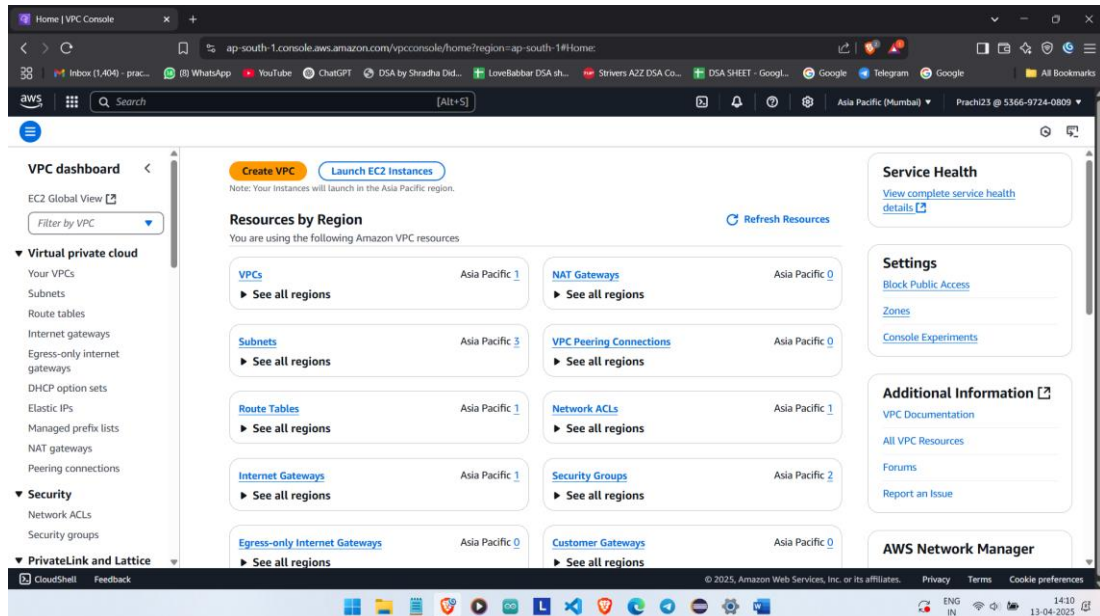


PRACTICAL NO : 11

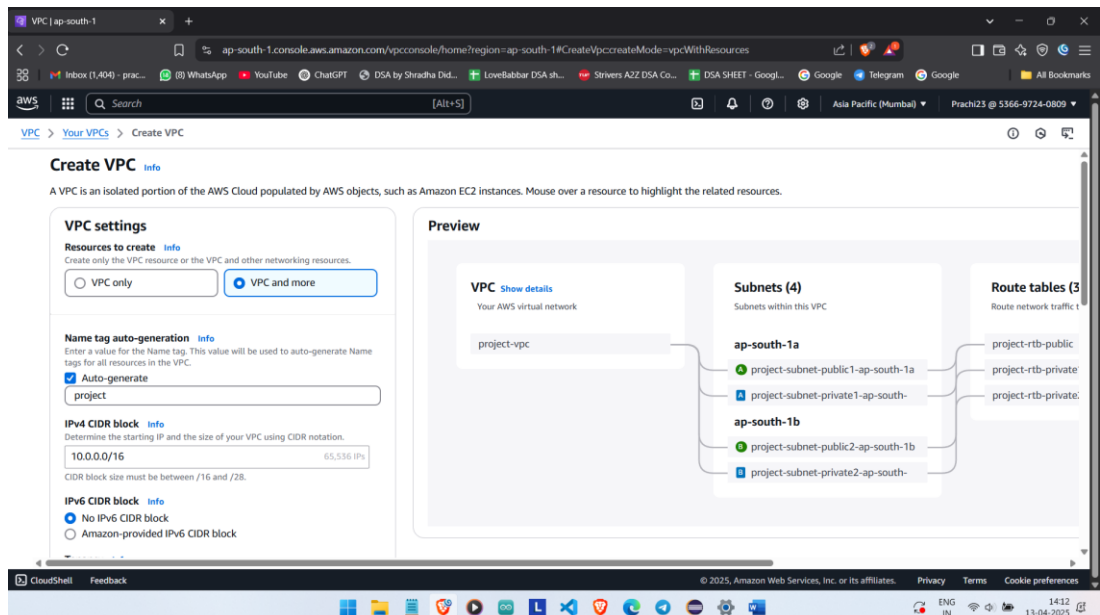
Title: Create A VPC network.

Steps:

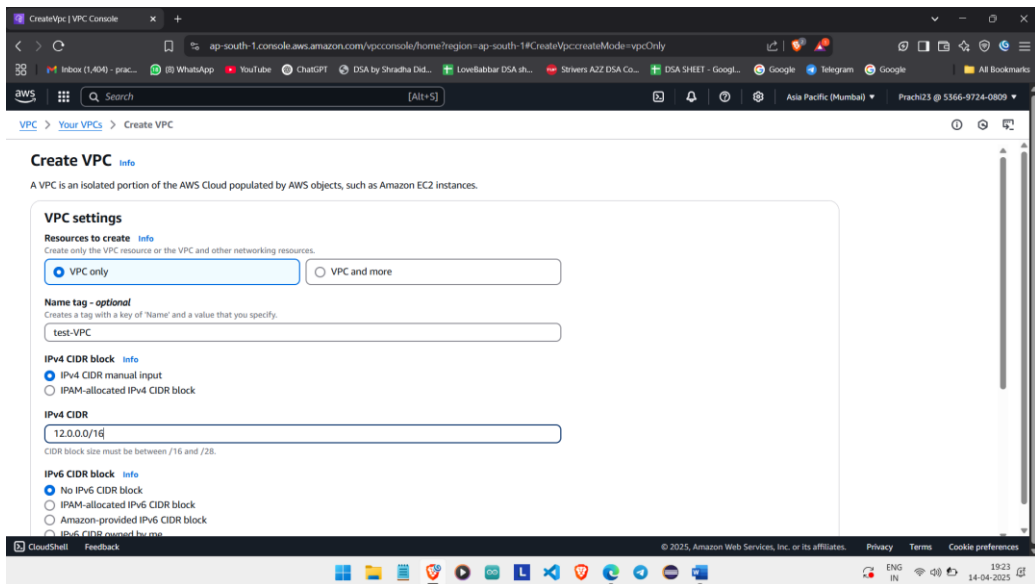
1. Login to AWS Console and Go to VPC section.



