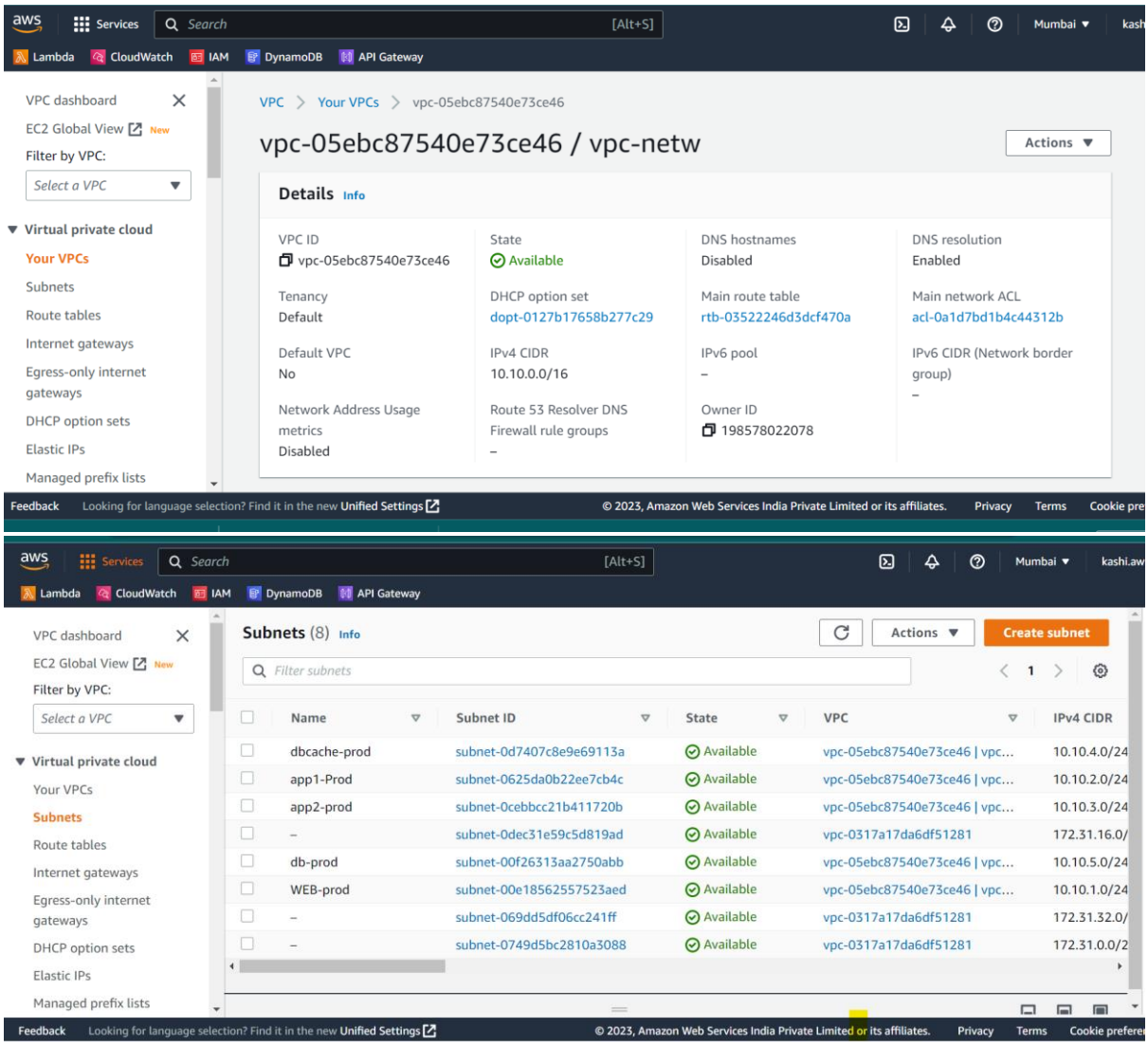
Module 4 -VPC

CASE STUDY

Production Network:

1. Design and build a 4 tier architecture
2. Create 5 subnets out of which 4 should be private with names app1, app2, dbcache and db and one should be public named web.
3. Launch instances in all subnets and name them as per the subnet that they have been launched in.
4. Allow dbcache instance and app1 subnet to send internet requests
5. Manage security groups and NACLs

➔Creation of VPC



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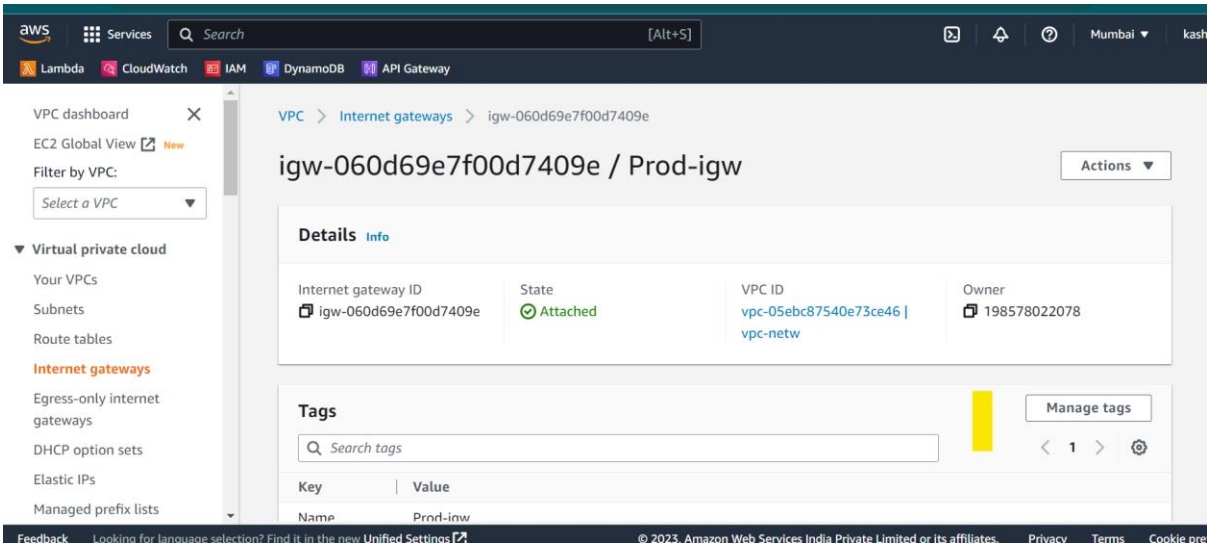
➔The creation of 5 subnets and WEB-prod is the only public subnet .



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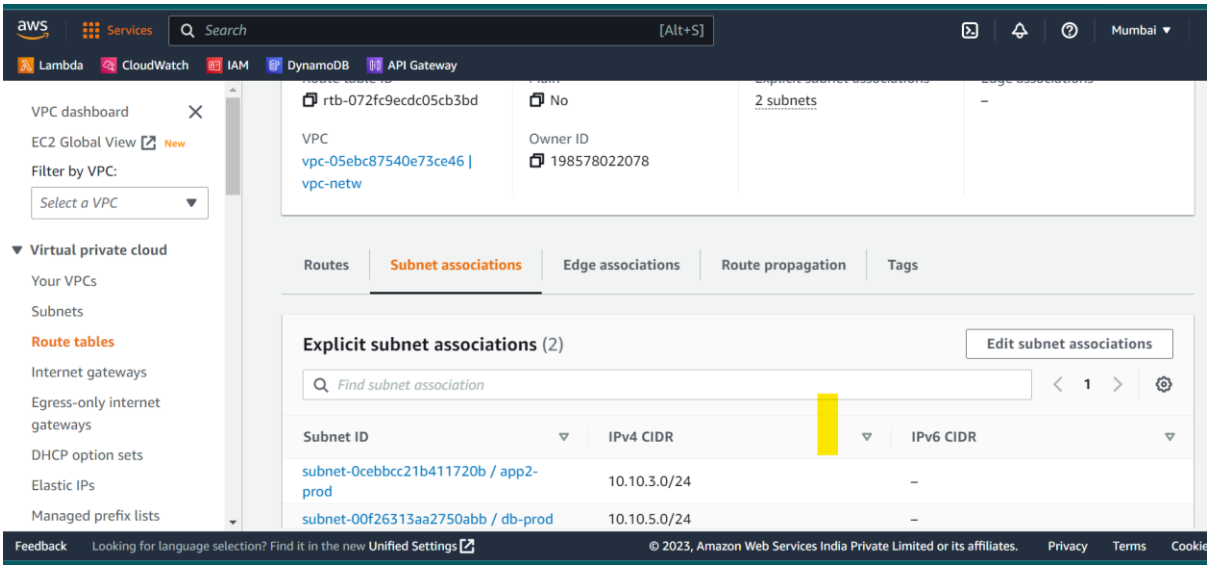
➔**Internet gateway for Internet connection and attached to web-prod.**



