ASSIGNMENT –1

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TASK:

Create two VPC`s in different regions and connect the two VPC`s using peering.

Step 1: Create a VPC in 1 region [Mumbai]

Select/fill options as

* VPC and More option

* Name of the VPC

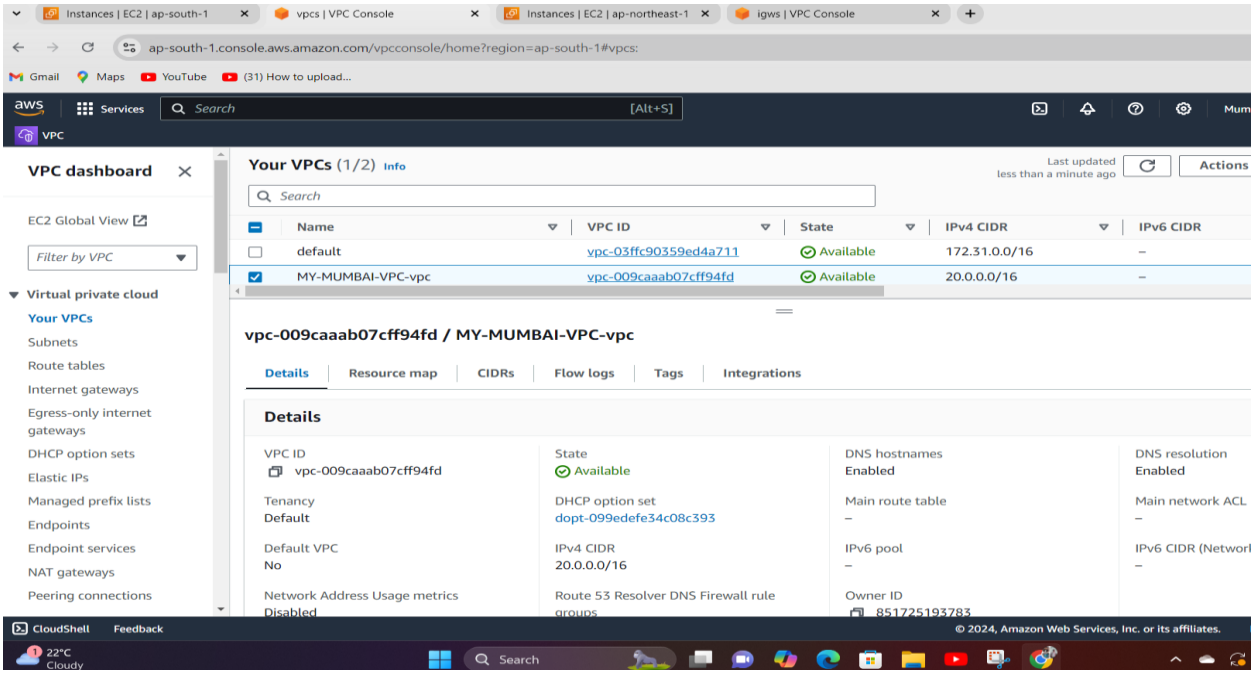
* IPv4 CIDR block

* No of availability zons (2)

* 1 NAT Gateway (in 1 AZ)

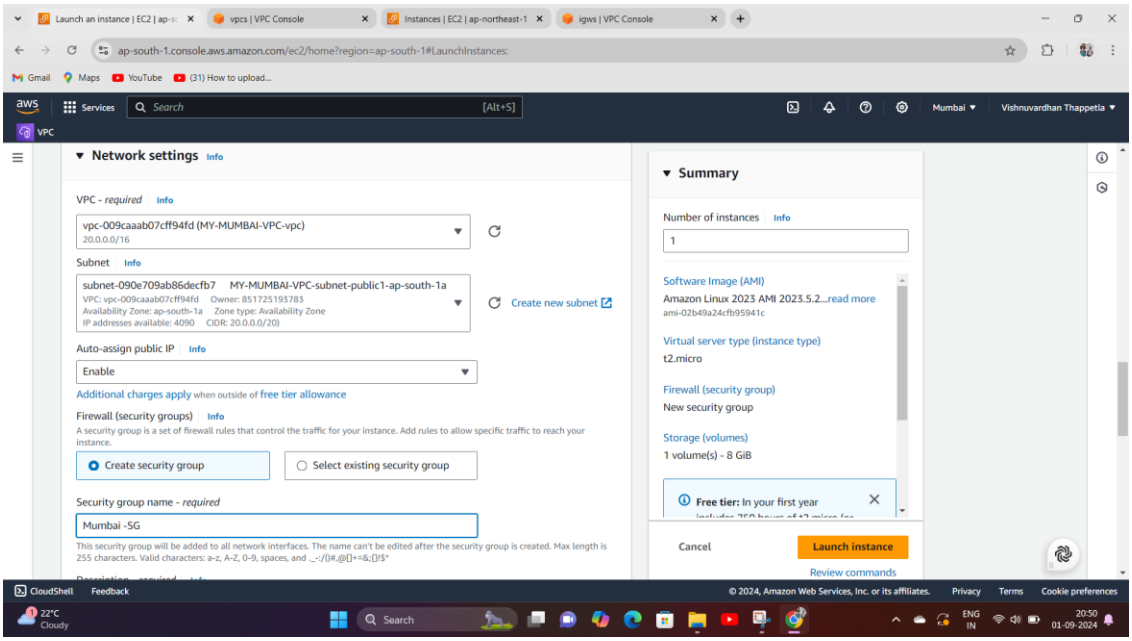
* VPC endpoints NONE

* Click on Create VPC



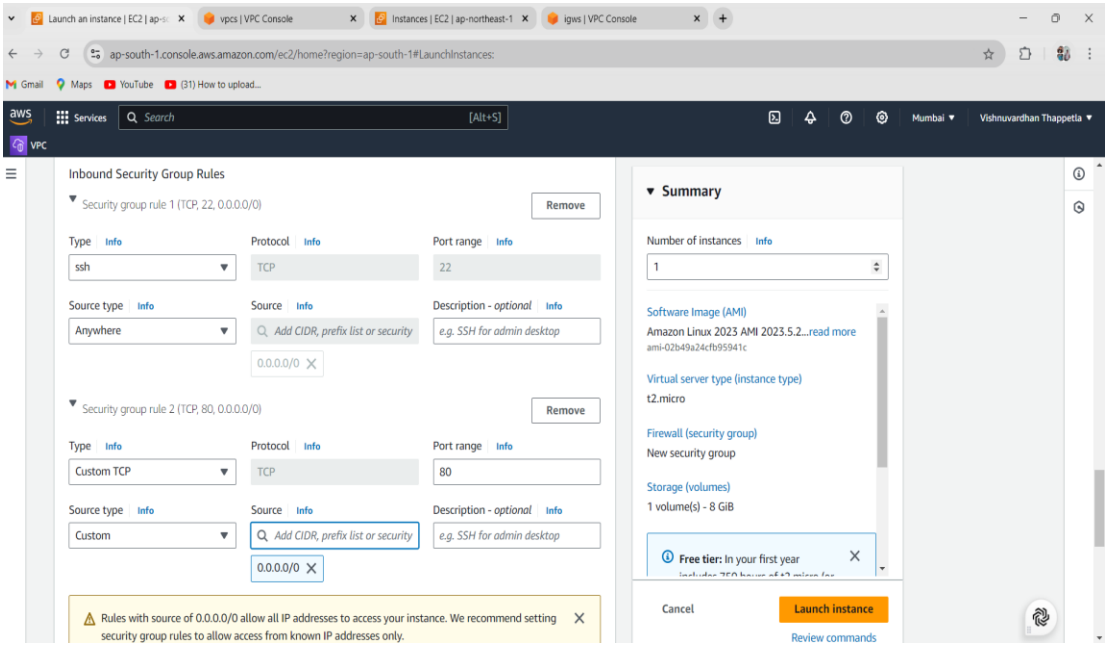
Step 2: Create EC2 instance

- Name of instance
- Choose Amazon Linux
- Create a Key Pair and Downloaded file Paste it on Desktop
- Click on Network settings