2. Click on 'Create VPC' button at the top.

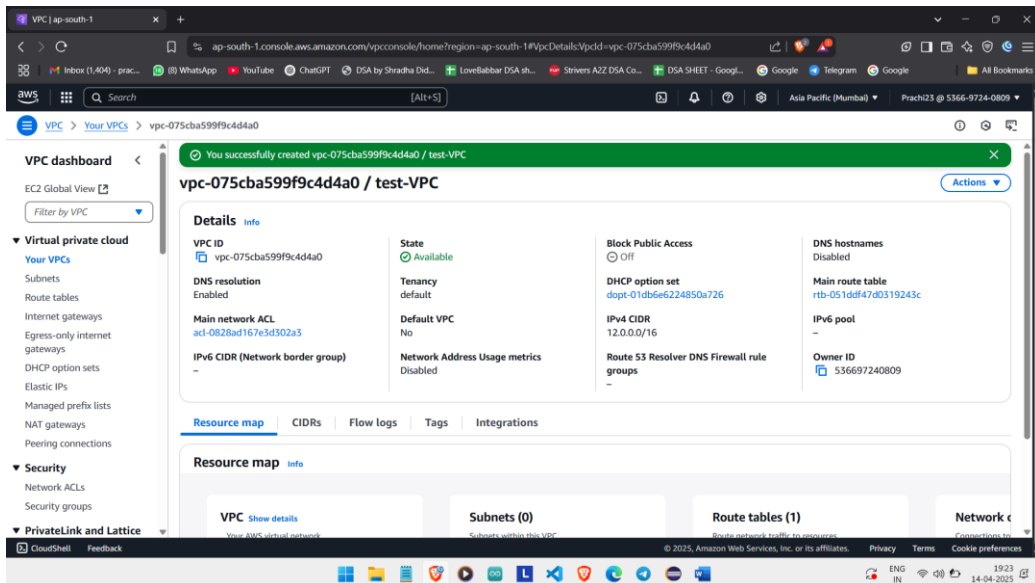


Give name to the VPC and IPV4 CIDR.



Then click on 'CREATE VPC'.

Now , we have successfully created our VPC.



3. Similarly, create second VPC

Create VPC info

A VPC is an isolated portion of the AWS Cloud populated by AWS objects, such as Amazon EC2 instances.

VPC settings

Resources to create info
Create only the VPC resource or the VPC and other networking resources.

☒ VPC only ☐ VPC and more

Name tag - optional
Creates a tag with a key of 'Name' and a value that you specify.

test-VPC2

IPv4 CIDR block info
☒ IPv4 CIDR manual input
☐ IPAM-allocated IPv4 CIDR block

IPv4 CIDR
13.0.0.0/16
CIDR block size must be between /16 and /28.

IPv6 CIDR block info
☒ No IPv6 CIDR block
☐ IPAM-allocated IPv6 CIDR block
☐ Amazon-provided IPv6 CIDR block
☐ IPv6 CIDR owned by me

You successfully created vpc-0e509f7c557152fb4 / test-VPC2

vpc-0e509f7c557152fb4 / test-VPC2

Details info

VPC ID vpc-0e509f7c557152fb4	State Available	Block Public Access Off	DNS hostnames Disabled
DNS resolution Enabled	Tenancy default	DHCP option set dopt-01db6ae6224850a726	Main route table rtb-03b9e230ba07acaf2
Main network ACL acl-0db7f8972d90de2b1	Default VPC No	IPv4 CIDR 13.0.0.0/16	IPv6 pool -
IPv6 CIDR (Network border group) -	Network Address Usage metrics Disabled	Route 53 Resolver DNS Firewall rule groups -	Owner ID 536697240809

Resource map info

Subnets (0)

Route tables (1)

Now we have successfully create 2 VPC's.

your VPCs (3) info

Last updated less than a minute ago

Name	VPC ID	State	Block Public...	IPv4 CIDR	IPv6 CIDR
test-VPC	vpc-075cba599f9c4d4a0	Available	Off	12.0.0.0/16	-
test-VPC2	vpc-0e509f7c557152fb4	Available	Off	13.0.0.0/16	-
-	vpc-0f42b18bc88fab57c	Available	Off	172.31.0.0/16	-

Select a VPC above

4. Now , we need to create 2 routing tables : so Go to Route Tables tab

The screenshot shows the 'Create route table' page in the AWS Management Console. The page title is 'Create route table' with an 'Info' link. Below the title is a description: 'A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.' The form is divided into three sections: 'Route table settings', 'Tags', and 'Create route table' buttons.

Route table settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.

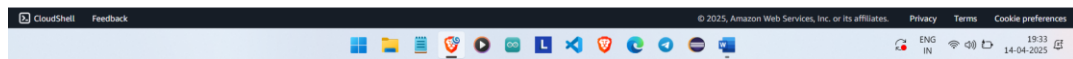
VPC
The VPC to use for this route table.

Tags
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key

Value - optional

You can add 49 more tags.



The screenshot shows the 'Route table details' page for the route table 'rtb-04be904f35268a454'. The page title is 'Route table details' with an 'Info' link. Below the title is a green success message: 'Route table rtb-04be904f35268a454 | test-rt-vpc-1 was created successfully.' The page is divided into several sections: 'Details', 'Routes', 'Subnet associations', 'Edge associations', 'Route propagation', and 'Tags'.

Details

Route table ID

VPC

Main

Owner ID

Explicit subnet associations

Edge associations

Routes (1)

Destination	Target	Status	Propagated
12.0.0.0/16	local	Active	No

This screenshot shows the 'Create route table' page in the AWS Management Console, similar to the first screenshot. The page title is 'Create route table' with an 'Info' link. Below the title is a description: 'A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.' The form is divided into three sections: 'Route table settings', 'Tags', and 'Create route table' buttons.

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Value - optional

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This screenshot shows the 'Create route table' page in the AWS Management Console, similar to the first screenshot. The page title is 'Create route table' with an 'Info' link. Below the title is a description: 'A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.' The form is divided into three sections: 'Route table settings', 'Tags', and 'Create route table' buttons.

Route table settings

Name - optional
Create a tag with a key of 'Name' and a value that you specify.