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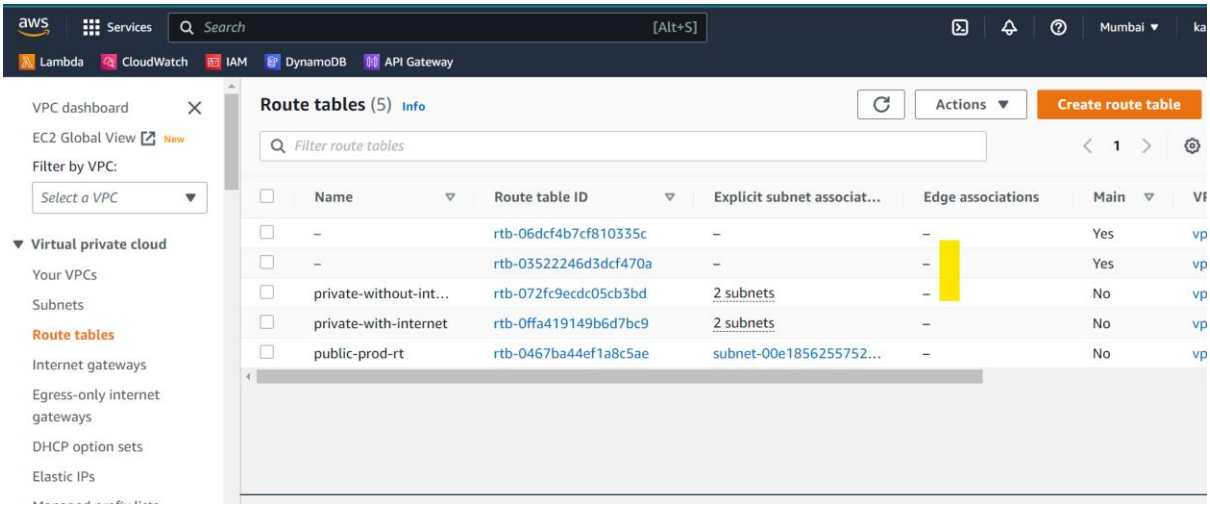
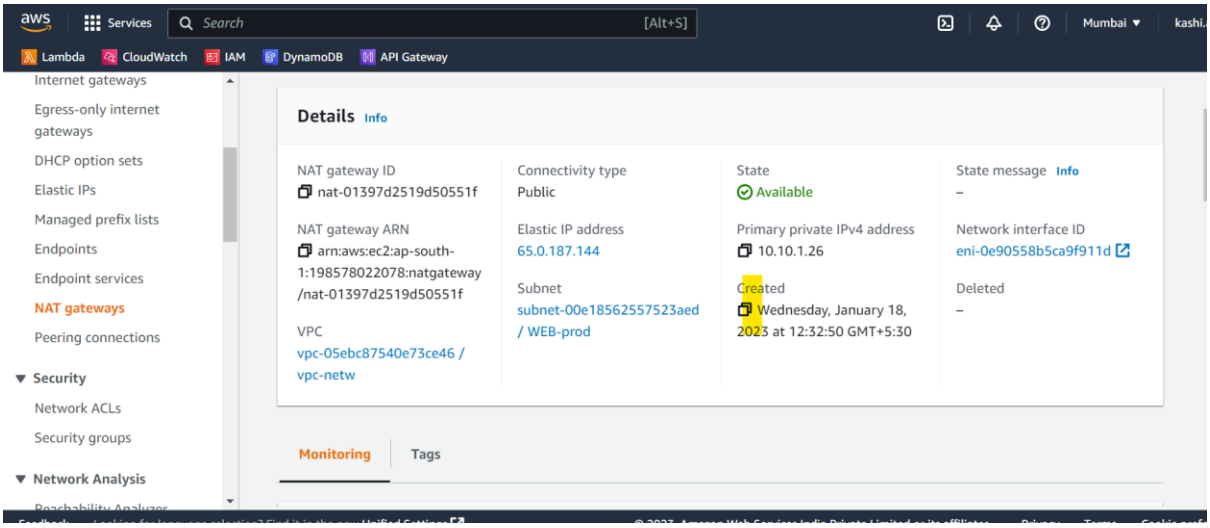
➔**Route Table with internet and associated 2 subnets app2-prod and DB-prod**



➔

➔**3 Route tables are created and associated with subnets .**

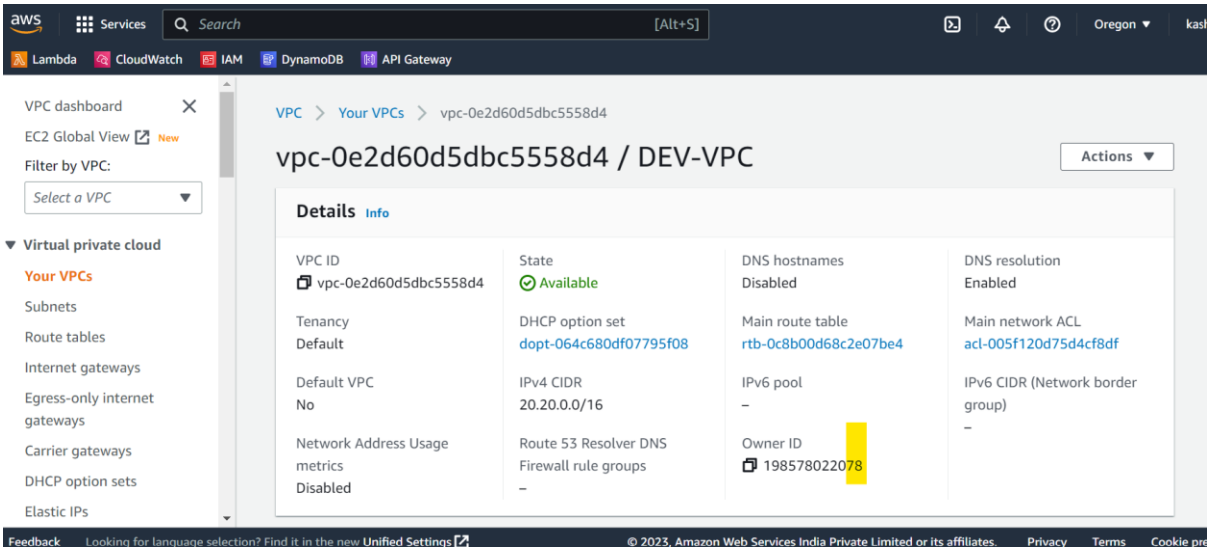


➔ **NAT Gateway is created for web-prod(public) as to communicate with private instances once created .**