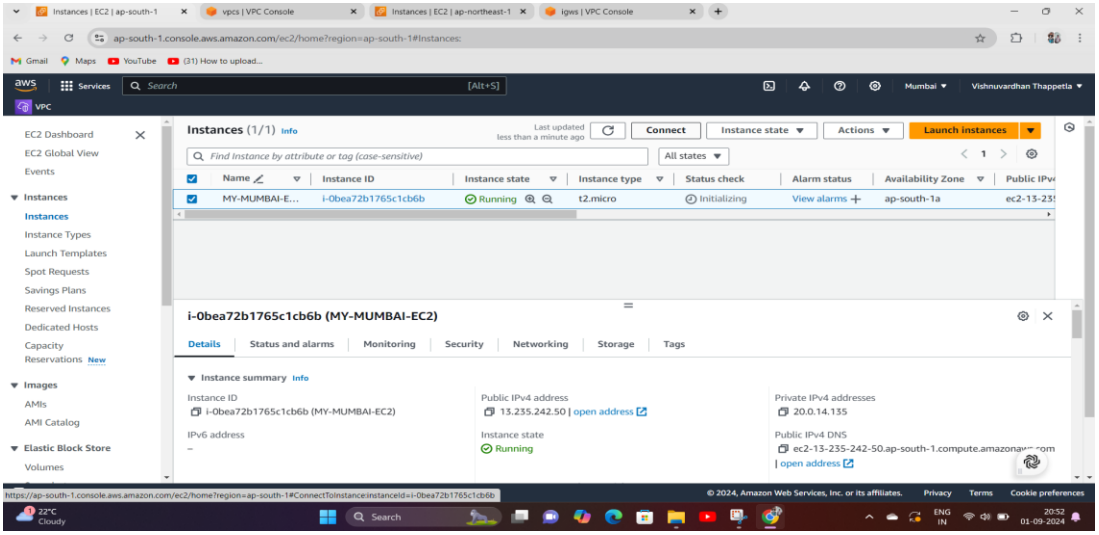


Step 3: From the above figure

- Select Created VPC
- Select Public Subnet
- Public IP Enable
- Create a Security Group
- Add Inbound Security Group Rules with “80 ” Port Range

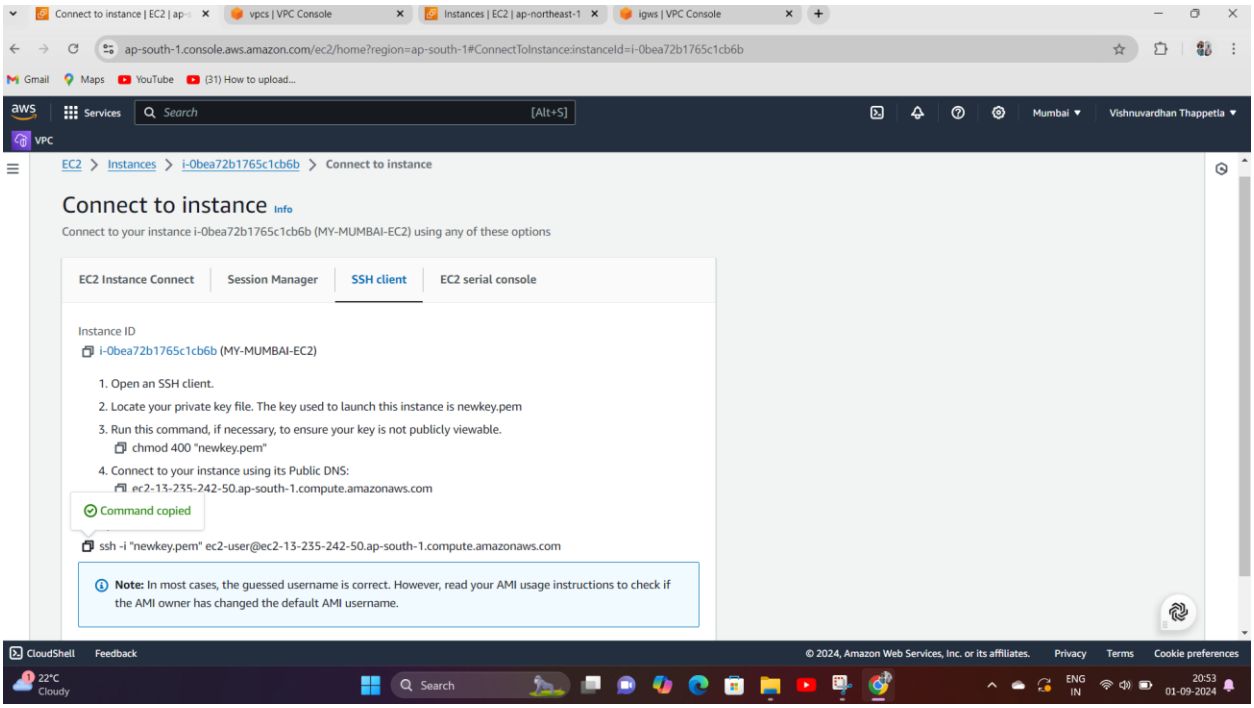


- Click on Launch Instance



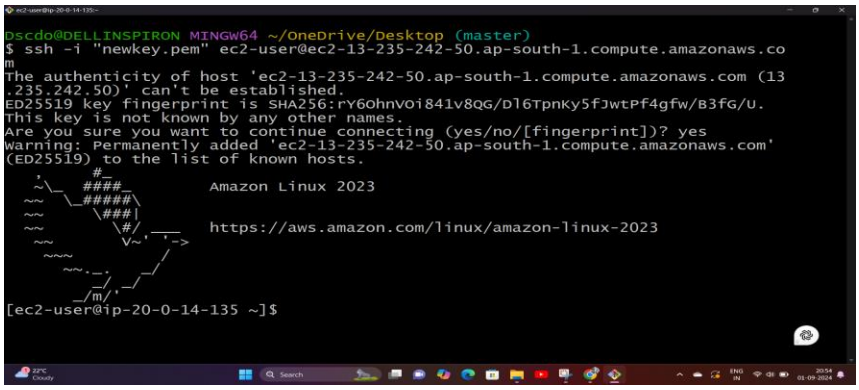
Step 4:

- Connect to EC2 Instance Through SSH Client Link
- Copy the SSH Client Link



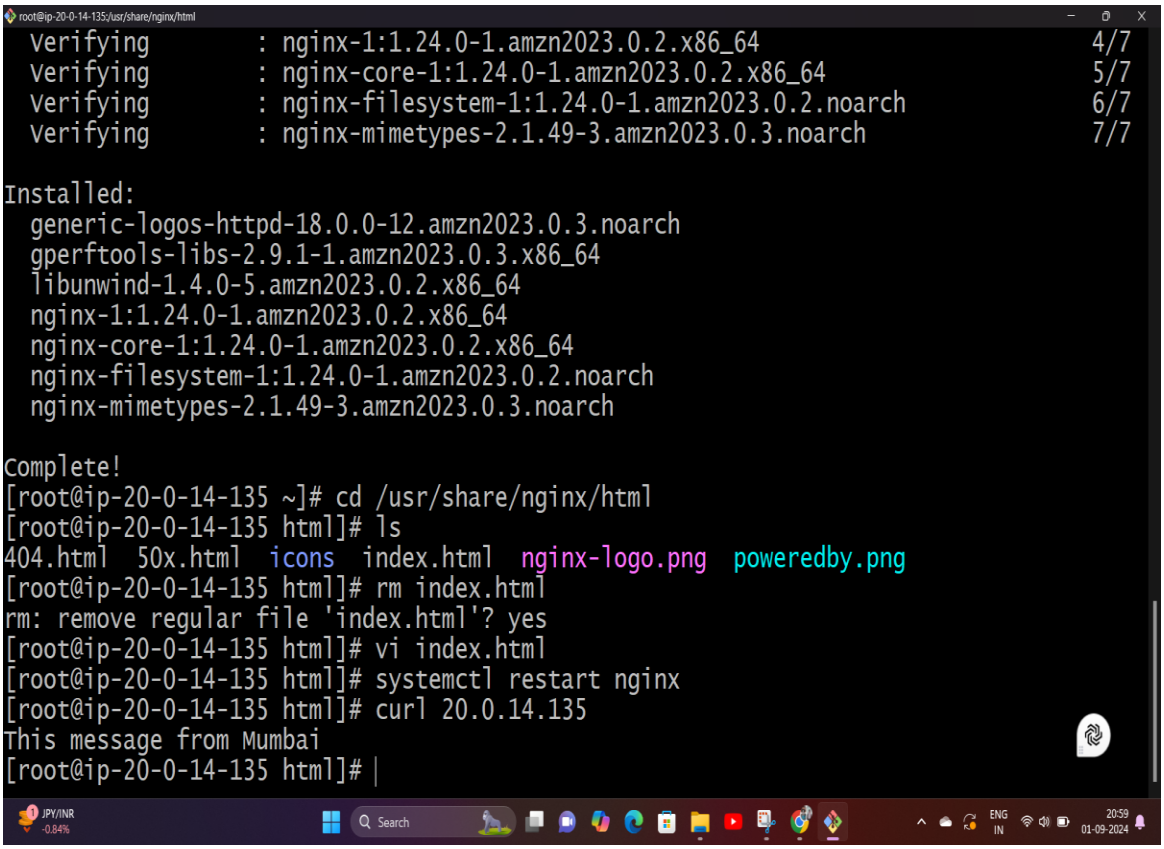
Step 5:

- Back to Desktop
- Open GitBash and
- Paste the SSH Client Link
- Press ENTER Button
- Type “Yes “
- Now you are connected to EC2 Instance

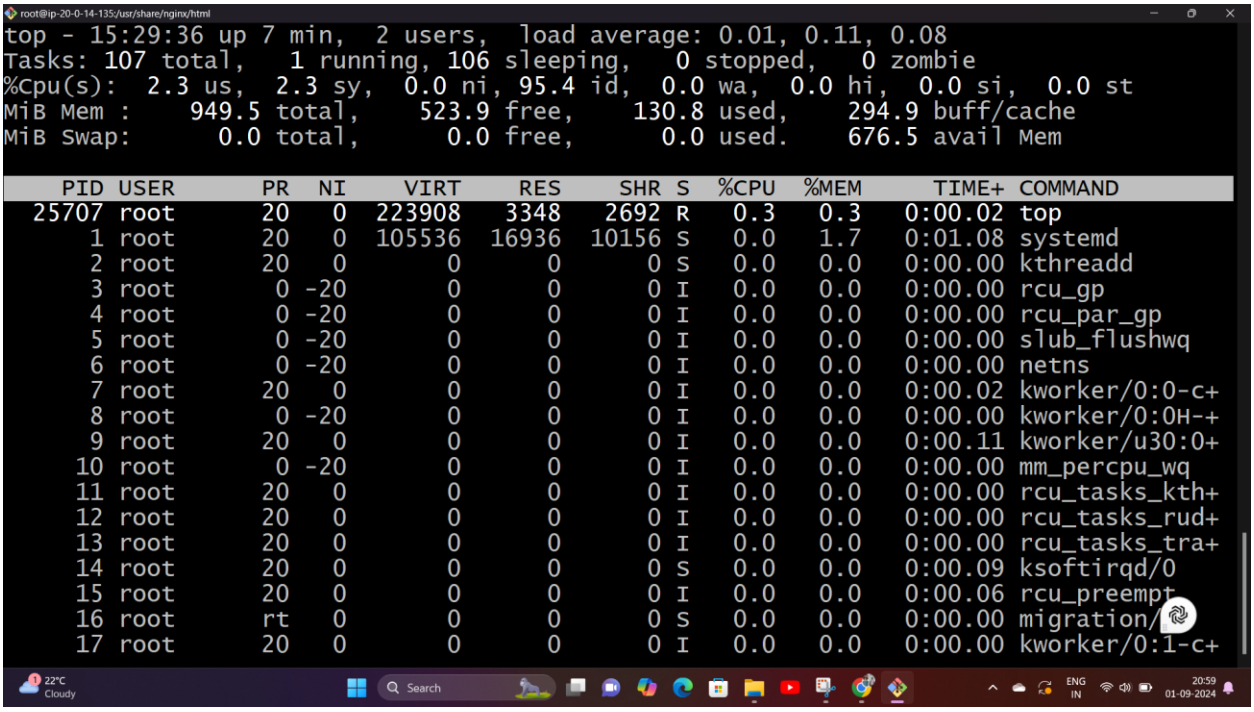


Step 6: Now Type Commands on git bash

- Sudo -i
- yum update –y
- yum install nginx –y --> Used to install nginx web server
- cd /usr/share/nginx/html --> Used to change html directory
- ls --> Used to list the files and directories i
- rm index.html --> used to delete the file
- vi index.html -->Used to create a file after opening the file click “I" to insert content
- This message from Mumbai --> file Content
- Click Esc + Shift + Semi colon + wq and click enter
- Systemctl restart nginx --> Used to restart the nginx web server
- Back to VPC and copy the IP address paste it before the curl command
- Curl [IP address] :80 --> Used to Display the fiile content

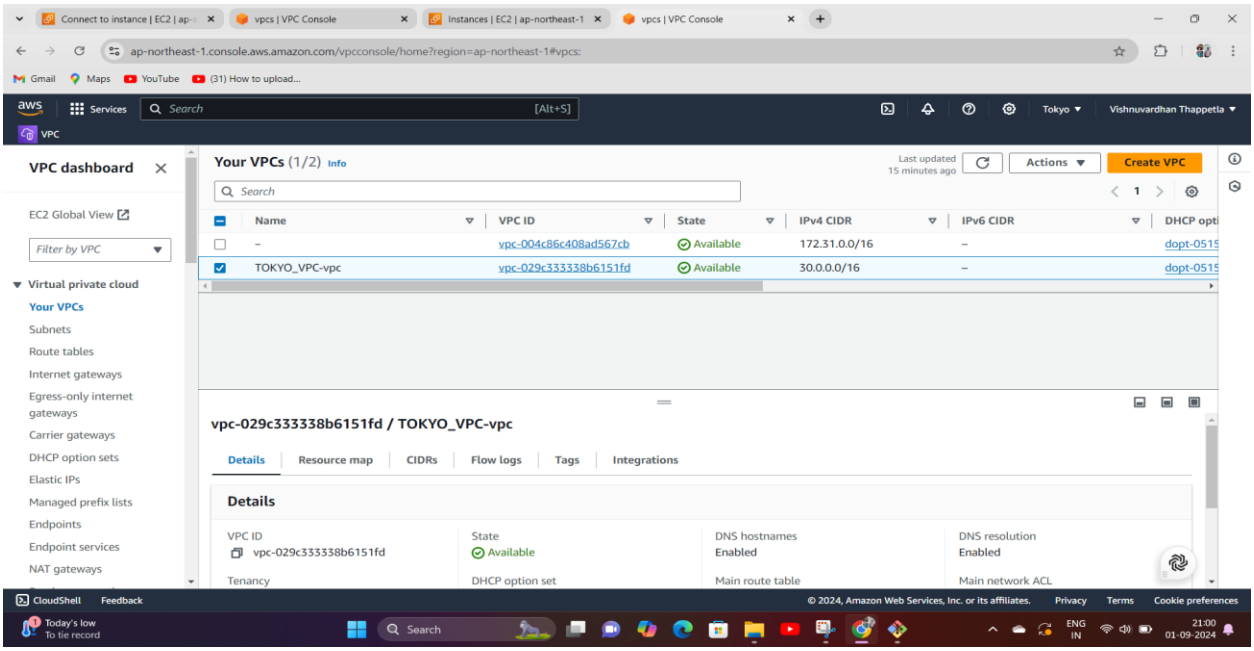


Step 7: Now use the “top “command to not hang the connection and Dispaly all running process