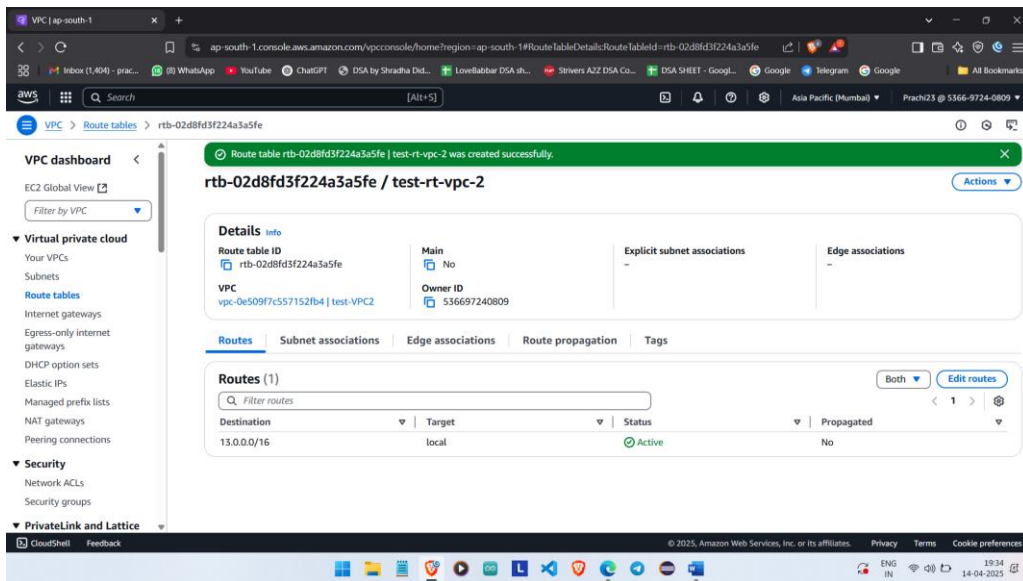
VPC
The VPC to use for this route table.

Tags
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

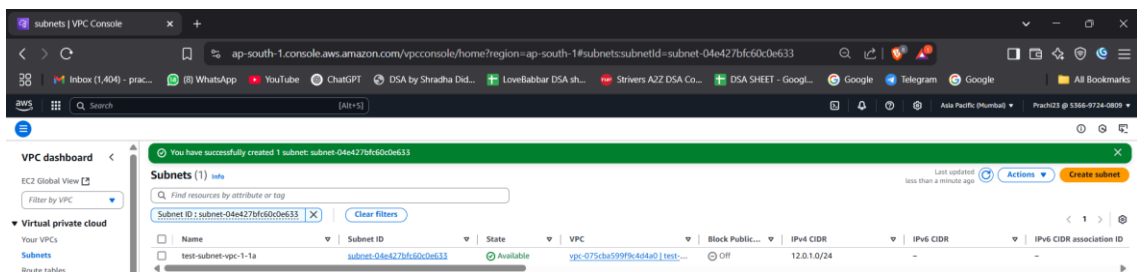
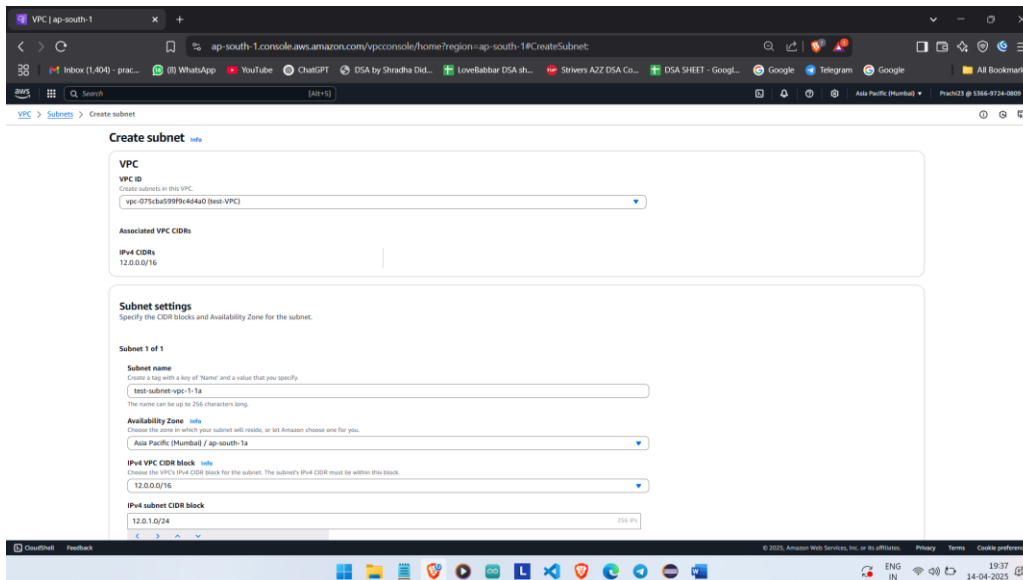
Key

