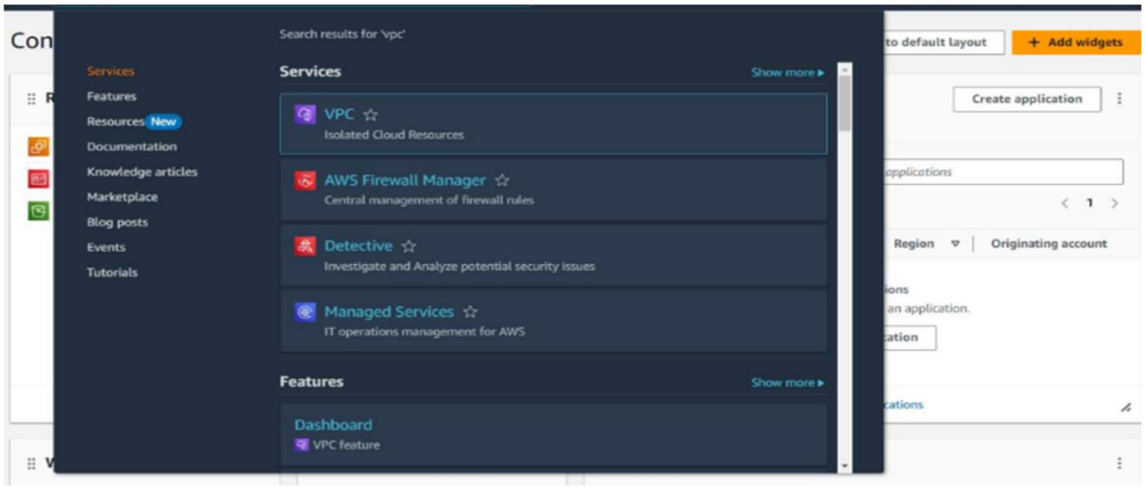
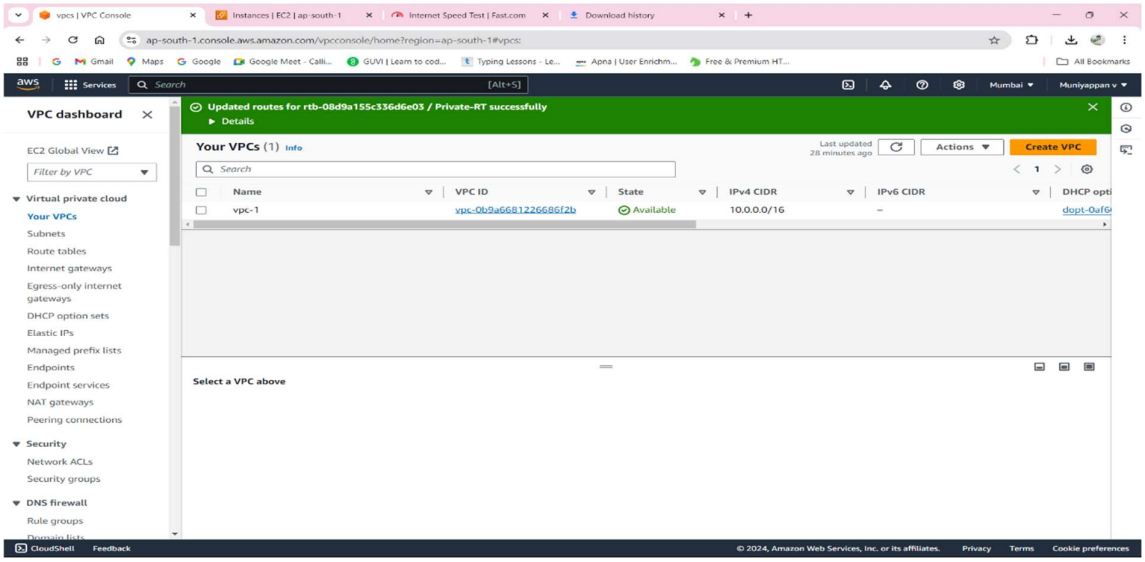
CREATION OF VPC (VIRTUAL PRIVATE CLOUD)