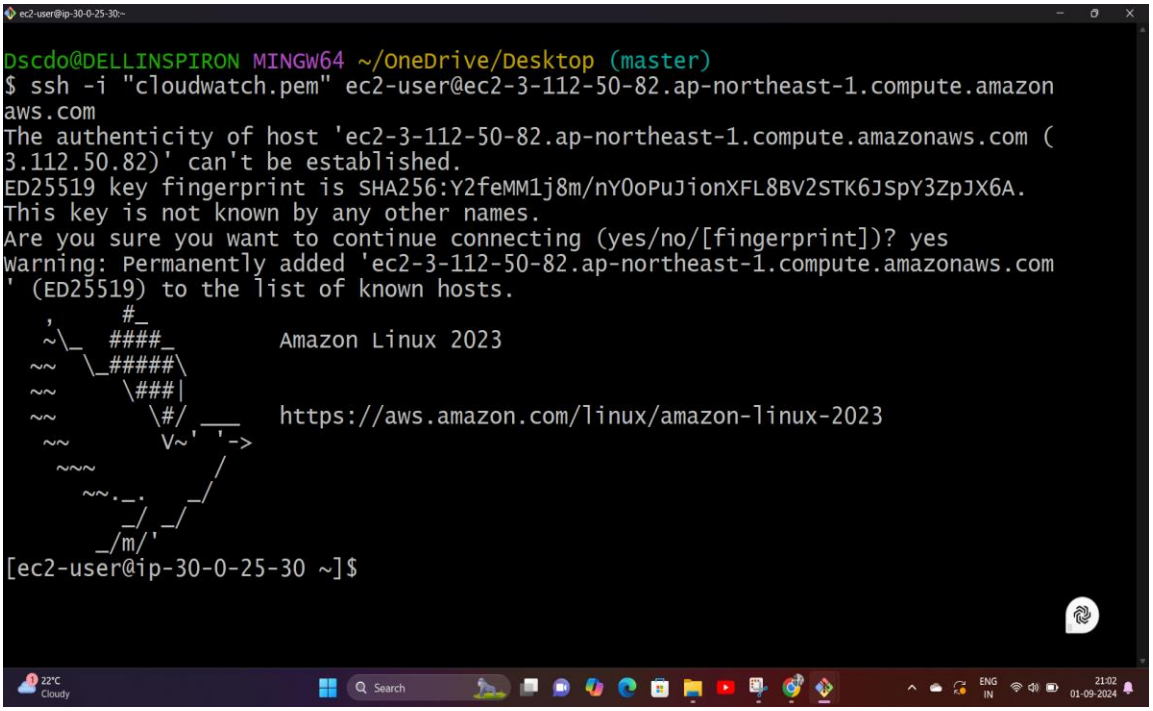
Step 8: Now goto another region and create a VPC. So, I Created in TOKYO region

- Follow the Step 1



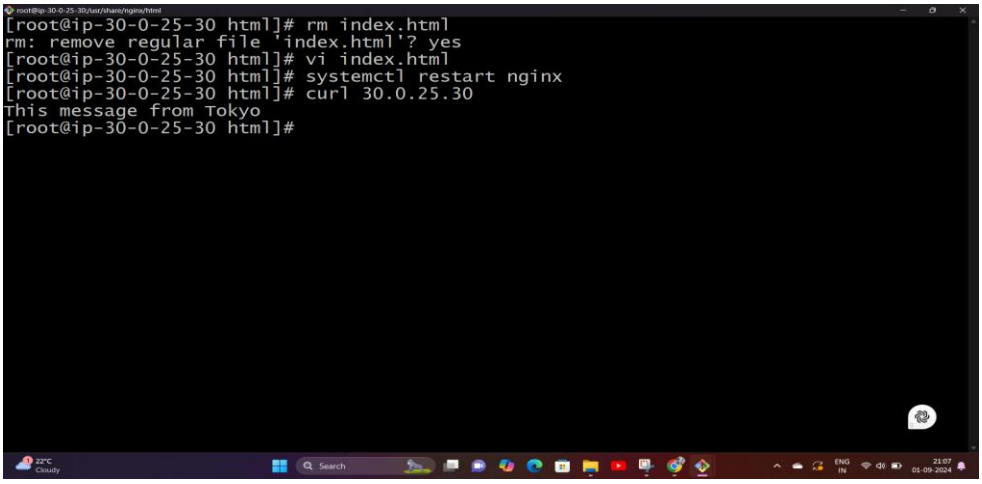
Step 9: Now Create a EC2 instance in Tokyo region

- Follow the Step 2, 3, 4, 5.

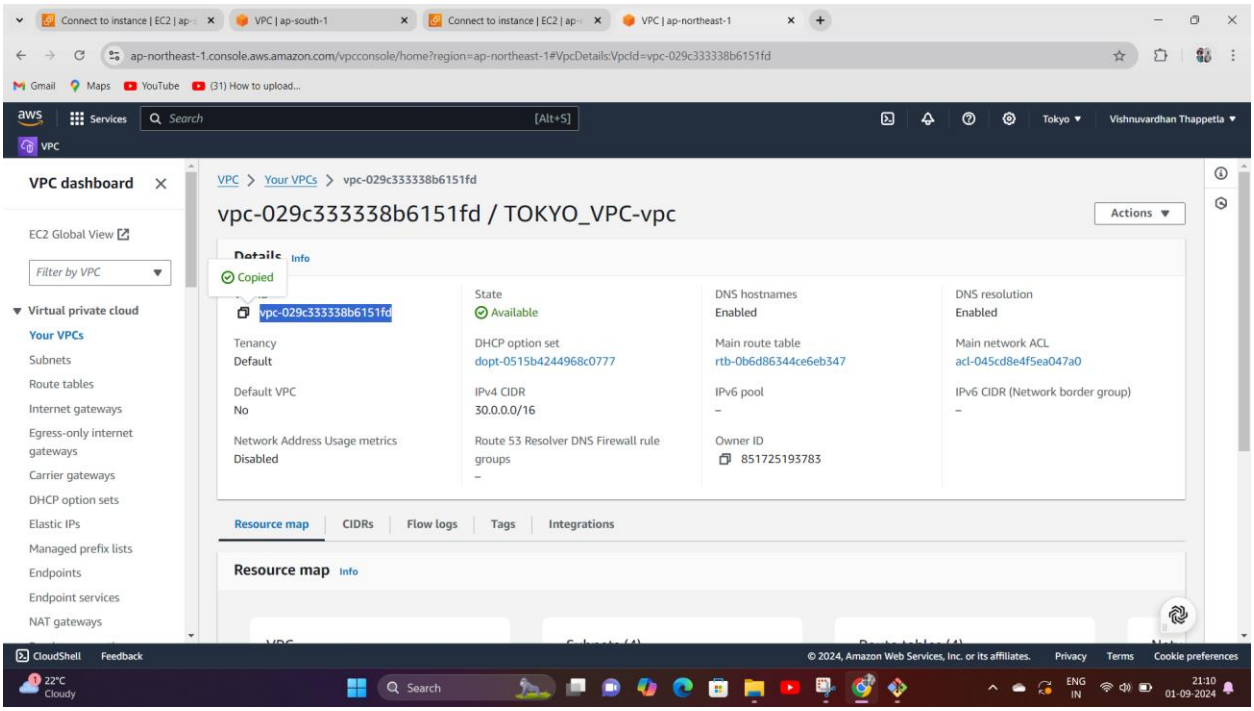


Step 10: Now follow the Step 6 but change the file content.