Value - optional

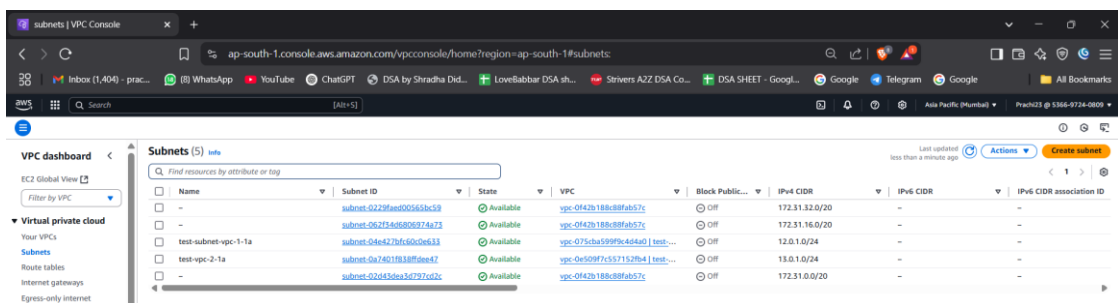
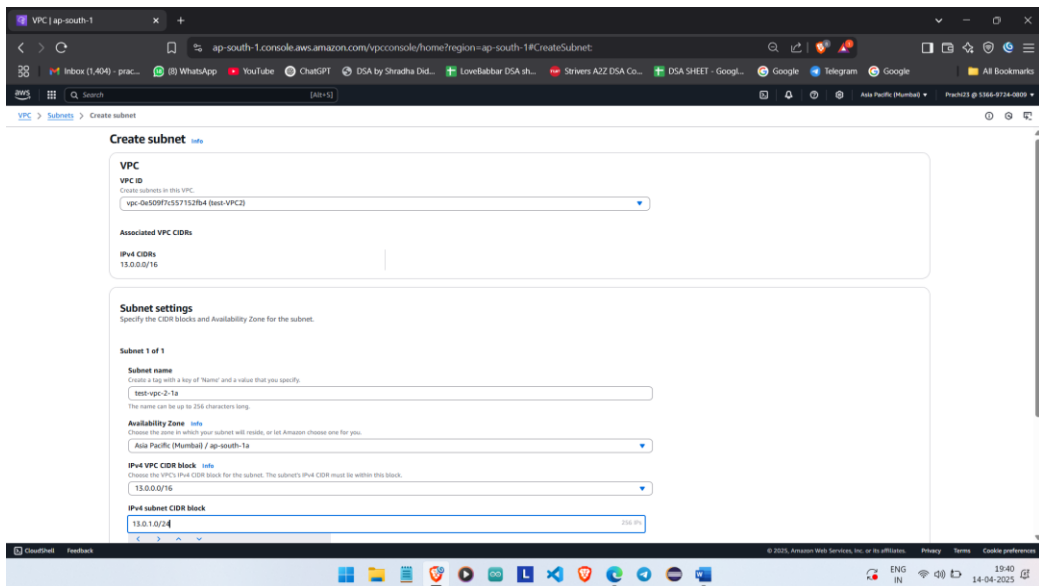
You can add 49 more tags.



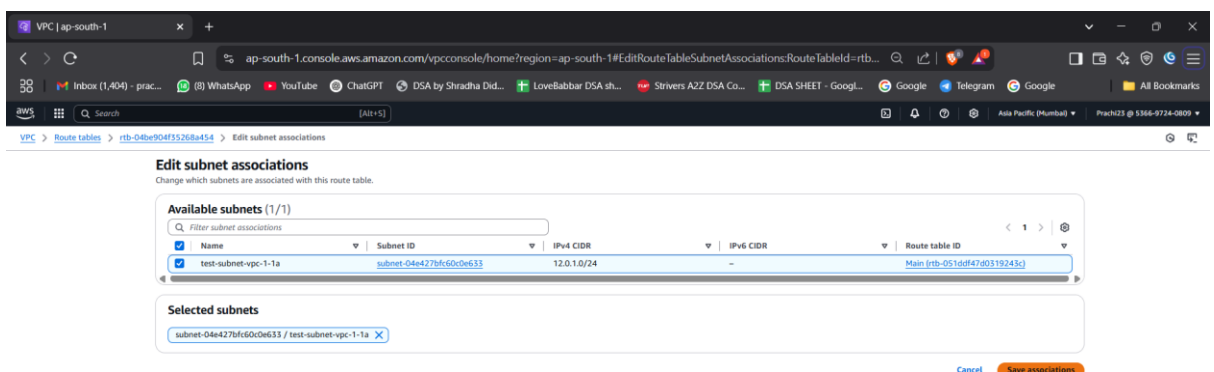
5. Now, Create Subnets:
For VPC1:



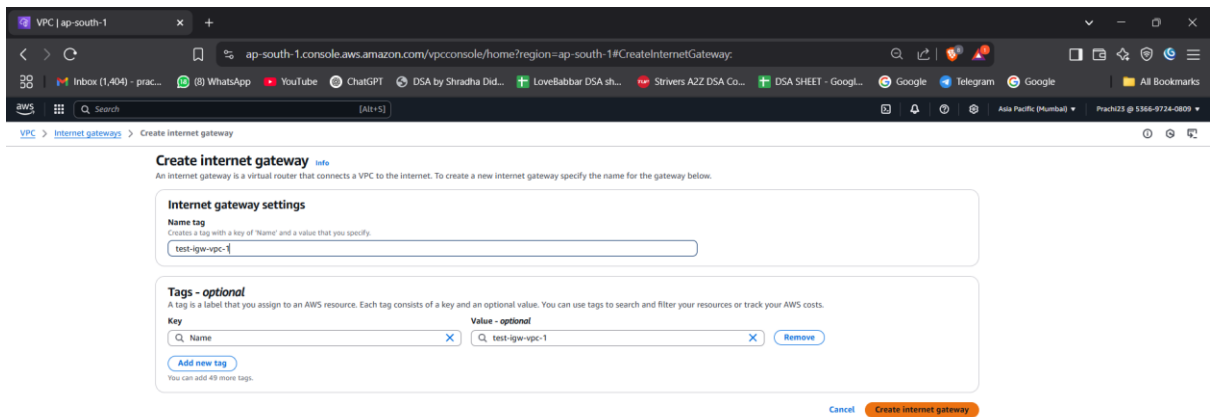
For VPC2:



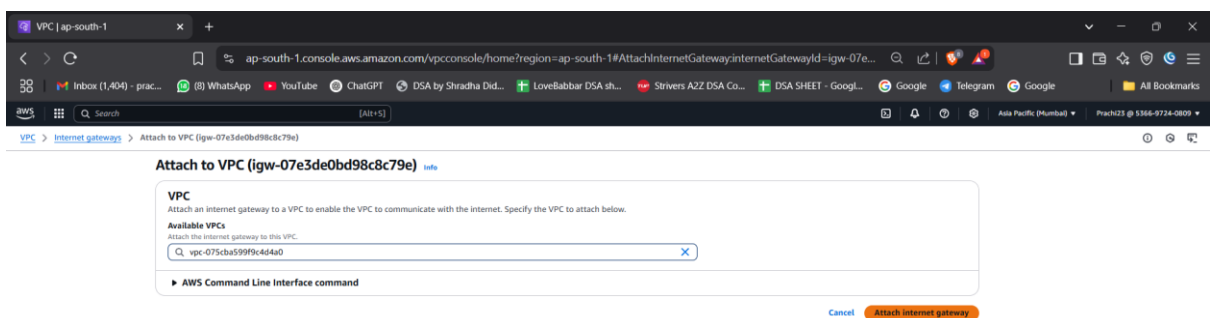
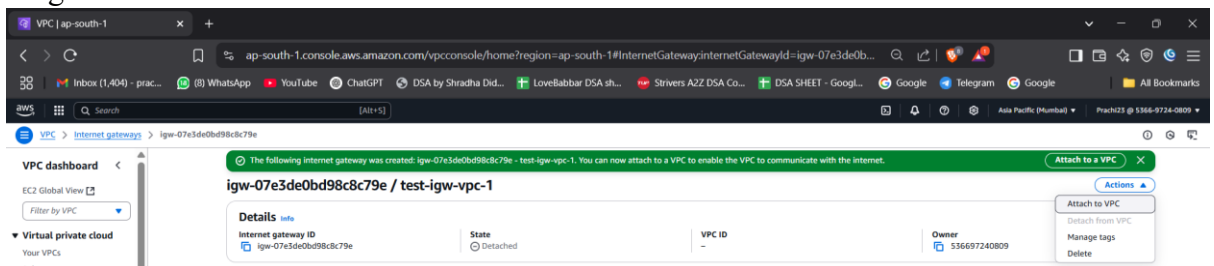
- Now we need to connect our route tables with subnets.
Go to Route table -> VPC1 -> Subnet Association -> edit subnet association -> select text box and save association