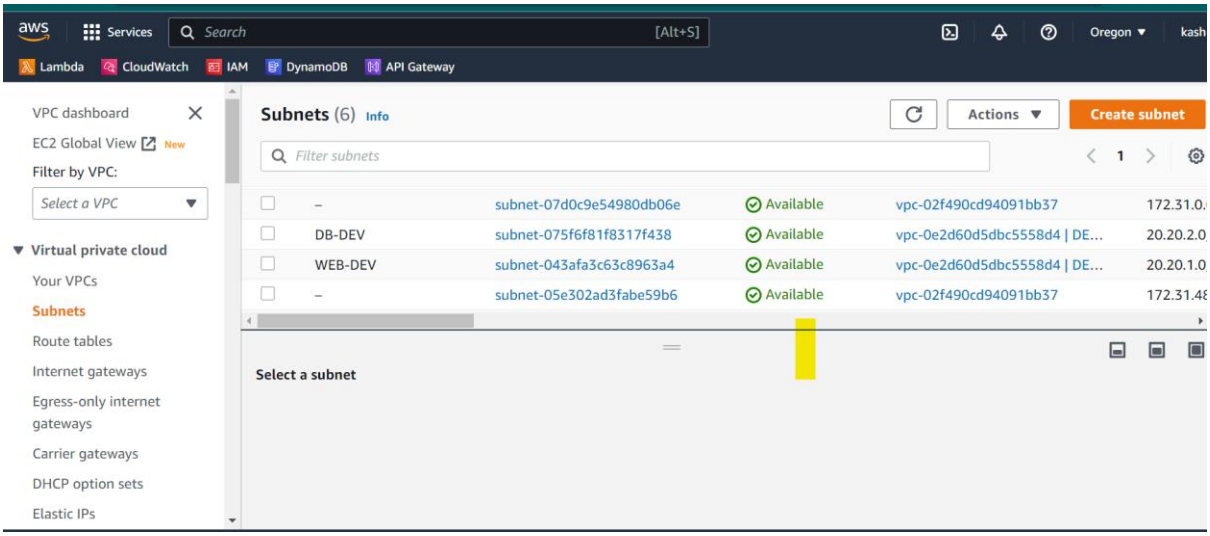
Development Network:

1. Design and build 2 tier architecture with two subnets named web and db and launch instances in both subnets and name them as per the subnet names.
2. Make sure only web subnet can send internet requests
3. Create peering connection between production network and development network
4. Setup connection between db subnets of both production network and development network respectively

➔ **Created a VPC**



➔ **WITH 2 subnets**



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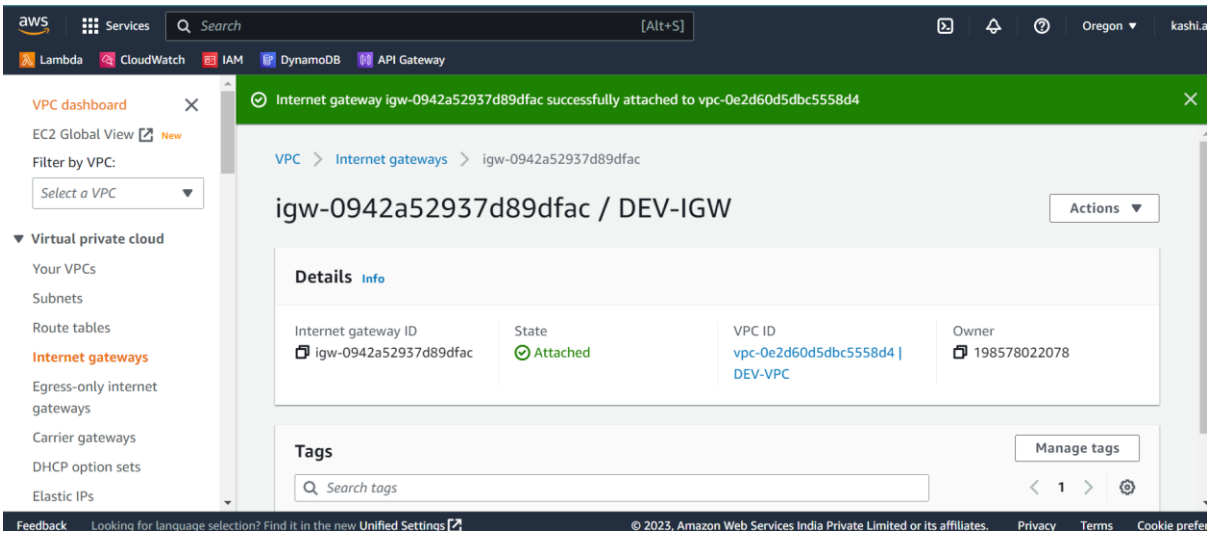
➔**Internet Gateway with attached vpc**



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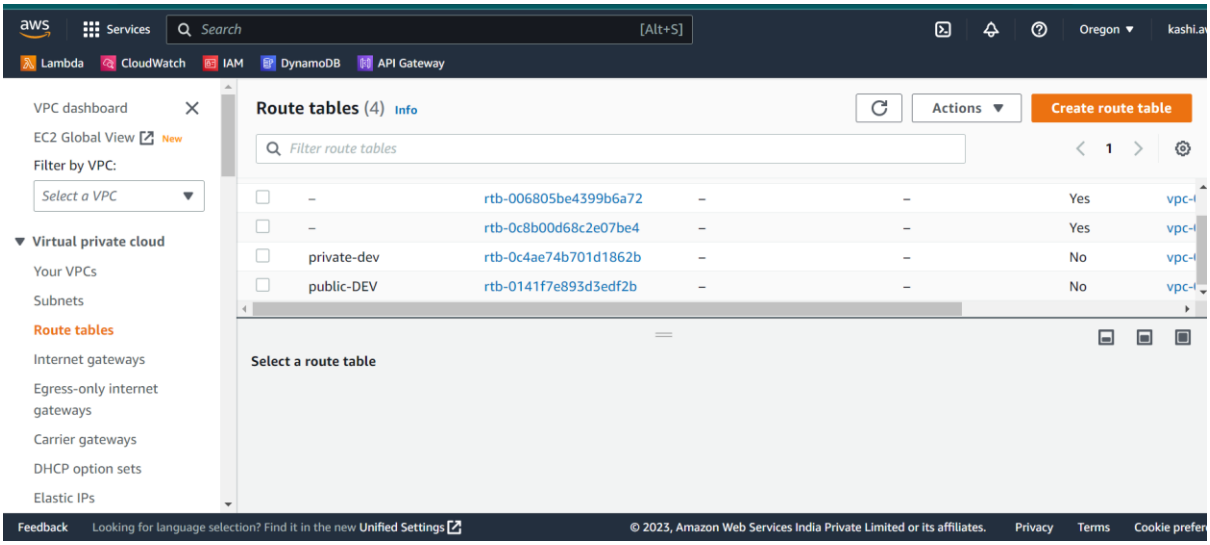
➔**Route tables**



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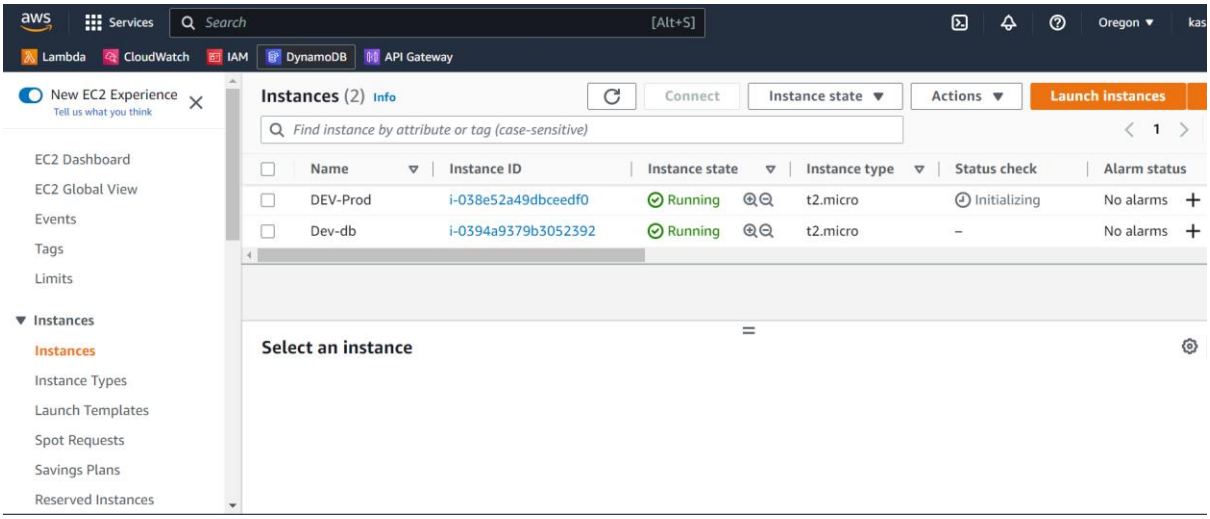
➔**Public route table is associated with dev-prod subnet and connected with Internet Gateway**