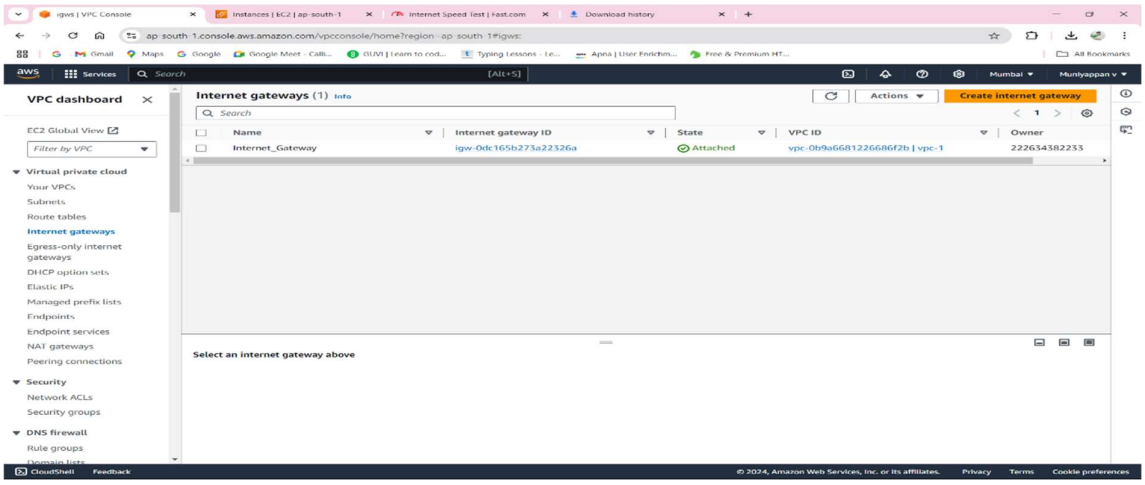
Step-1: Search VPC in the console home and click VPC.



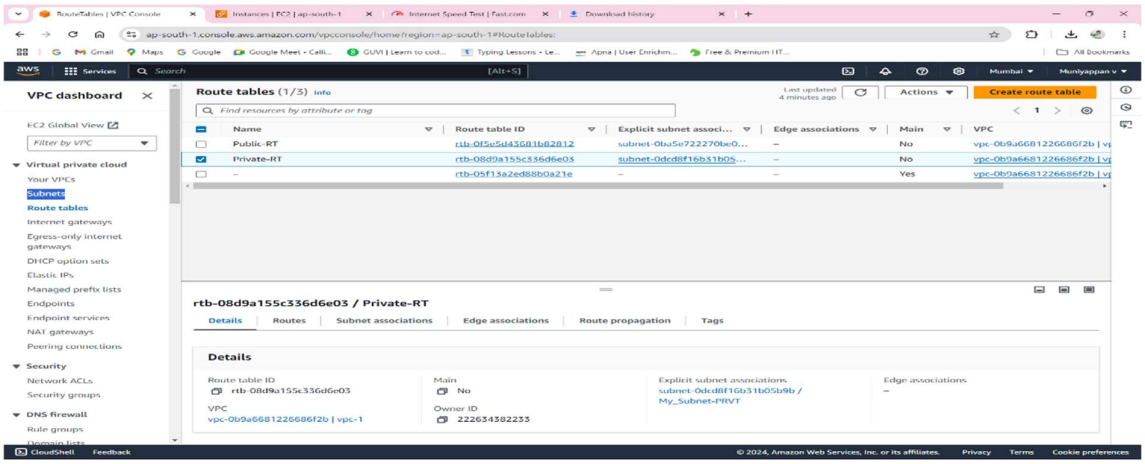
Step 2: Under the VPC dashboard, select your VPCs and click Create VPC > Give name tag and IPv4 CIDR > Click on create VPC > VPC was created successfully