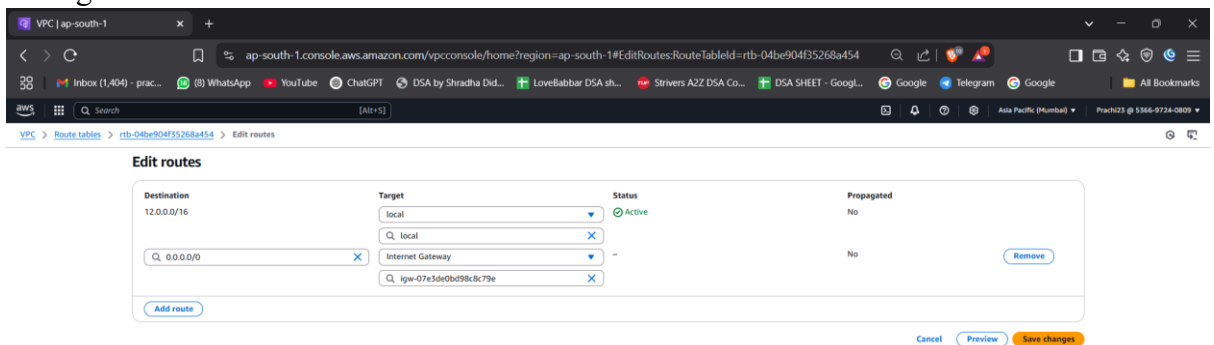
- Create INTERNET GATEWAY

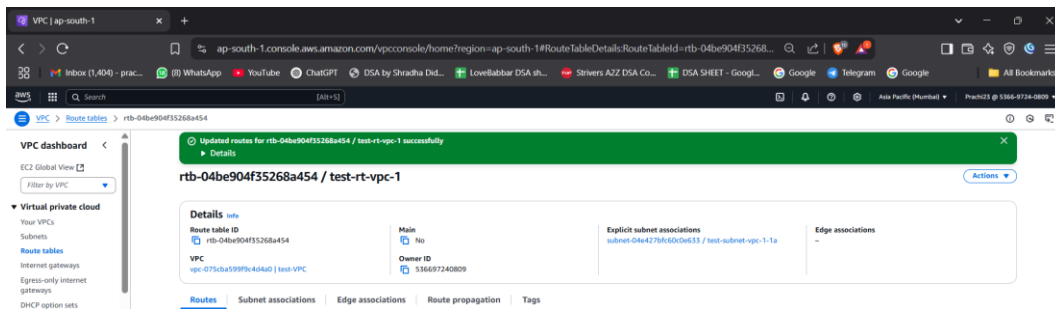


Then we need to attach VPC with internet gateway :
So go to ACTIONS->ATTACH VPC ->SELECT VPC -> ATTACH

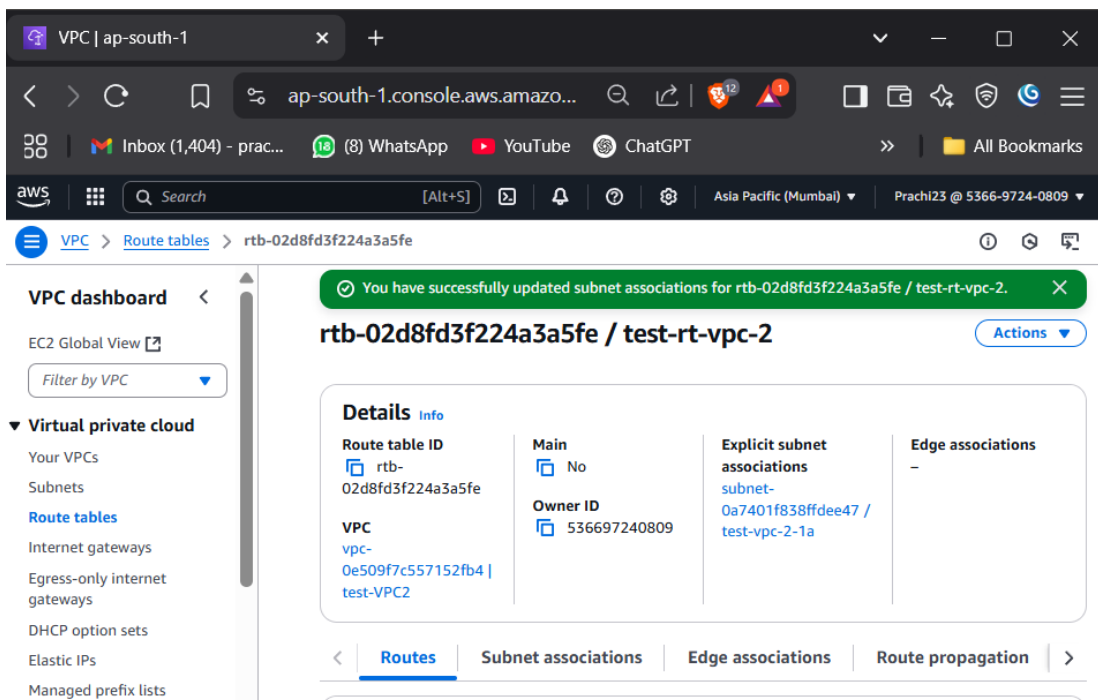
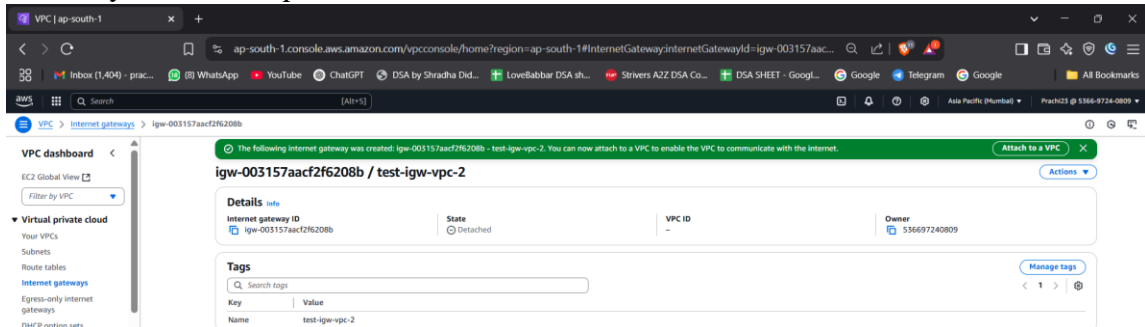


