Public_Sub_Sprint C - Choose Security_Sprints_Public



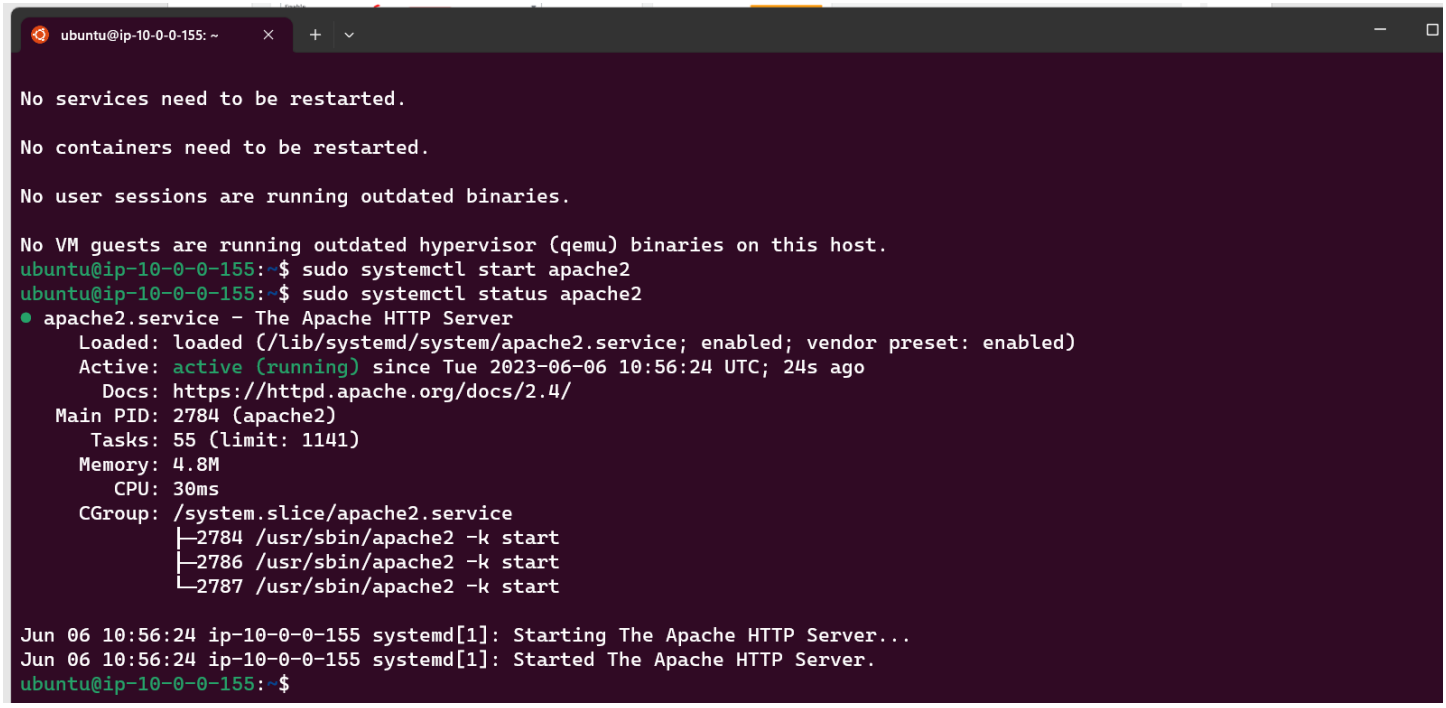
13 - Launch Instance And Put “Instance1_Private” as name of instance and choose an Ubuntu as image.

A – Choose Sprints VPC B – Choose Private_Sub_Sprint C - Choose Security_Sprints_Private