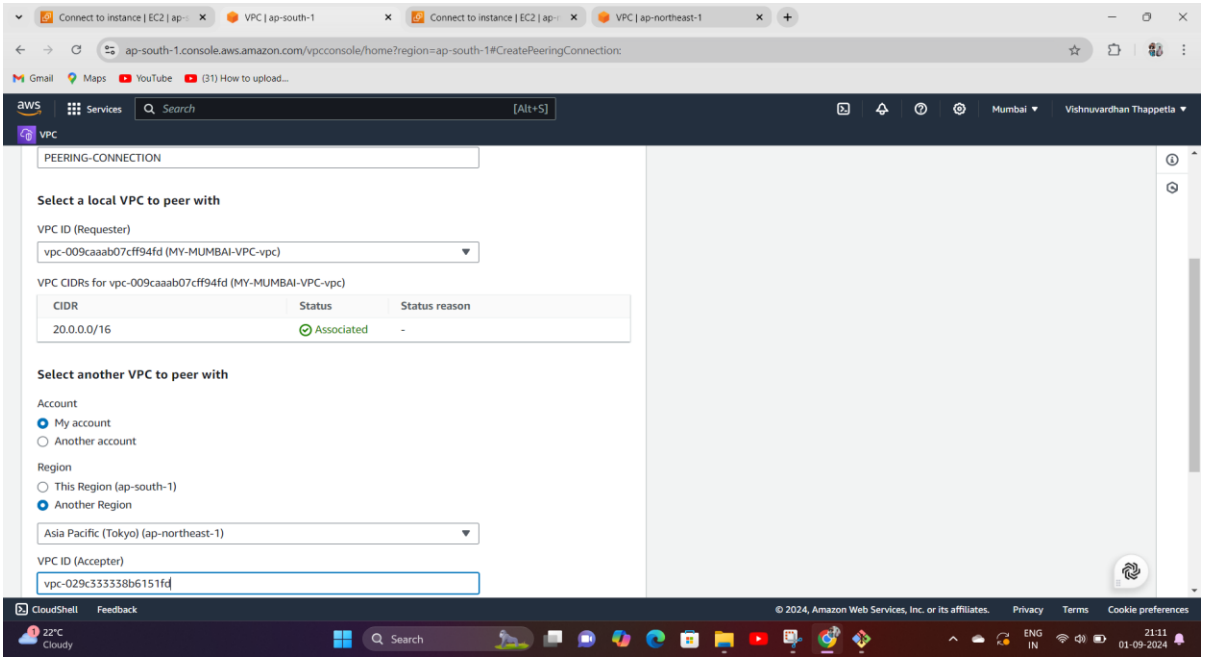
(This message from Tokyo) and follow Step 7



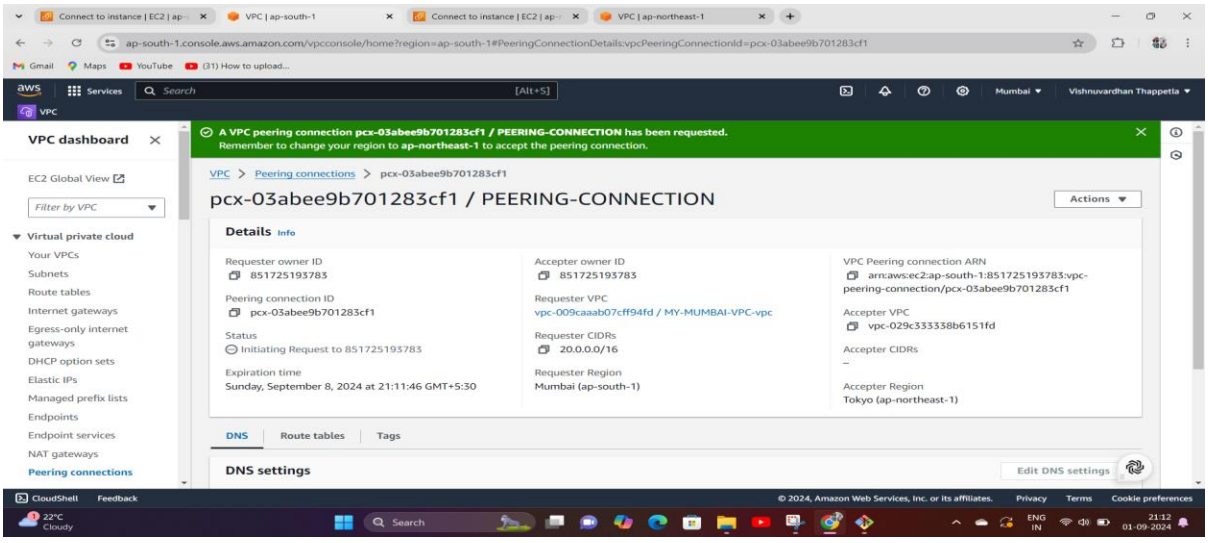
Step 11: Now Back to Tokyo region VPC and copy the VPC ID



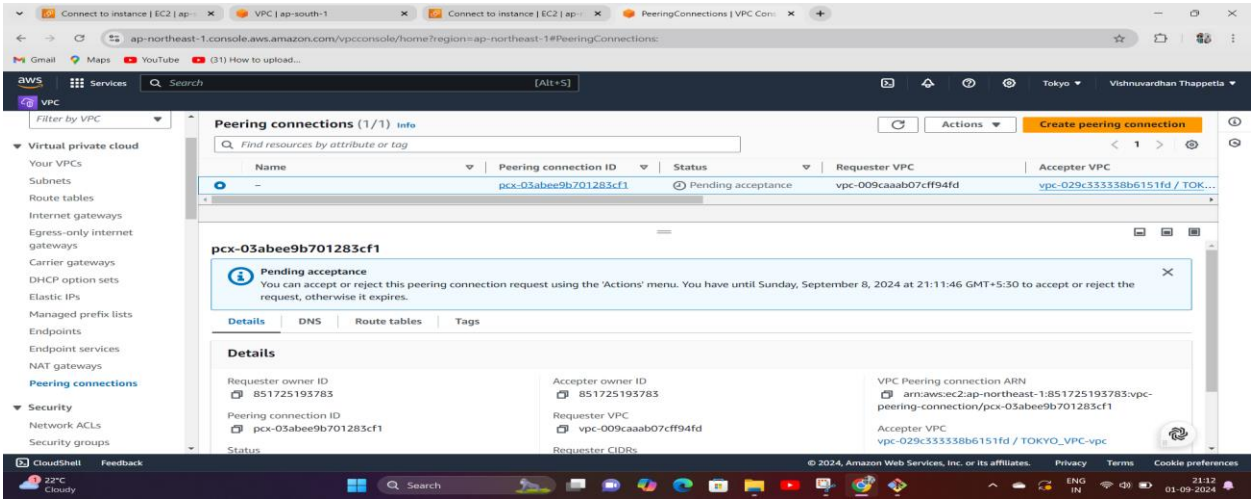
Step 12: Now create a peering connection in any one of the regions. So, i created in Mumbai region.