8. Now go to Route table -> VPC1-> edit route

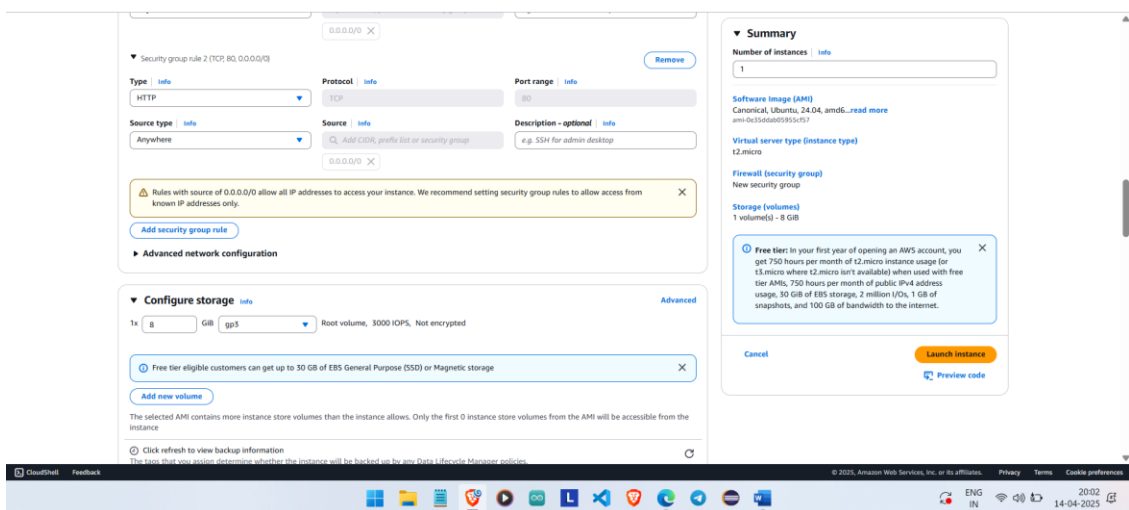
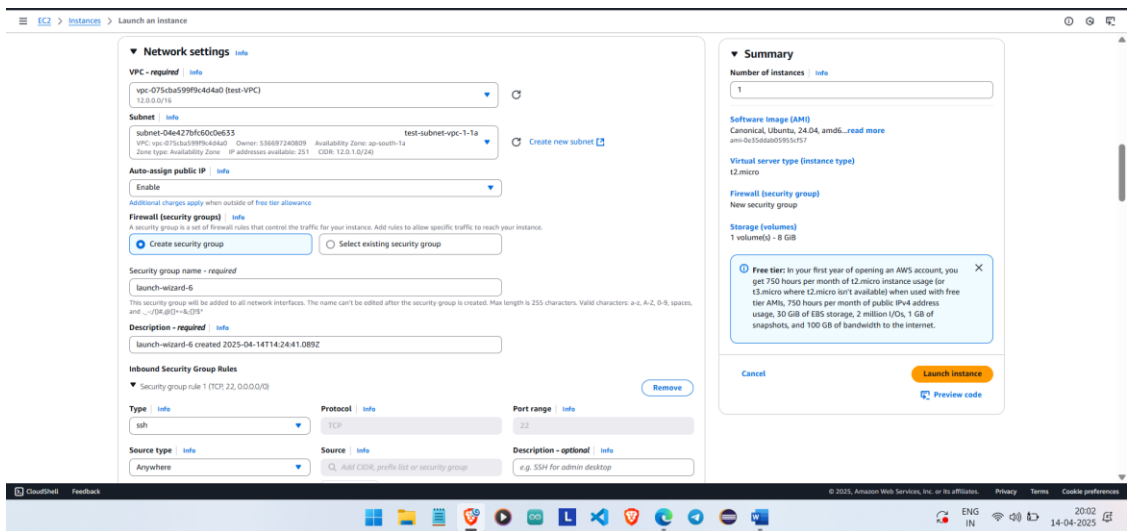
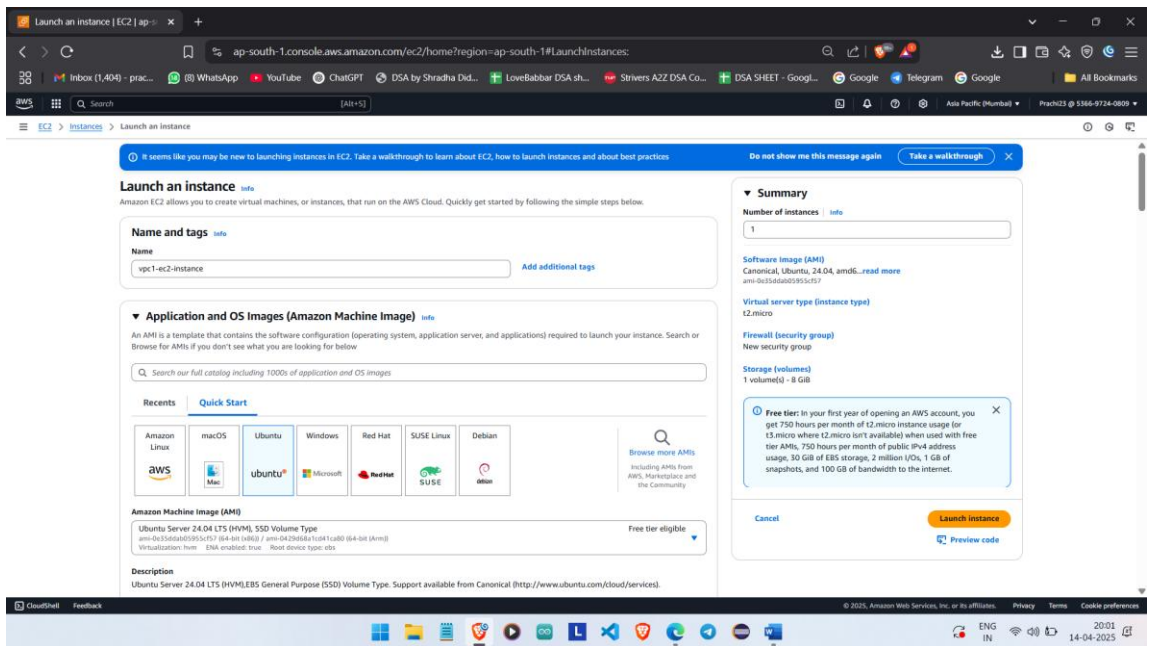