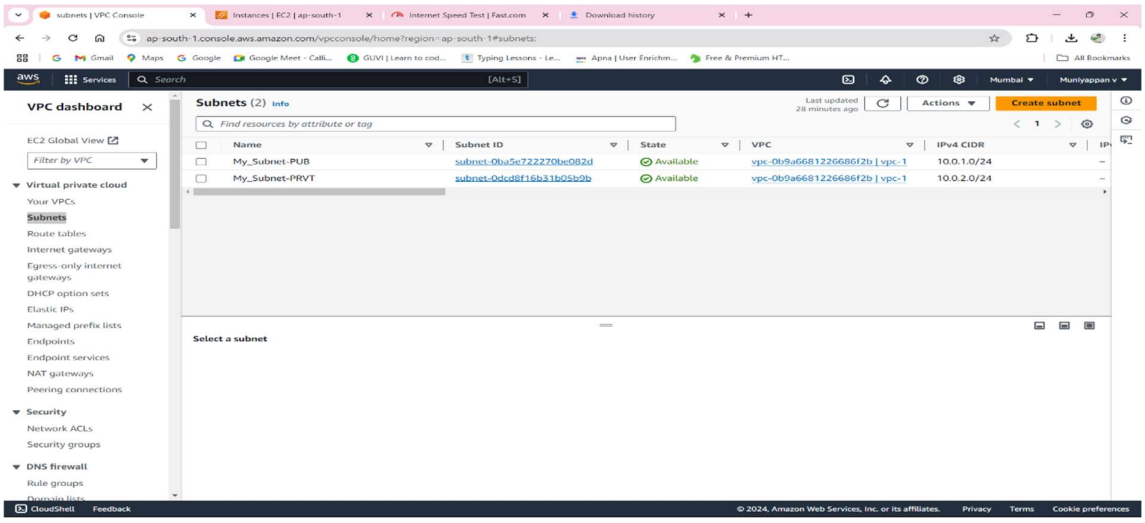
Step-3: Go to Internet Gateways and click Create Internet Gateway> Provide name and select Create Internet Gateway> Internet gateway was created successfully.



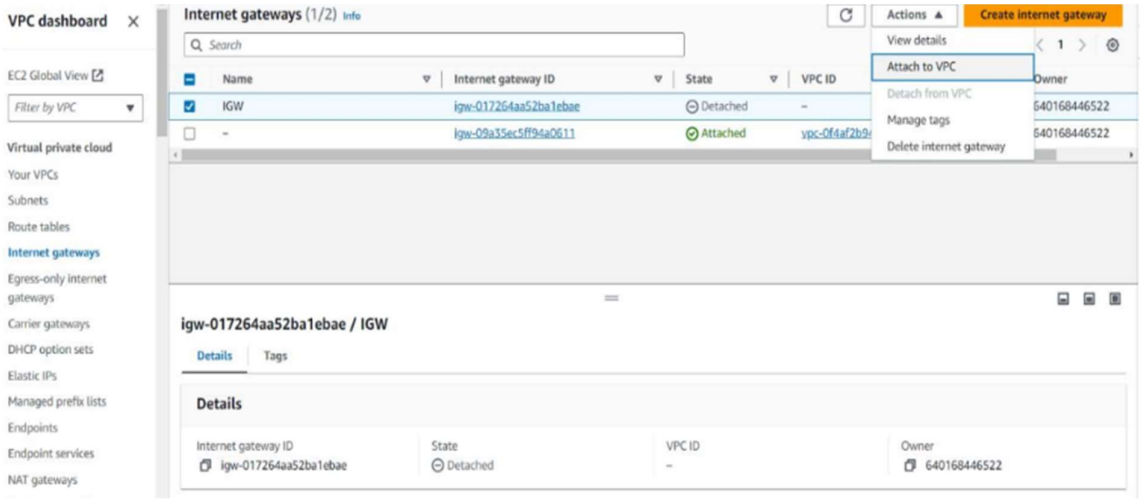
Step-4: Open the Route table in the VPC dashboard and click Create Route Table > Give RT name, under VPC select My-vpc and select Create Route Table. Here we create public pubic RT > The pubic RT was created successfully > In the same way, create private RT