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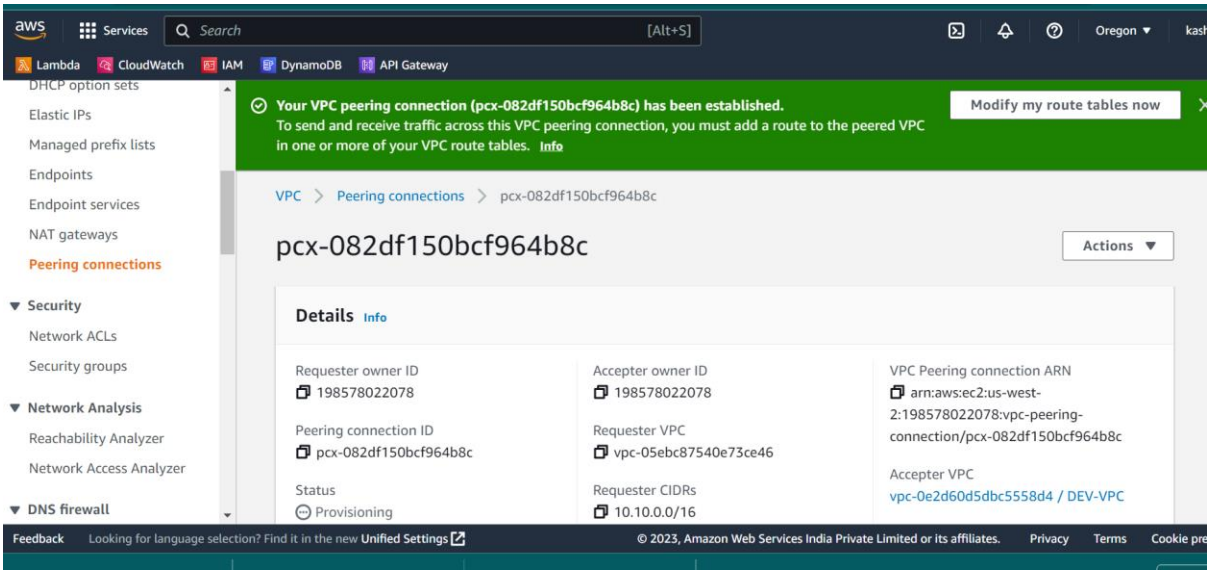
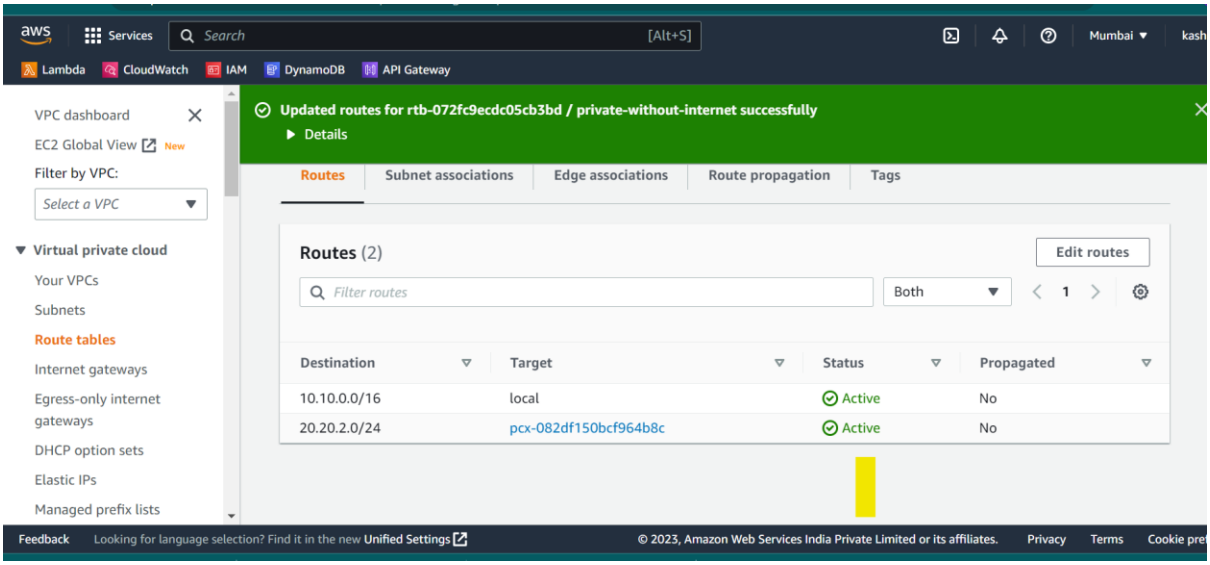
➔**Instances are created in Oregon region**



➔

➔**Created Peering connection between Oregon and Mumbai region and**



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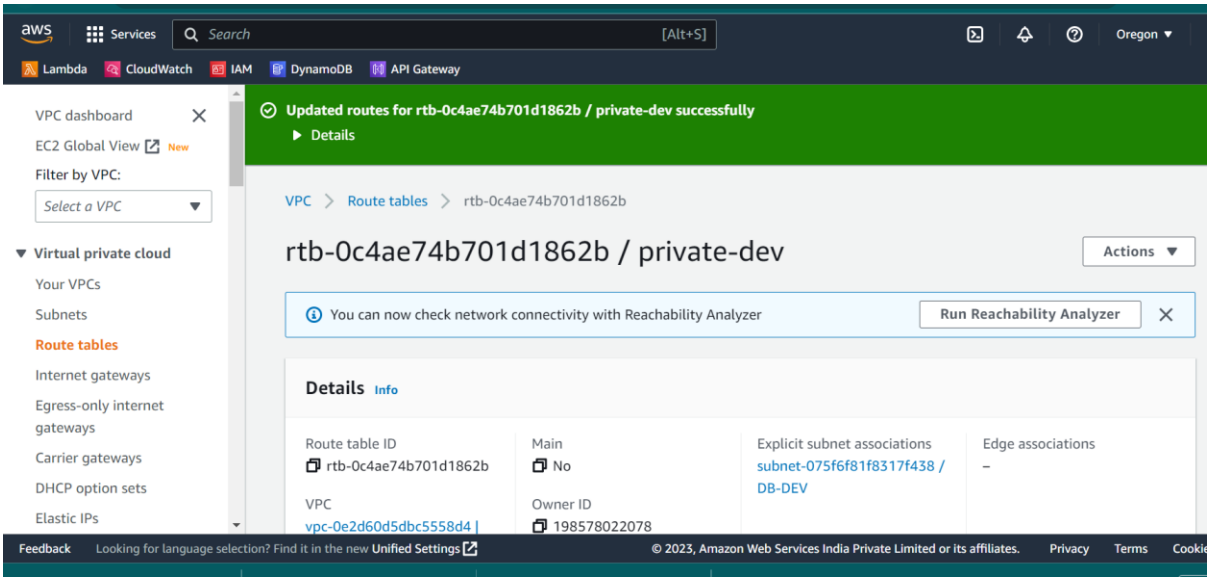