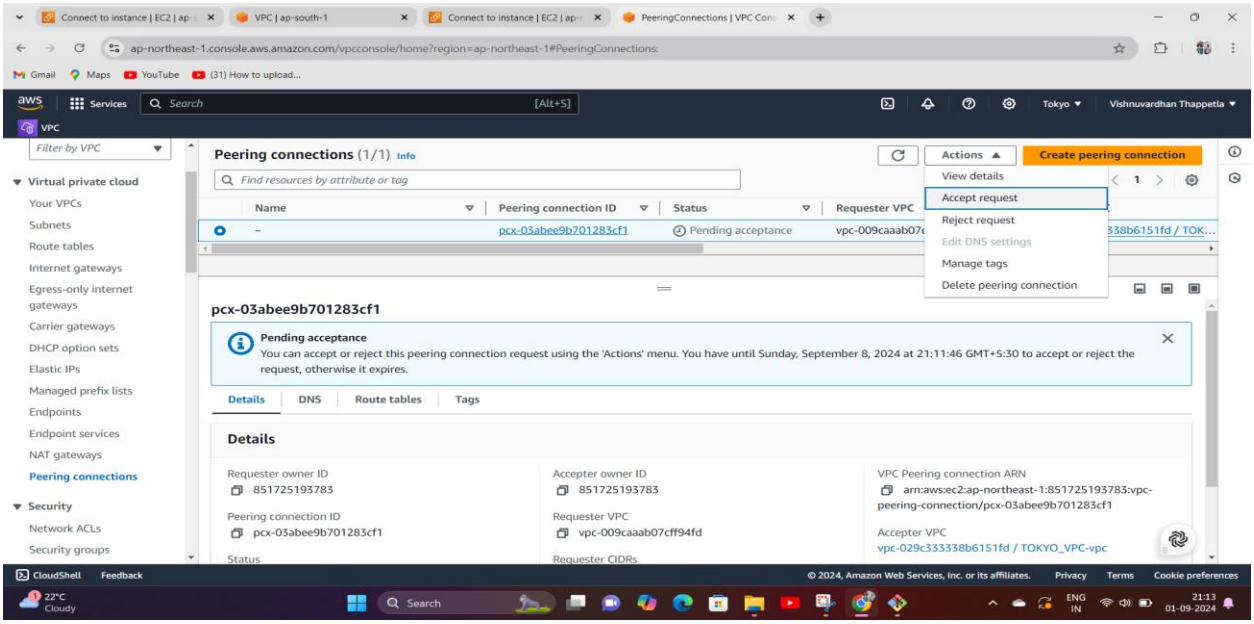
- While creating a peering connection VPC ID Requester give Mumbai VPC
- Select another VPC to peer with click on “another region”
- Add region
- Add VPC ID in Accepter
- Now click on create Peering connection
- Now you will see Initiating Request



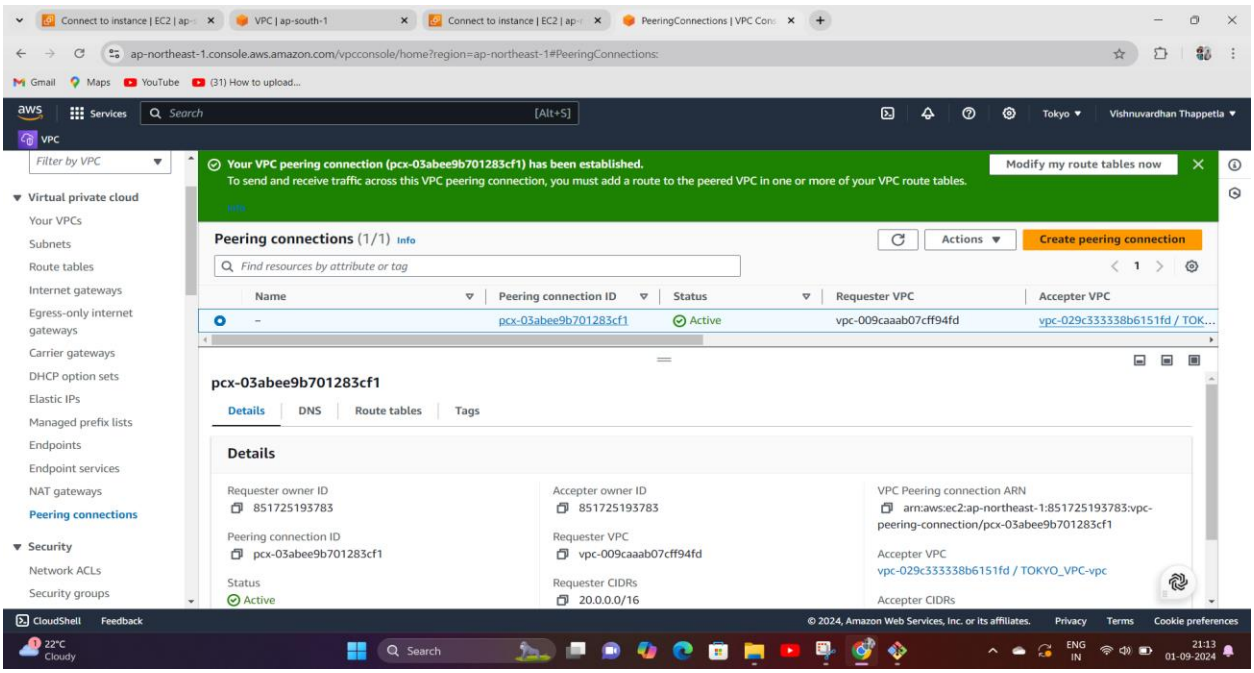
Step 13: Now Back to Another region “TOKYO” check whether the peeing connection request have been come or not.



- Now go to “Actions” and accept the request

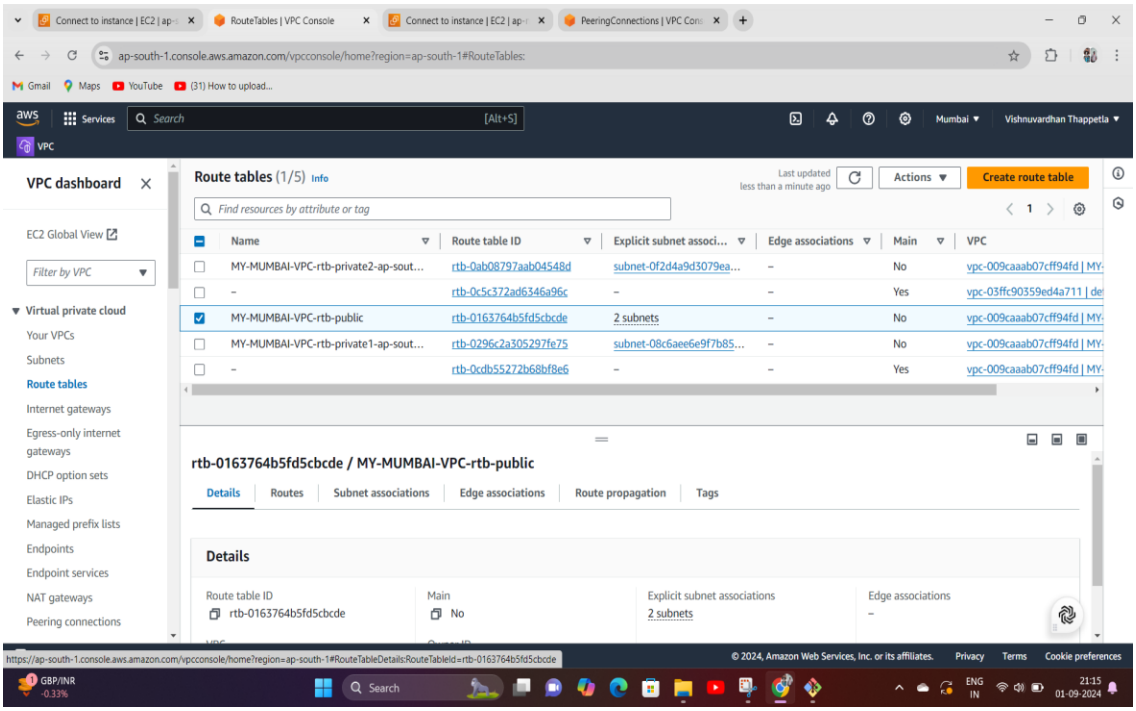


- After accepting the Peering connection will be active in both regions after refreshing