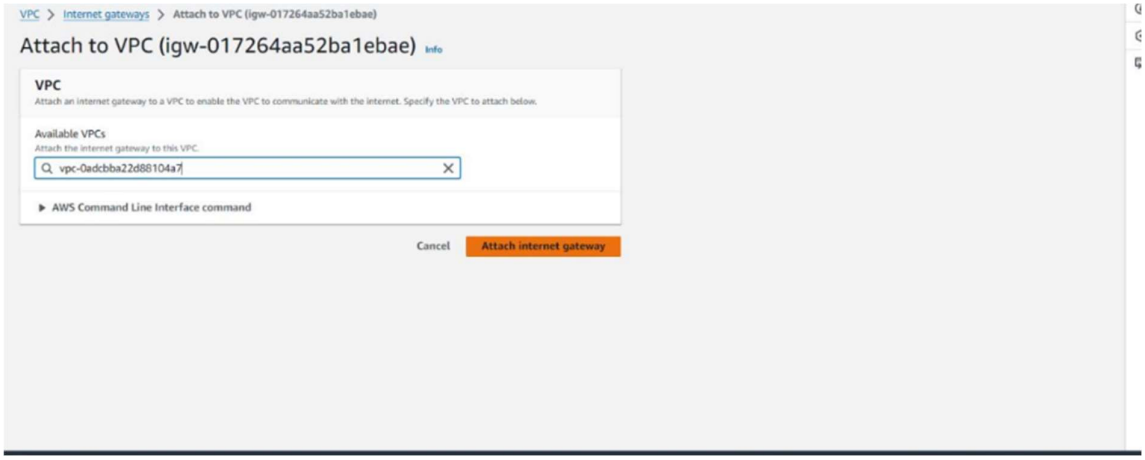
Step-5: Select subnet and click create subnet > under VPC, select My-vpc and give the subnet name. Here we create a public subnet > Provide 10.0.1.0/24 in IPv4 subnet CIDR block and click create subnet > The public subnet was created successfully > In the same way the private subnet was created. The only change was in the IPv4 subnet CIDR block (10.0.2.0/24)



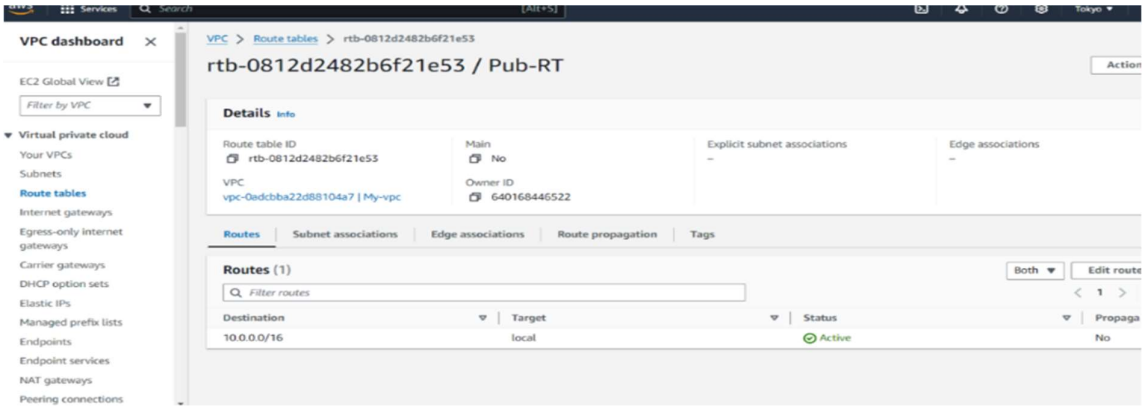
Step -6: Search for EC2 and open it > Create an instance which is named web server > Create a key pair for web server instance > Under Network settings > Edit > Select created VPC > Select pub-SN > Under auto-assign Public IP > Make enable > Under security groups, edit inbound group rules, set type as All TCP and select launch instance > Launch another instance which is named as app server > Under network settings, edit, select created VPC, select Pub-SN, Under auto-assign public IP, make disable > Under security groups, edit inbound rules, set type All TCP. Select launch instance > Connect Internet Gateway to VPC, select IGW, select actions, attach to VPC



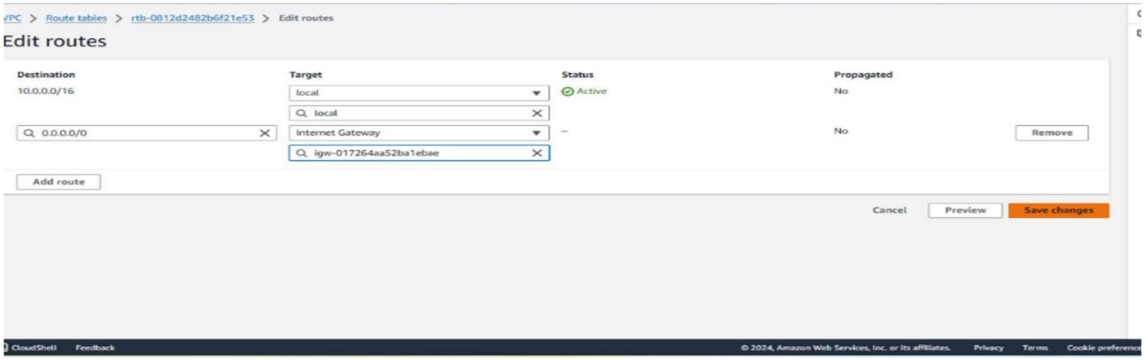
Step-7: Select VPC which we created previously.