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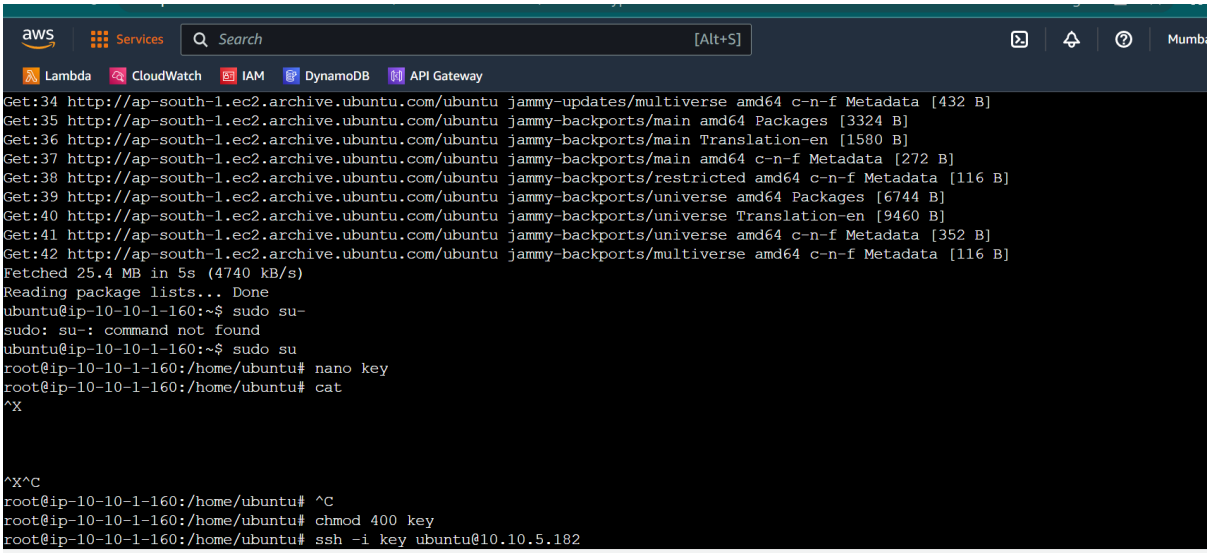
➔ **Route table is edited with the route**



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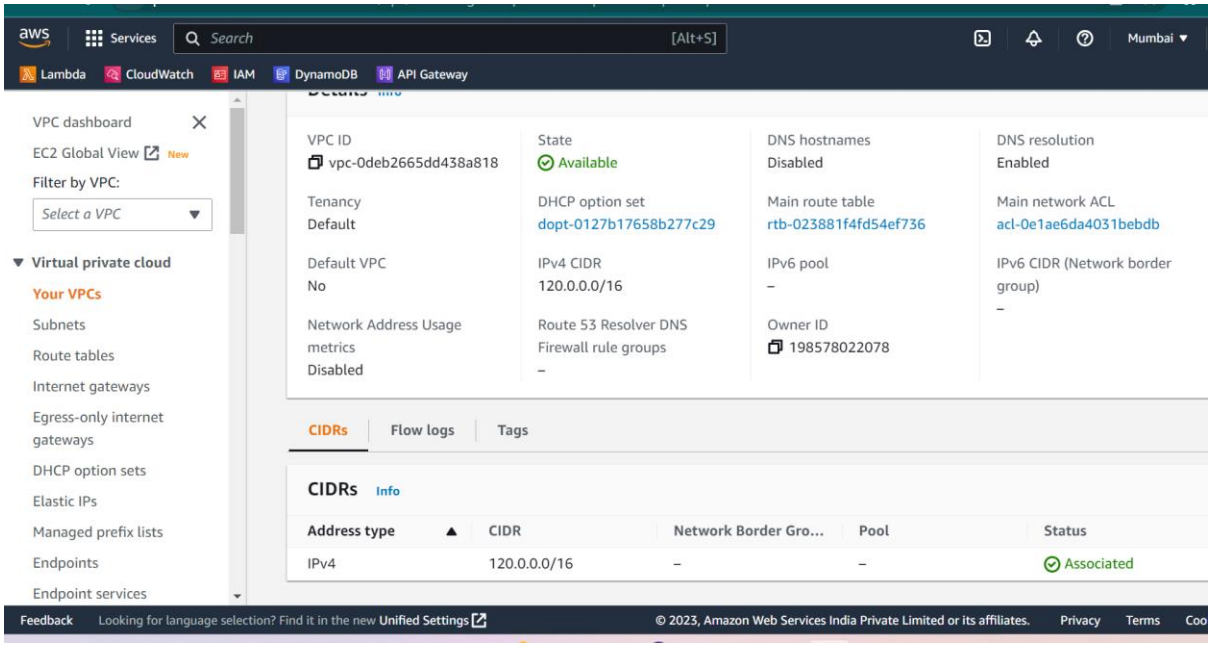
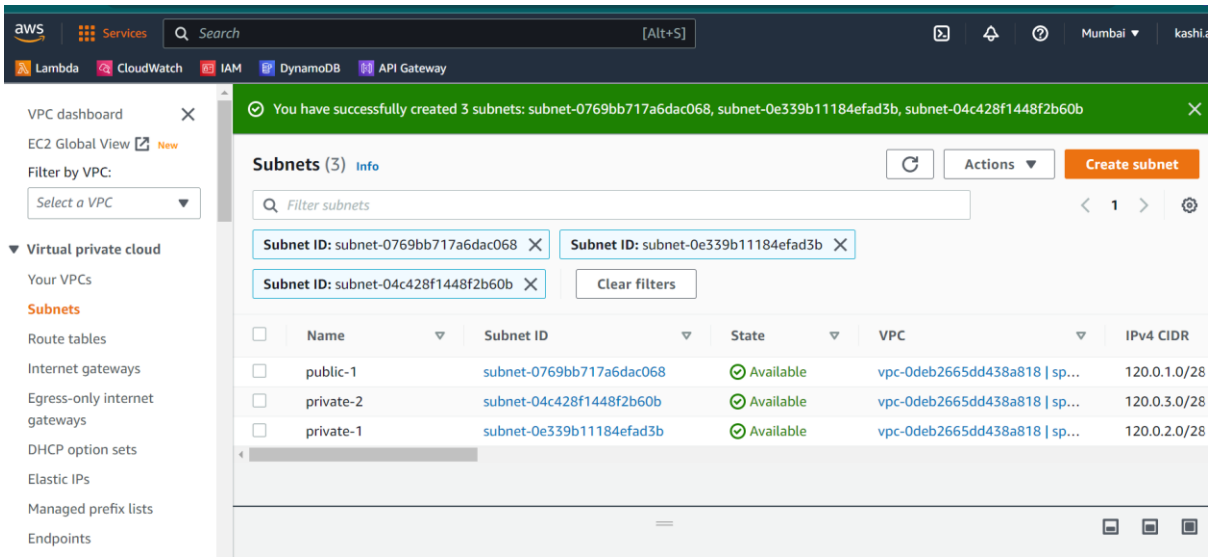
➔ **Same is checked by using ping for Oregon**

Assignment -1

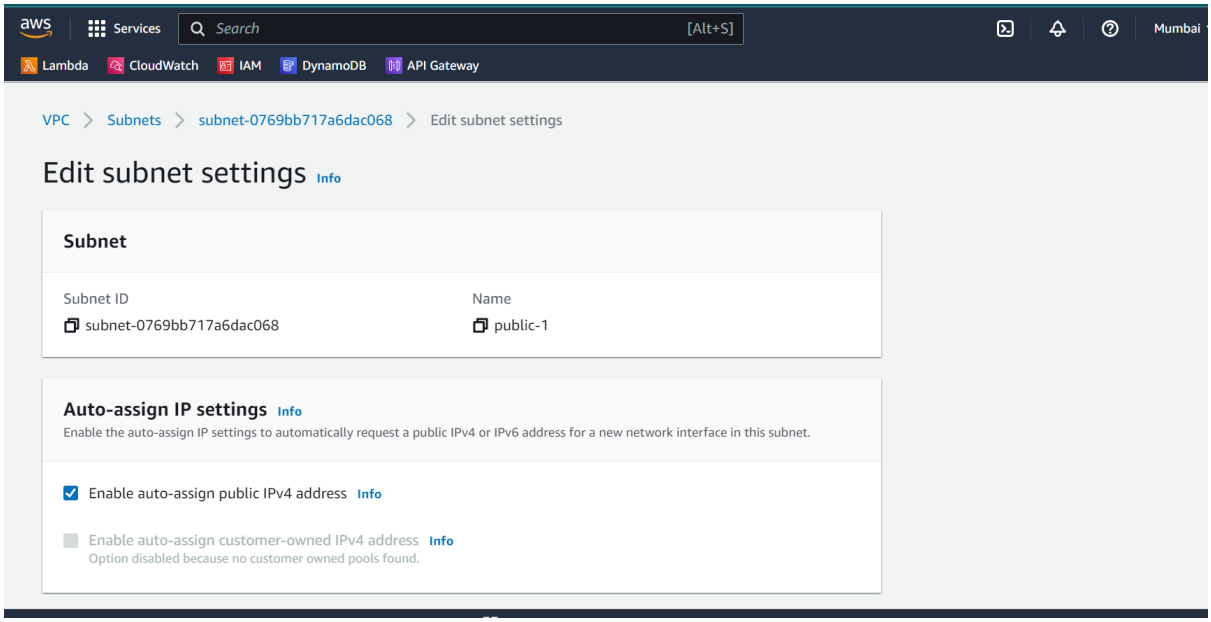
1. **Create VPC With 120.0.0.0/16 CIDR Block**



2.Create 1 public and 2 private subnet and NAT gateway for private subnet .