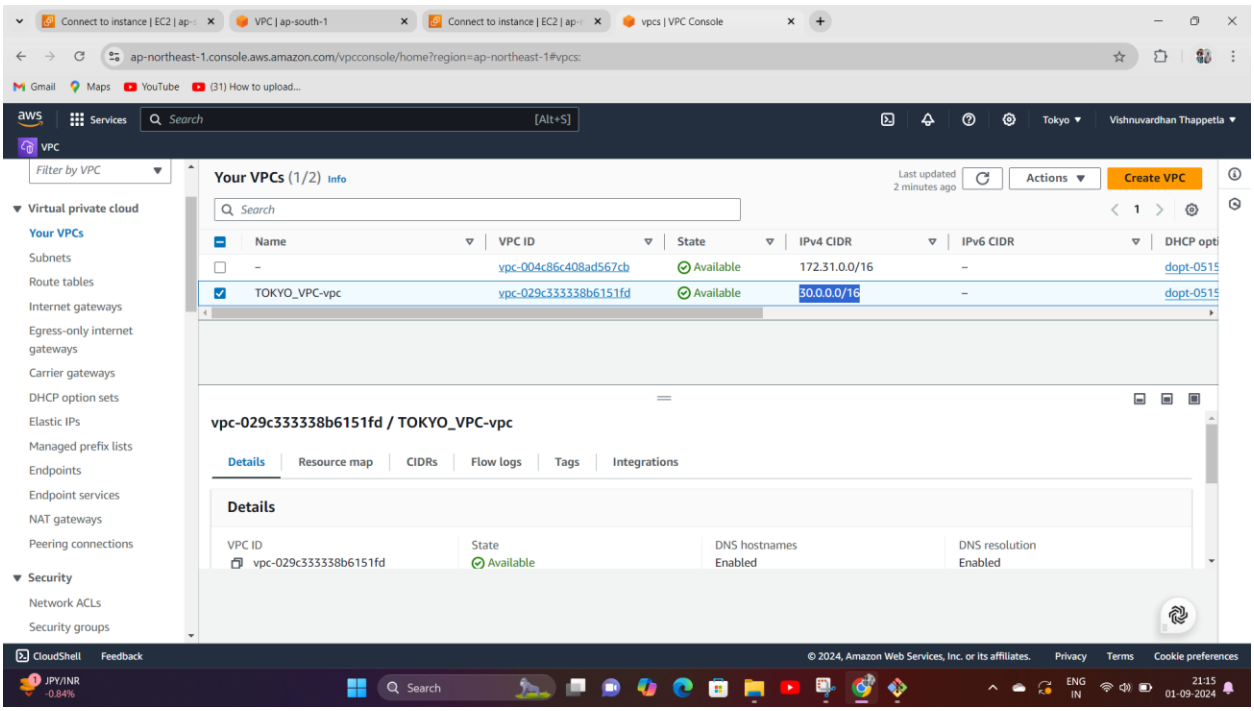


Step 14: Now back to Mumbai region “Open Public route table ID”

- Goto Actions and click edit route

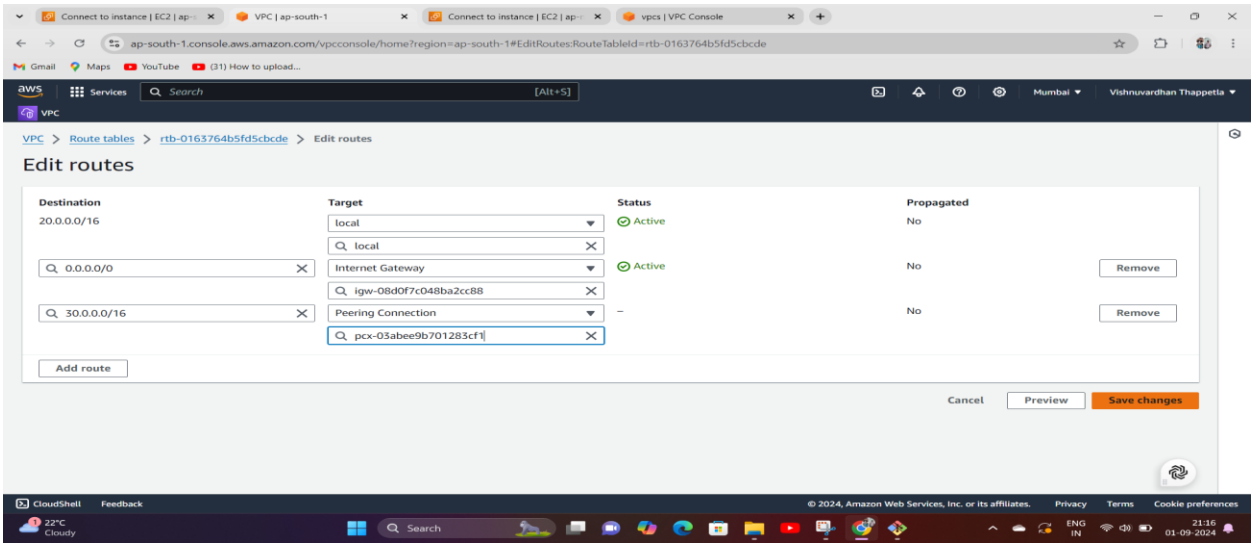


Step 15: Back to TOKYO region VPC and Copy the IPV4 CIDR Address [30.0.0.0/16]