Step 8: Go to the route table, select Pub-RT, and edit routes.

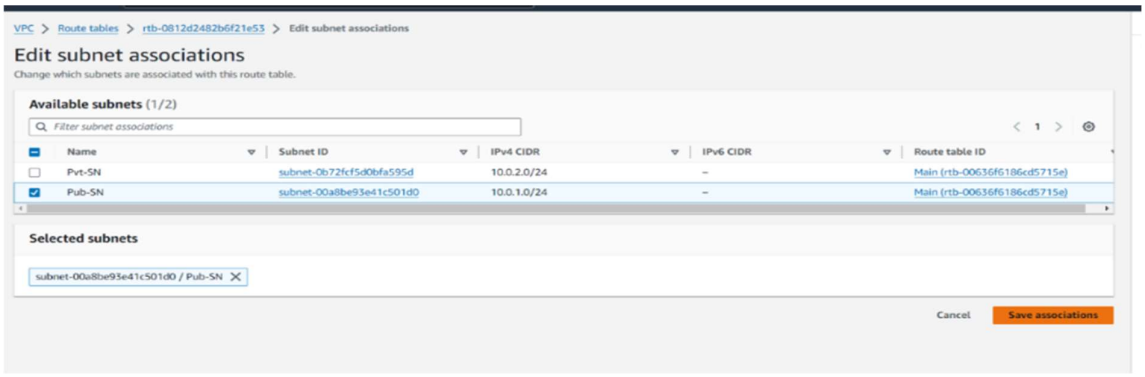


Step-9: Select add the route, choose the destination as 0.0.0.0/0 and select the target as IGW and then select IGW which we created, give save changes.

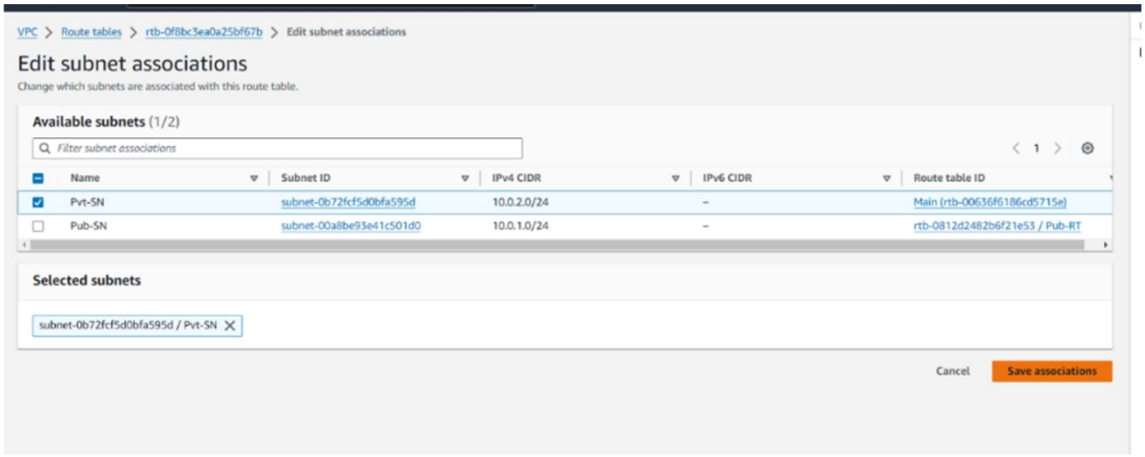


Step-10: Under subnet association in public network, edit subnet association.