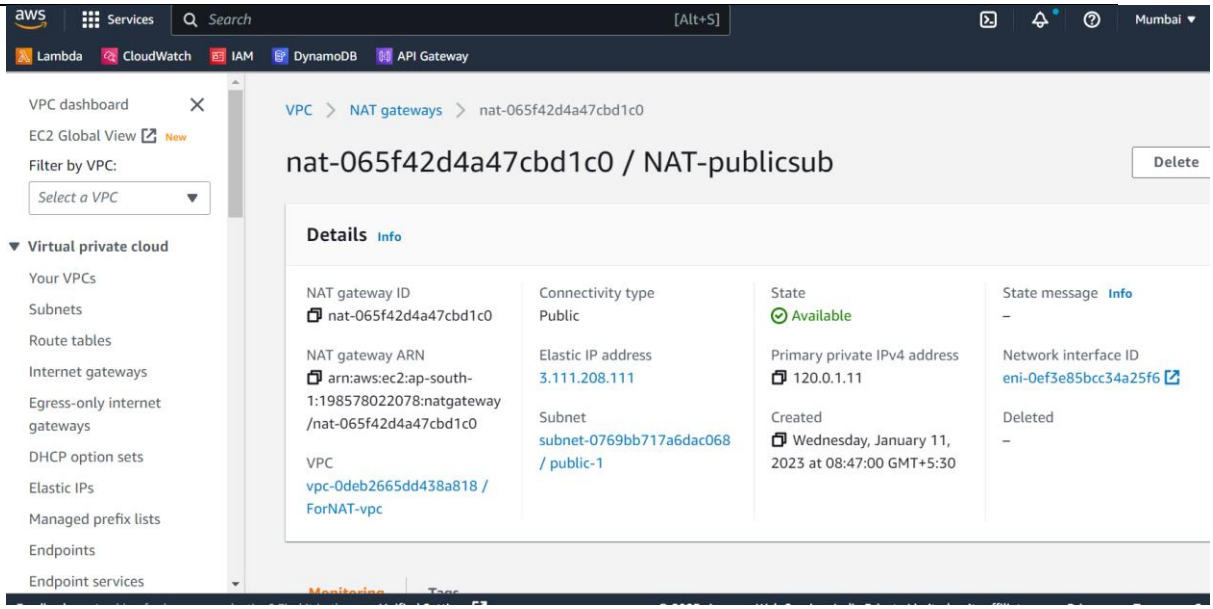


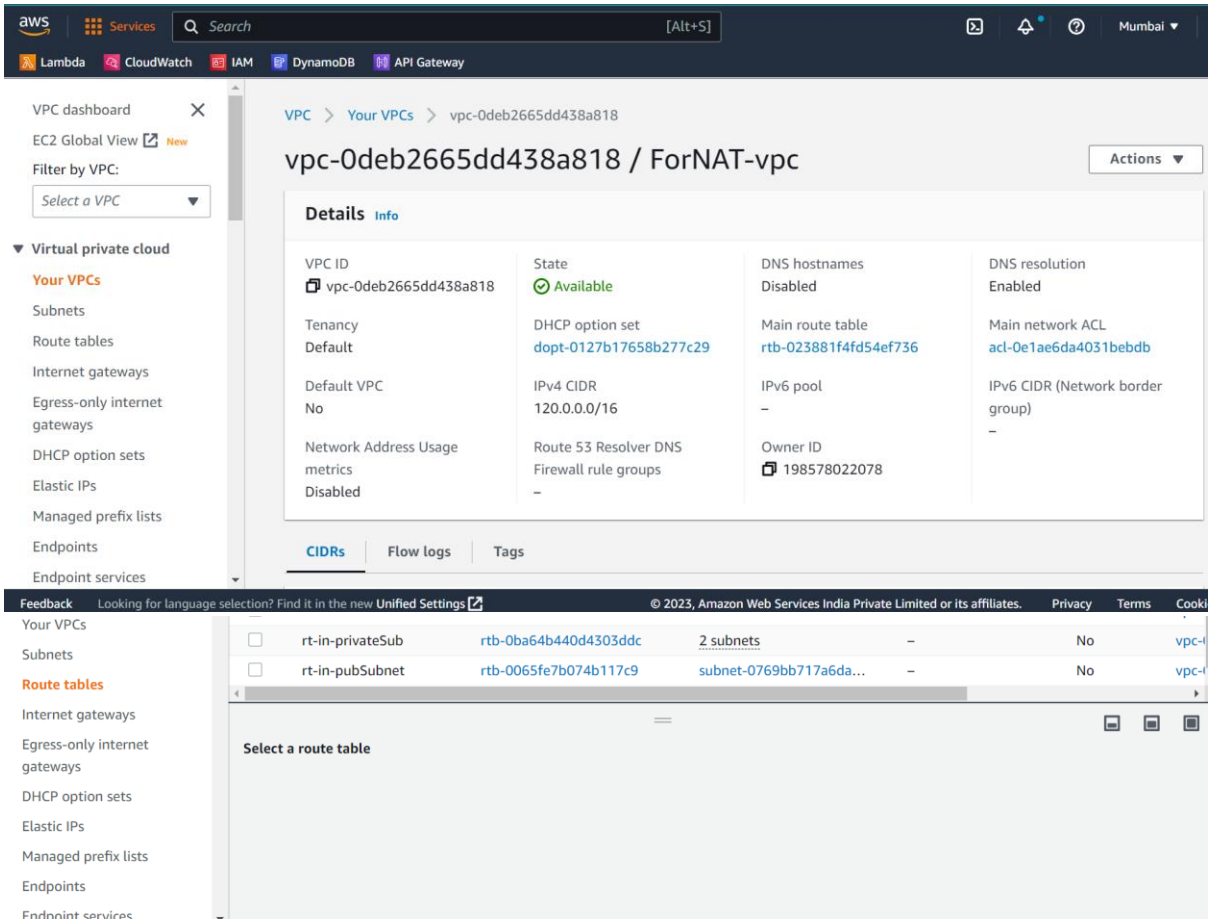
➔ **2 private and 1 public subnet are created with IPV4 CIDR**