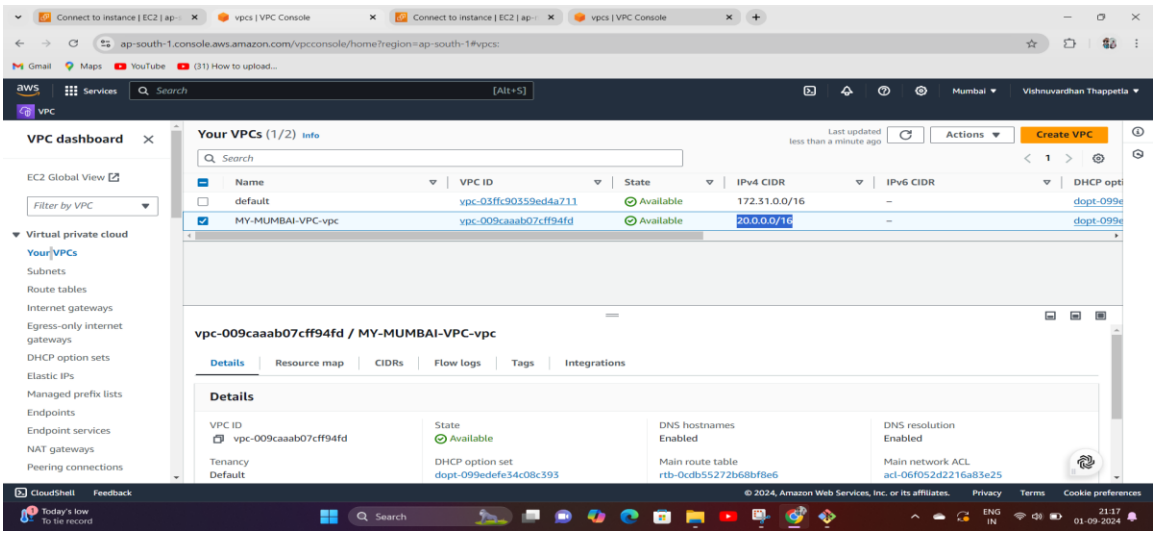


Step 16: Back to Mumbai region public route table ID in edit route

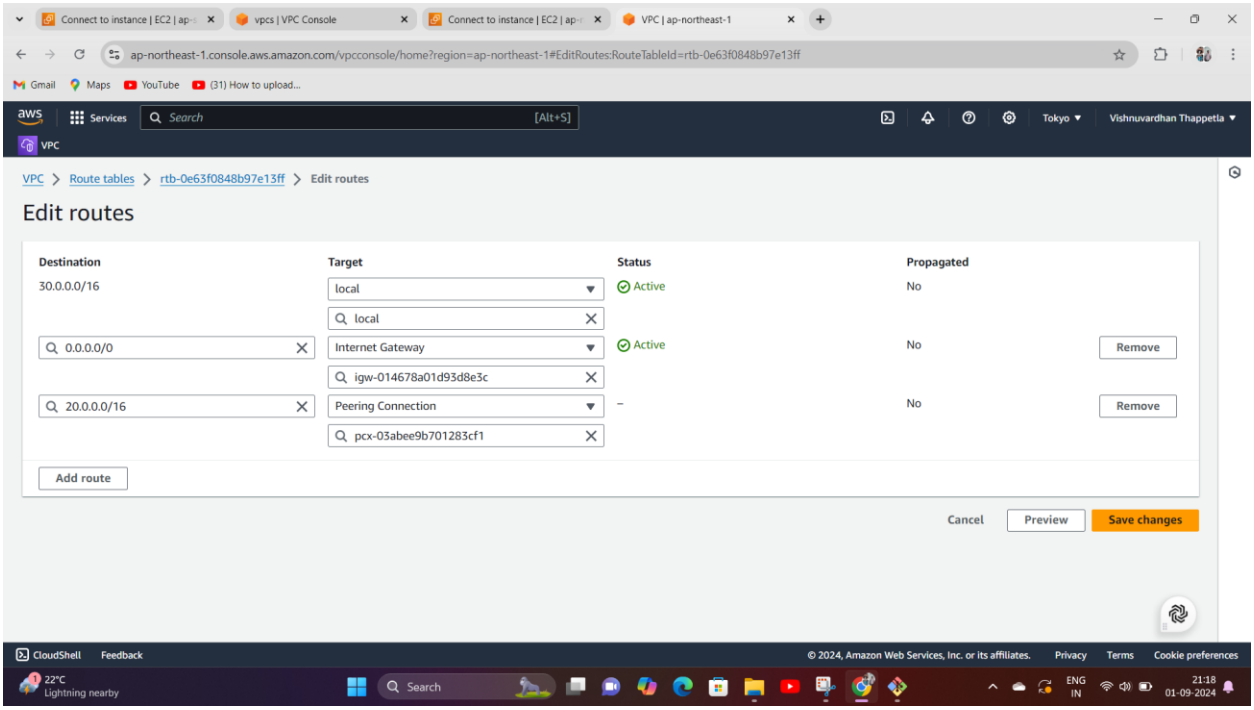
- Add route
- Paste Tokyo IPV4 CIDR Address
- Give Peering Connection and below it gives Peering connection ID
- Save changes



Step 17: Back to Mumbai VPC and Copy the IPV4 CIDR address [20.0.0.0/16]



Step 18: Goto Tokyo region does same as Step 16 but paste the Mumbai copied IPV4 CIDR address [20.0.0.0/16].

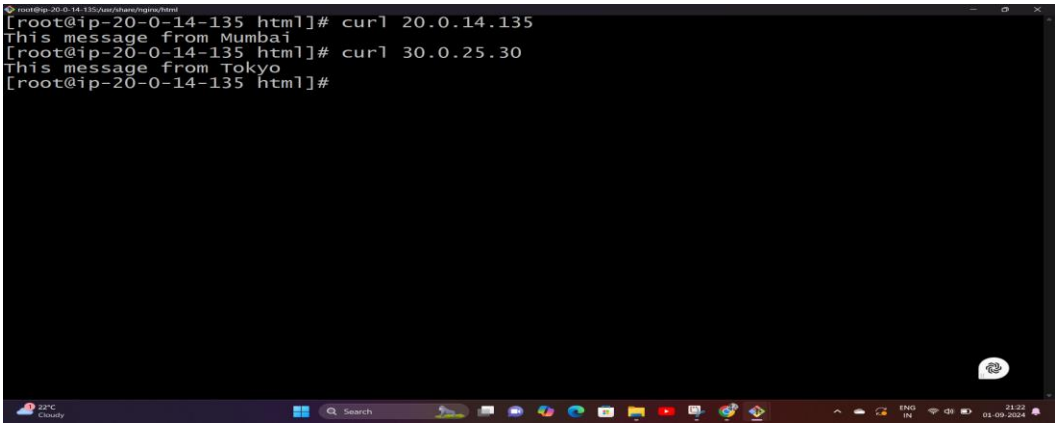


- Now we are interchanged IPV4 CIDR Address to establish the connection between two VPC`s using Peering connection. [Mumbai & Tokyo]

Step 19: Now goto Git bash of Mumbai server clicks [ctrl + c] to halts the current command.

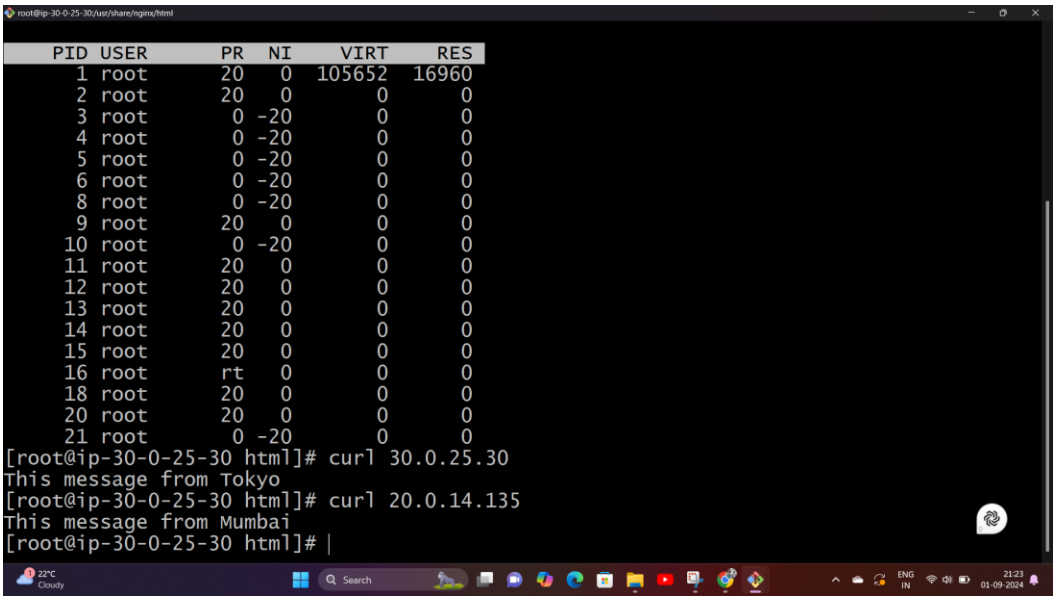
- Paste the Tokyo IPV4 address

- Using this CURL command



Step 20: Goto gitbash of Tokyo server.

- Click ctrl + c
- Paste the Mumbai IPV4 address
- Using “curl” command



- From the above steps we have successfully created two VPC`s in different regions and connected the two VPC`s using Peering Connection.
- By creating peering connection between these two VPC`s in different regions they can communicate easily.

Step 21:

- Now delete the peering connection.
- Terminate the EC2 instances.
- Remove the route tables Sub association connection and route connections
- Delete NAT gateway
- Delete Internet Gateway
- Delete Route tables
- Delete subnets
- Delete VPC`s.