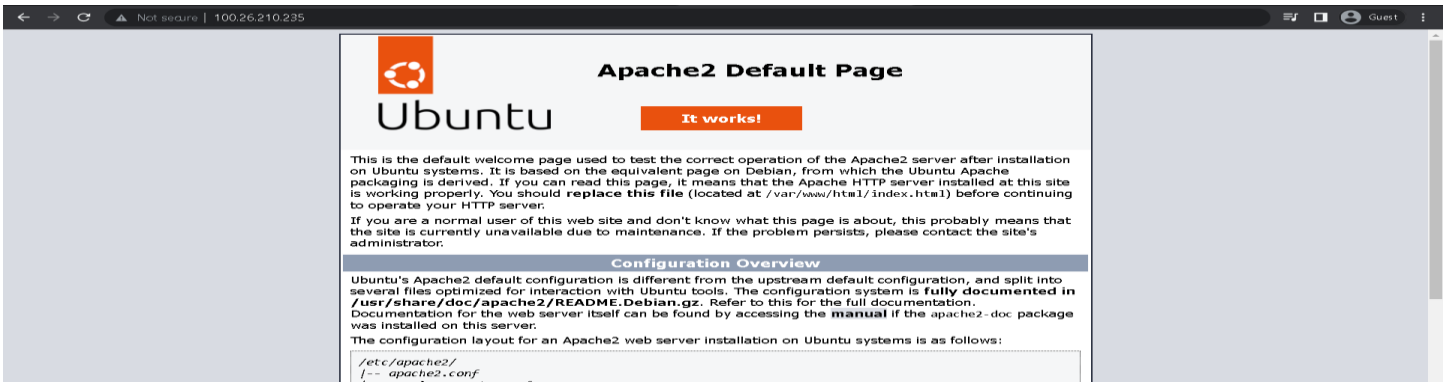


14 – Connect For First Instance [Instance1_Public]

Commands : 1 – sudo apt-get update -y
2 – sudo apt-get install apache2 -y
3 – sudo systemctl start apache2
4 – sudo systemctl status apache2