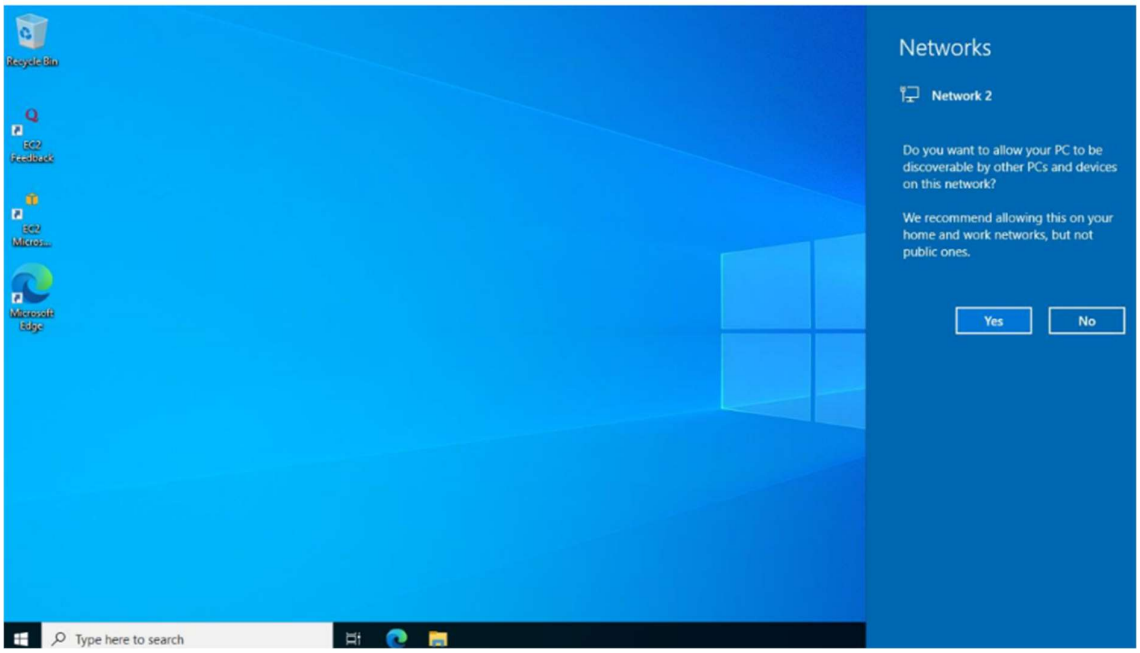
Step-11: Select pub-SN, save association.



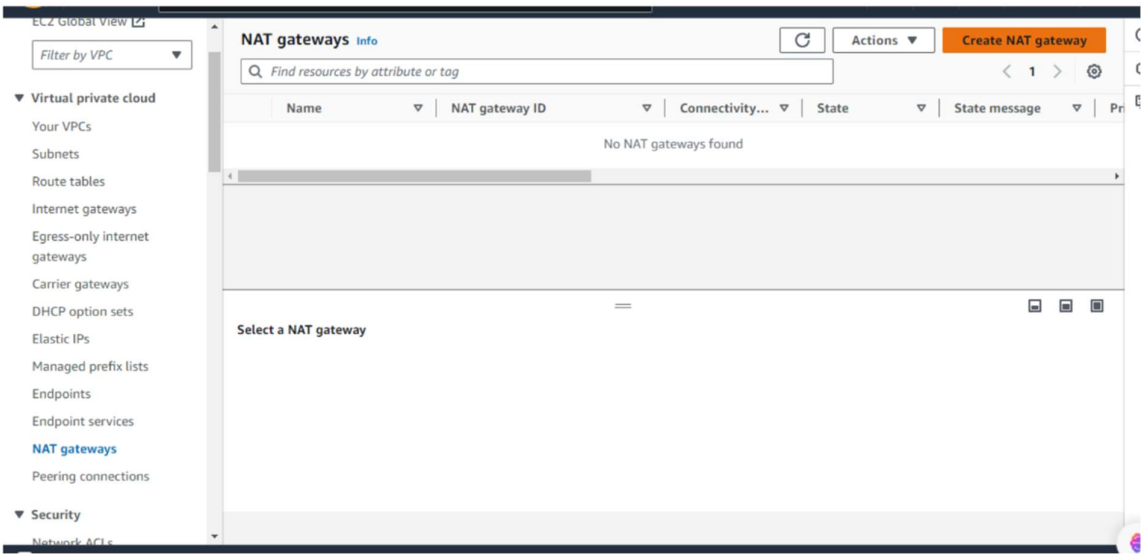
Step-12: Go to Pvt-SN, edit the subnet association, select Pvt-SN and save the association.