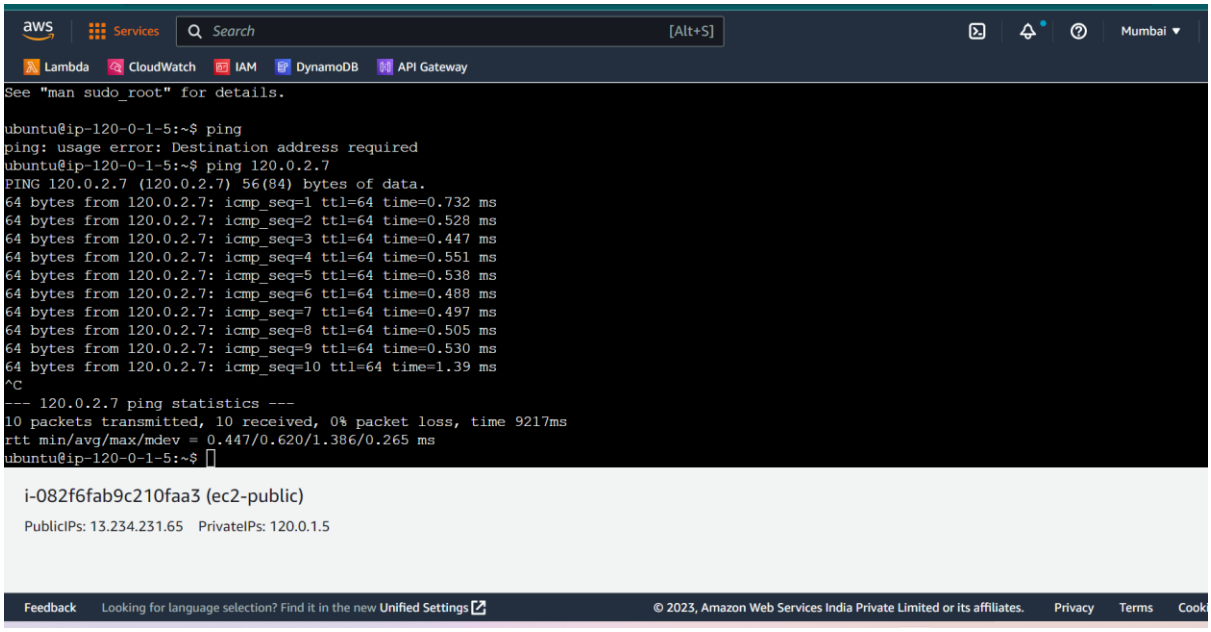


➔ **The public subnet is enabled to receive IPV4 / IPV6 addresses publicly**

- **Creating NAT Gateway in the public subnet for the private subnets to communicate with internet.**