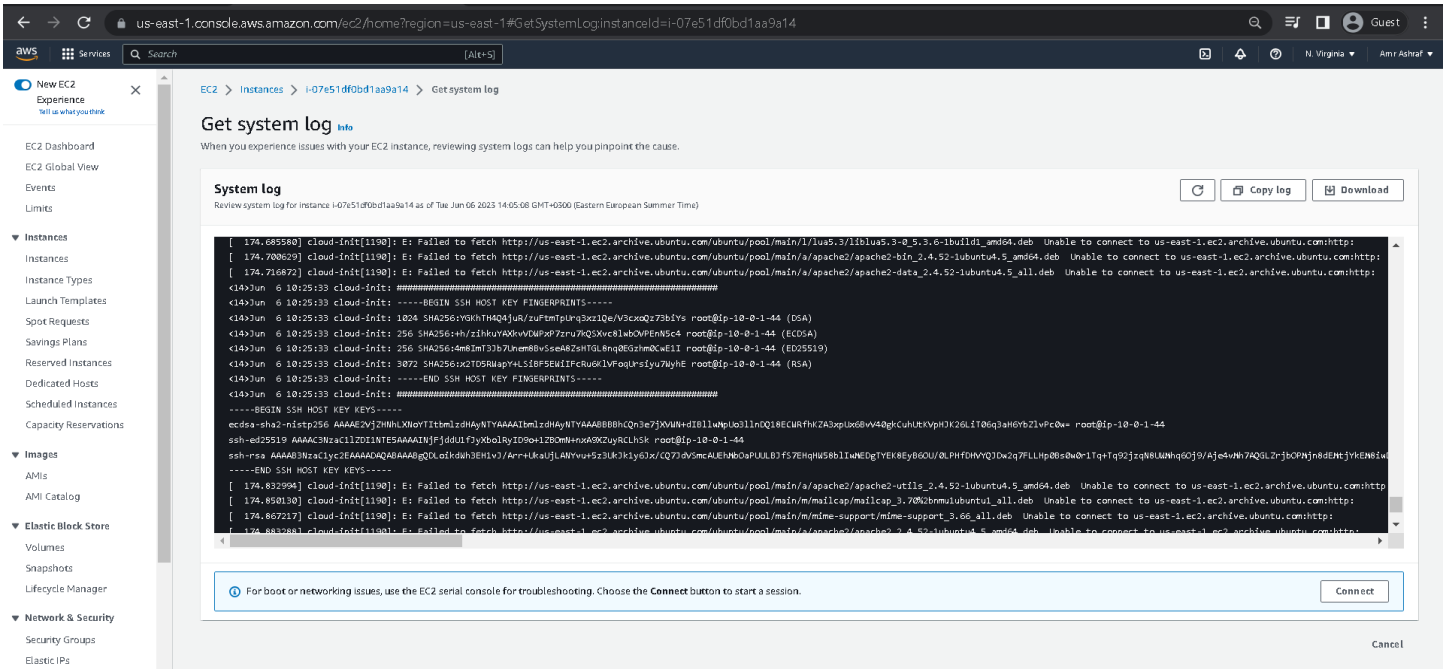


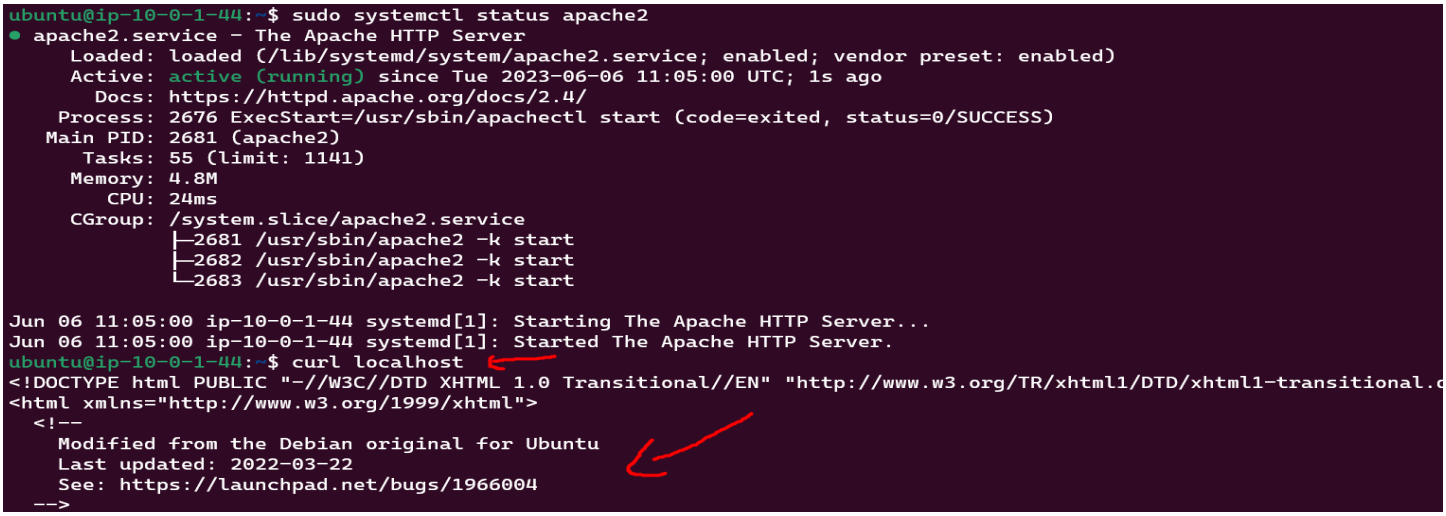
Check The Page Results



14 – Connect For Second Instance [Instance1_Private]

Commands : 1 – sudo apt-get update -y
2 – sudo apt-get install apache2 -y
3 – sudo systemctl start apache2
4 – sudo systemctl status apache2




ubuntu@ip-10-0-1-44:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
Active: active (running) since Tue 2023-06-06 11:05:00 UTC; 1s ago
Docs: https://httpd.apache.org/docs/2.4/
Process: 2676 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
Main PID: 2681 (apache2)
Tasks: 55 (limit: 1141)
Memory: 4.8M
CPU: 24ms
CGroup: /system.slice/apache2.service
├─2681 /usr/sbin/apache2 -k start
├─2682 /usr/sbin/apache2 -k start
└─2683 /usr/sbin/apache2 -k start
Jun 06 11:05:00 ip-10-0-1-44 systemd[1]: Starting The Apache HTTP Server...
Jun 06 11:05:00 ip-10-0-1-44 systemd[1]: Started The Apache HTTP Server.
ubuntu@ip-10-0-1-44:~$ curl localhost
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.d
<html xmlns="http://www.w3.org/1999/xhtml">
<!--
Modified from the Debian original for Ubuntu
Last updated: 2022-03-22
See: https://launchpad.net/bugs/1966004
-->