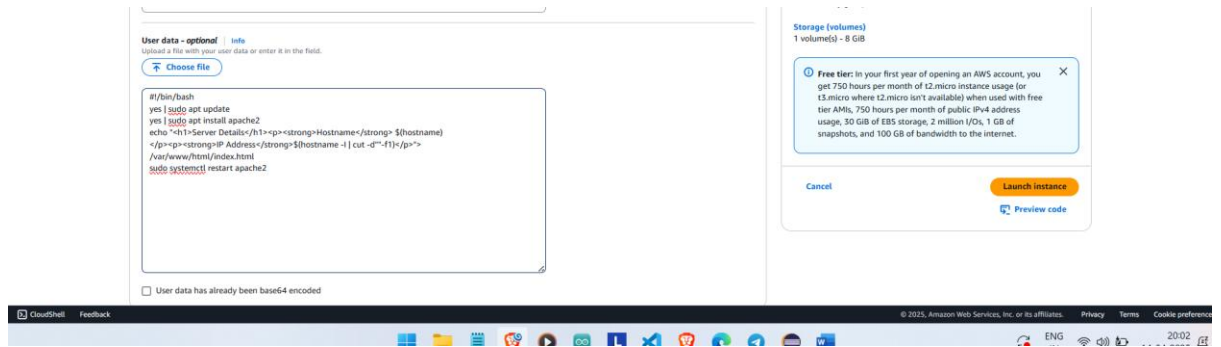


9. Similarly do these steps for VPC2

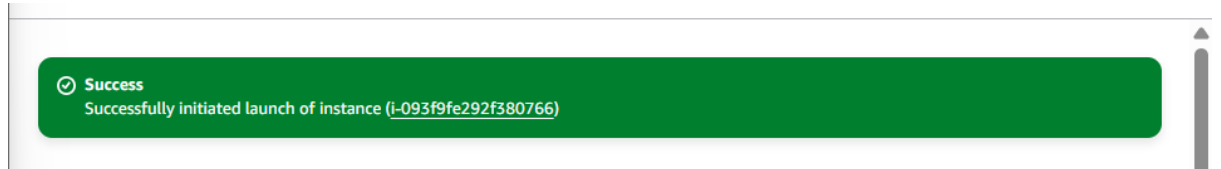


10. Now create an EC2 instance.

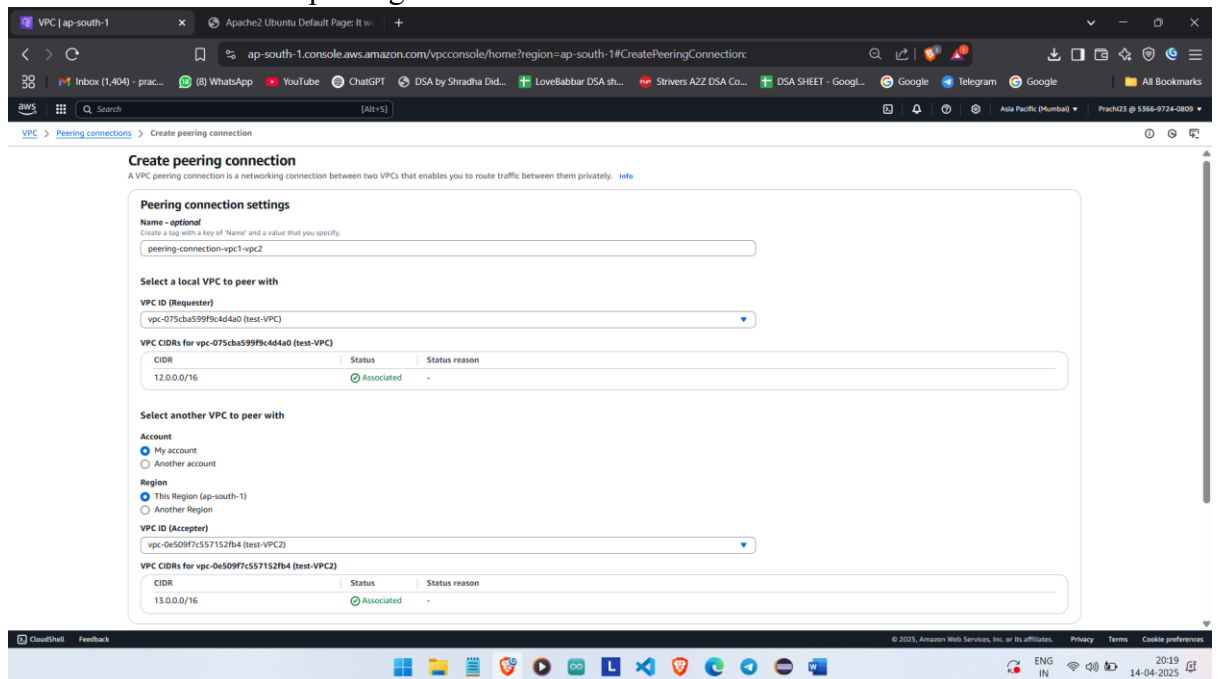


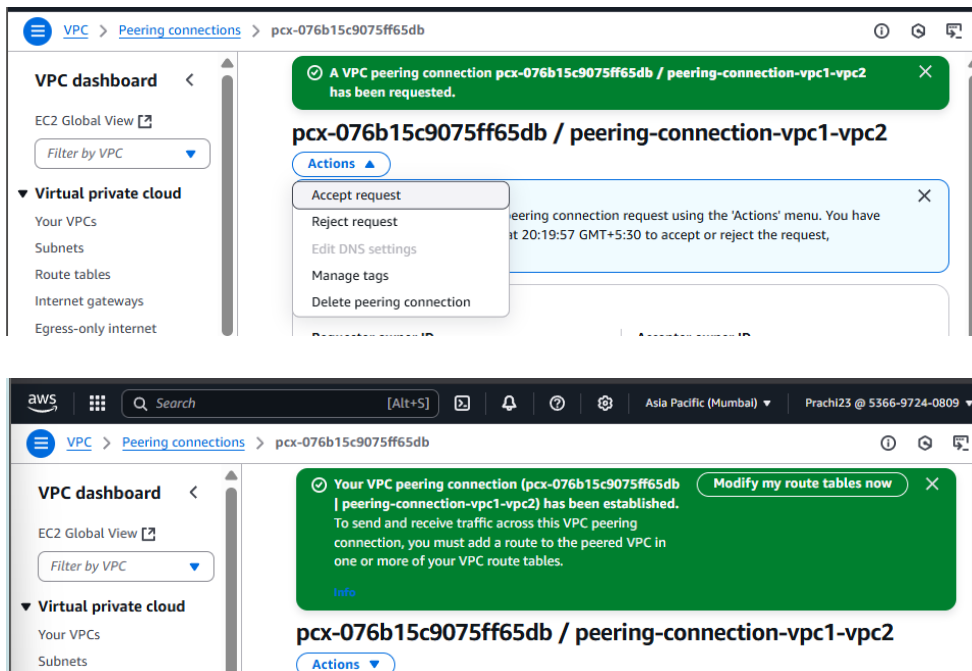


Similarly launch EC2 instance for VPC2

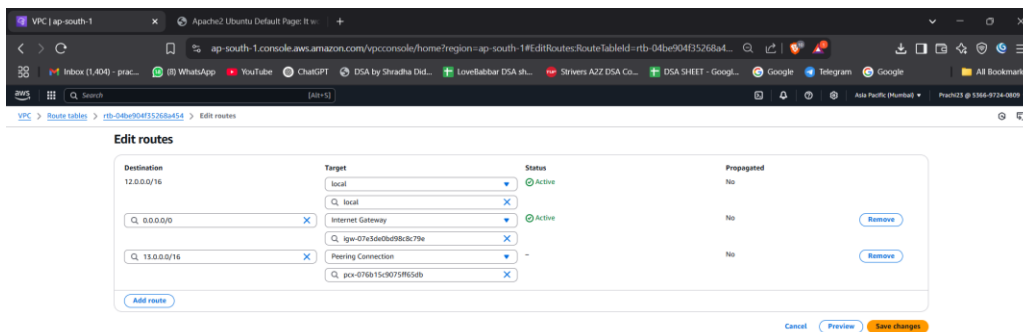


11. Now we need to create peering between 2 VPC's

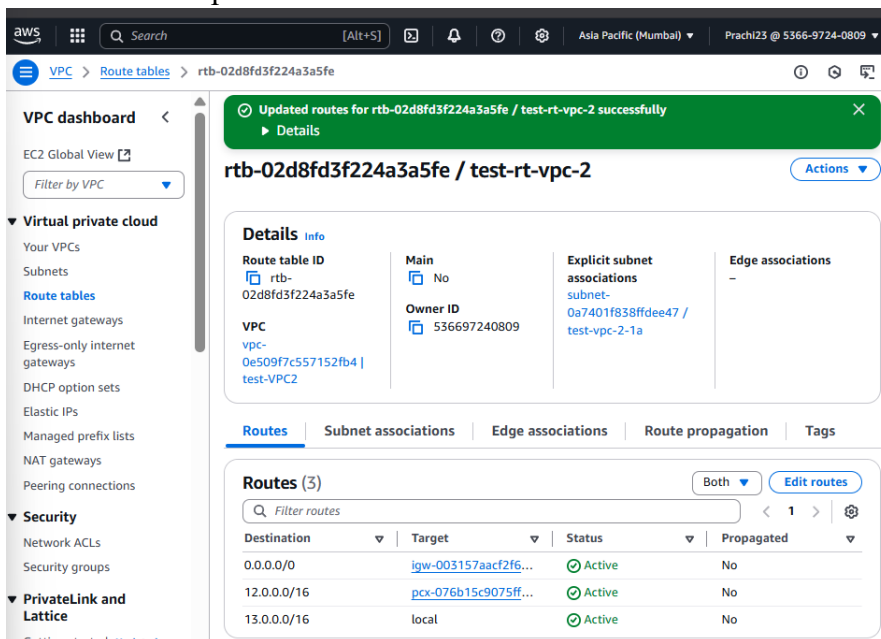




12. Now go to route table -> vpc1 -> edit route -> add route



Do similar for vpc2 route table



Amazon AWS Management Console

EC2 > Instances > i-04b8b33e38492bb5c > Connect to instance

Connect to instance info

Connect to your instance i-04b8b33e38492bb5c (vp1-ec2-instance) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

Instance ID
i-04b8b33e38492bb5c (vp1-ec2-instance)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is vp1-ec2key.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 "vp1-ec2key.pem"
4. Connect to your instance using its Public IP:
15.206.124.106

Example:
ssh -i "vp1-ec2key.pem" ubuntu@15.206.124.106

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

```
ubuntu@ip-13-0-1-154:~$ curl 13.0.1.154
<h1>Server Details</h1><p><strong>Hostname:</strong> ip-13-0-1-154</p><p><strong>IP Address:</strong> 13.0.1.154</p>
ubuntu@ip-12-0-1-44:~$

ubuntu@ip-13-0-1-154:~$ curl 12.0.1.44
<h1>Server Details</h1><p><strong>Hostname:</strong> ip-12-0-1-44</p><p><strong>IP Address:</strong> 12.0.1.44</p>
ubuntu@ip-13-0-1-154:~$
```