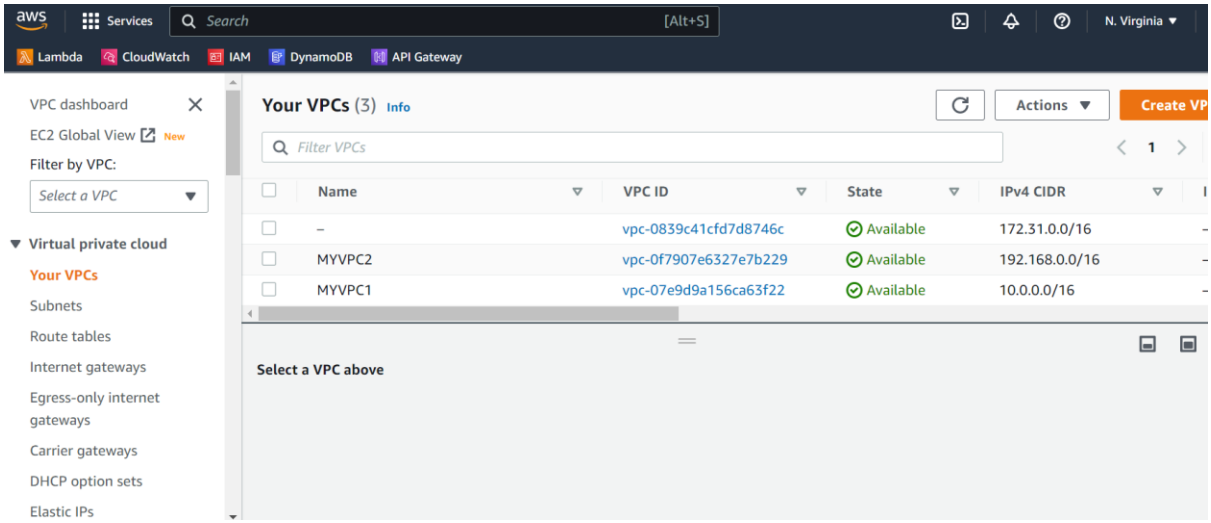




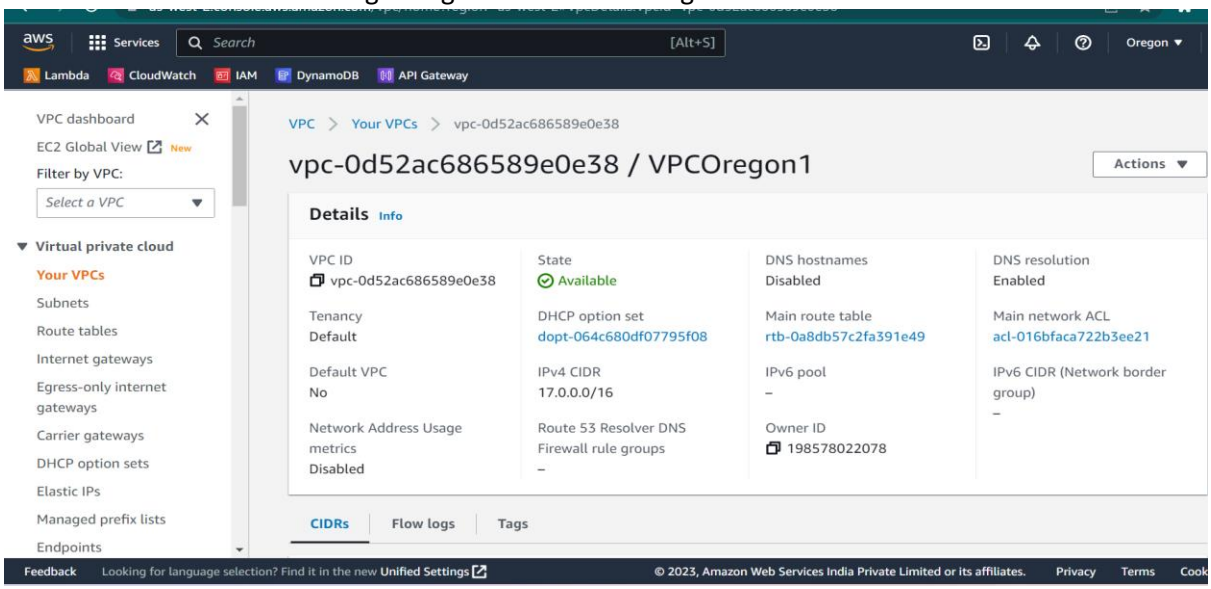


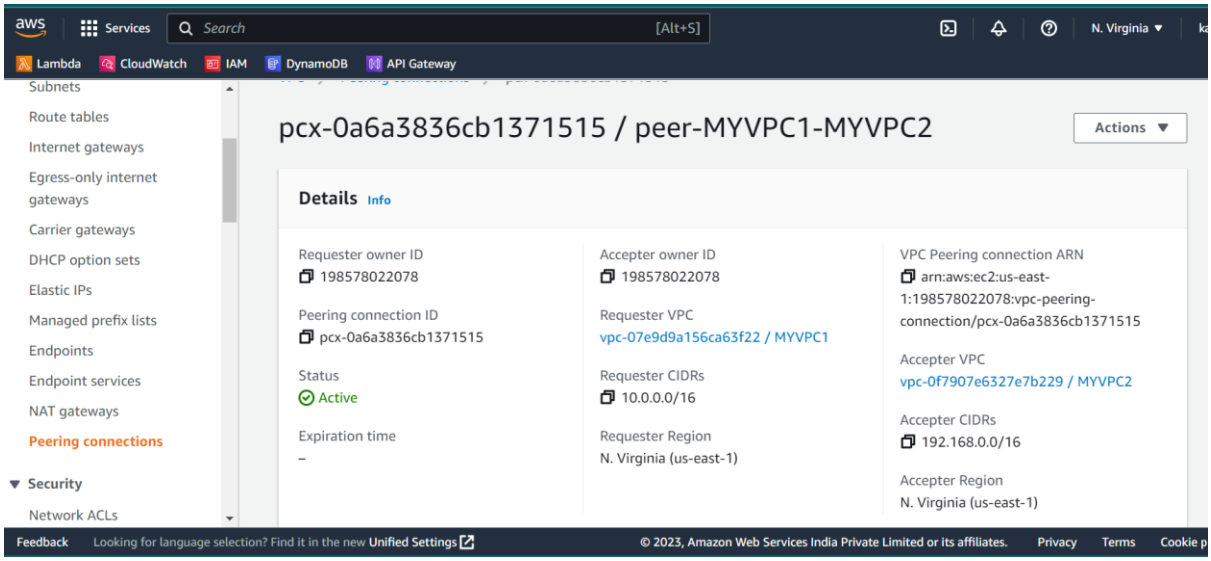
Assignment 2

1. Creating 2 vpc in n.verginia MYVPC1 and MYVPCC2



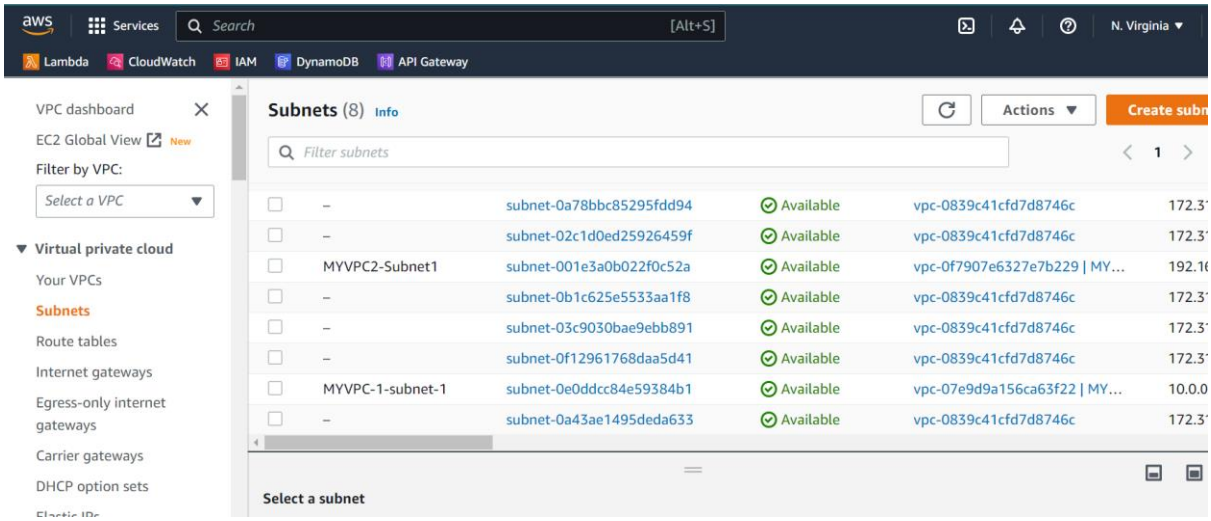
2. Create one VPC in Oregon region named VPCOregon1





➔ Created 2 vpc MYVPC1 and MYVPC2 .

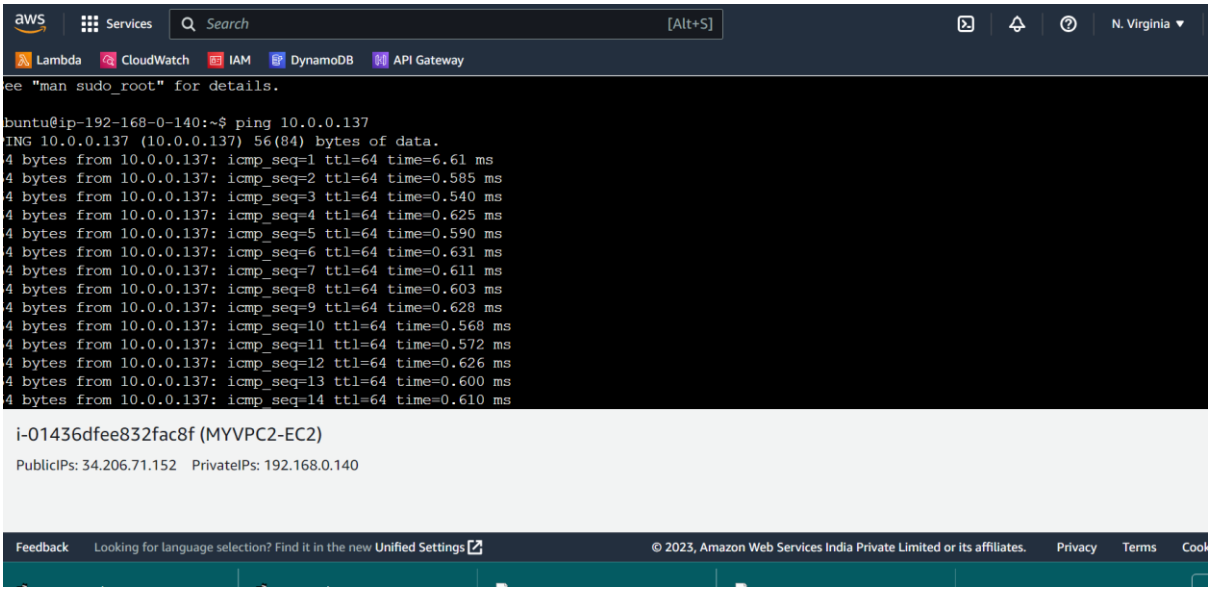
➔ Created subnet in both the VPC



➔ Created Internet Gateway and route table respectively and with the help of ping command done the communication between peers MYVPC1 and MYVPC2

 # ERROR Faced 1 – peering gateway connection was not done in the route table

 # ERROR Faced2 – ICMP traffic was allowed in the security group of the instances



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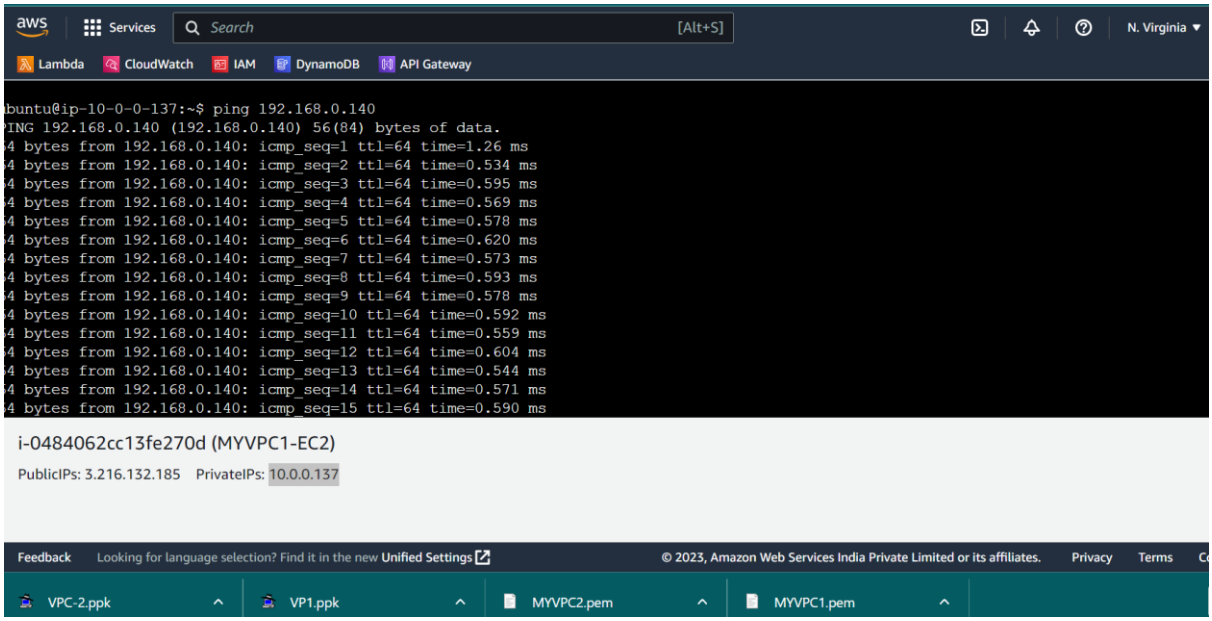

➔
➔ The connection is successful.