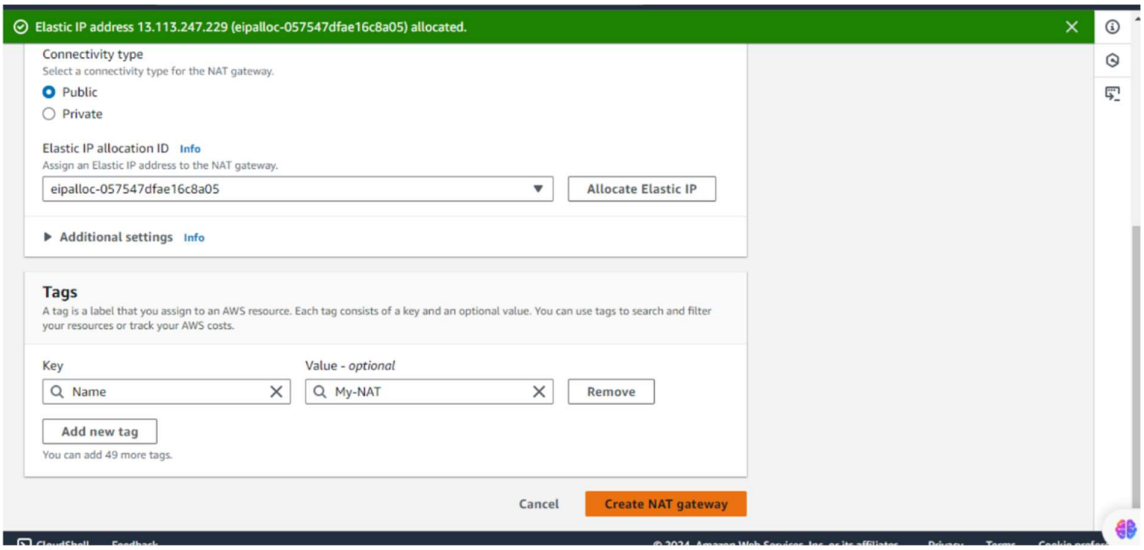
Step-13: If you launch web server, it got the network through the IGW.



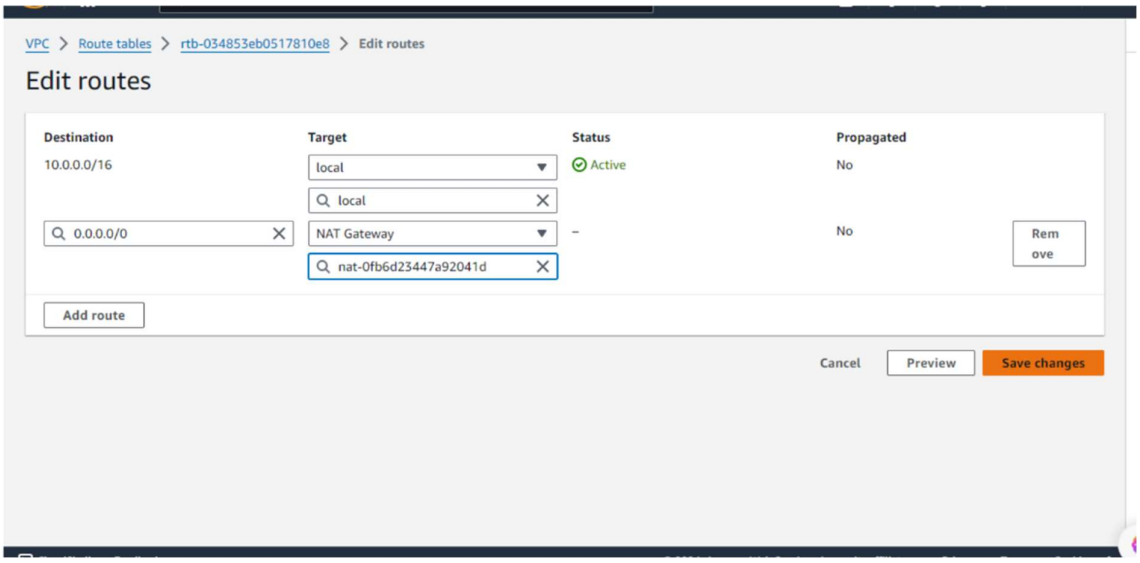
Step 14: Go to NAT gateways.



Step-15: Select Allocate Elastic IP > Create NAT Gateway.



Step-16: Edit Routes > Select Destination as 0.0.0.0/0 > Choose Target as NAT Gateway > Select NAT which you created > select save changes.



Final Result