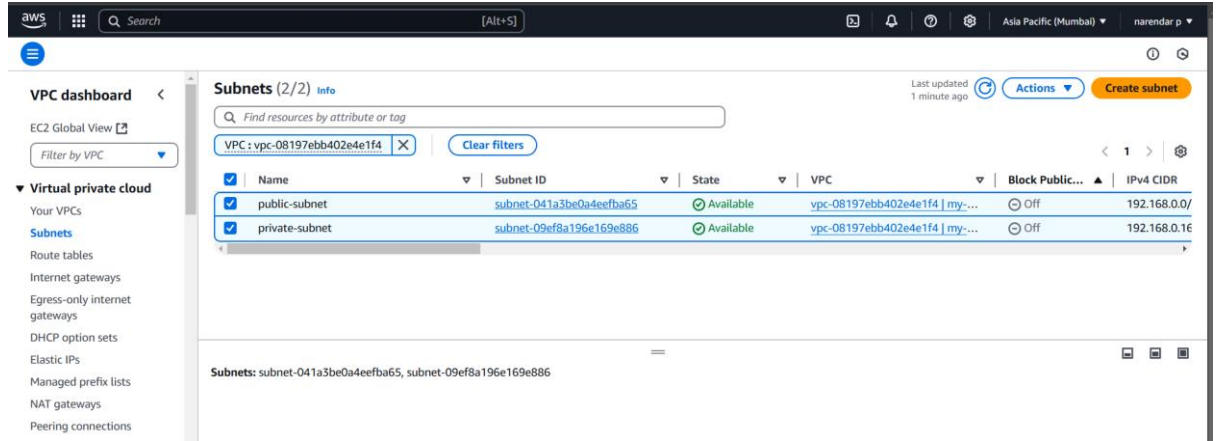


# TASK ON VPC 02

## 1) Create one VPC, with 1 one public subnet and 1 private subnet:

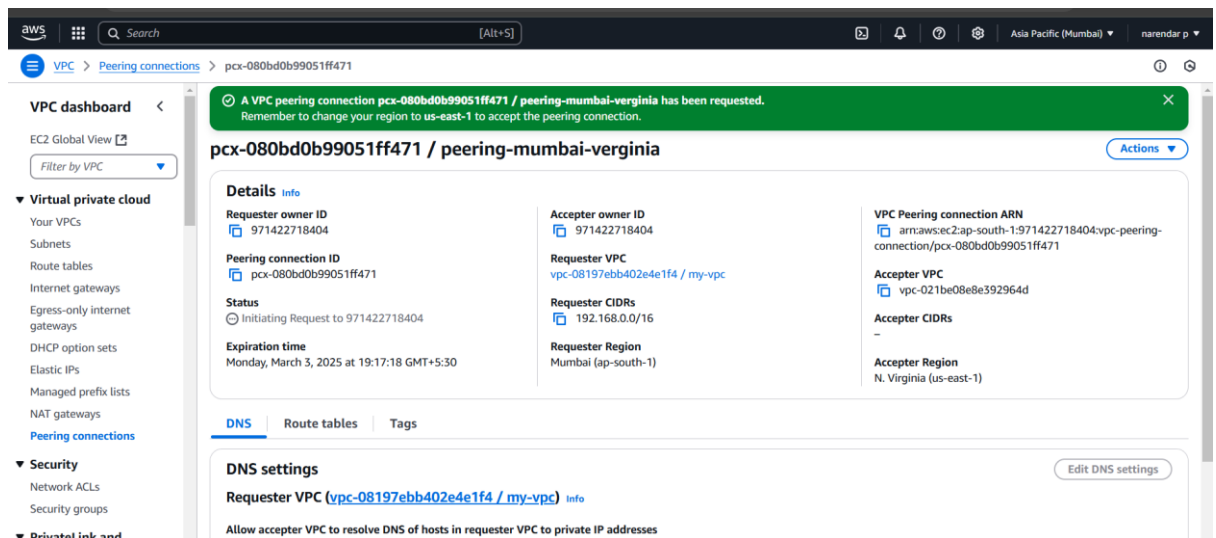


The screenshot shows the AWS VPC console. On the left, the 'VPC dashboard' sidebar is visible with options like 'Your VPCs', 'Subnets', 'Route tables', etc. The main panel is titled 'Subnets (2/2) Info'. It shows a table with two subnets:

Name	Subnet ID	State	VPC	Block Public...	IPv4 CIDR
public-subnet	subnet-041a3be0a4eebfa65	Available	vpc-08197ebb402e4e1f4   my-...	Off	192.168.0.0/
private-subnet	subnet-09ef8a196e169e886	Available	vpc-08197ebb402e4e1f4   my-...	Off	192.168.0.16

Below the table, it says 'Subnets: subnet-041a3be0a4eebfa65, subnet-09ef8a196e169e886'.

## 2) Enable VPC peering for cross region:



The screenshot shows the AWS VPC console with a VPC peering connection page. A green banner at the top states: 'A VPC peering connection pcx-080bd0b99051ff471 / peering-mumbai-verginia has been requested. Remember to change your region to us-east-1 to accept the peering connection.' The page title is 'pcx-080bd0b99051ff471 / peering-mumbai-verginia'.

**Details Info**

Requester owner ID	Accepter owner ID
971422718404	971422718404

**Peering connection ID**: pcx-080bd0b99051ff471

**Status**: Initiating Request to 971422718404

**Expiration time**: Monday, March 3, 2025 at 19:17:18 GMT+5:30

Requester VPC	Requester CIDRs	Requester Region
vpc-08197ebb402e4e1f4 / my-vpc	192.168.0.0/16	Mumbai (ap-south-1)

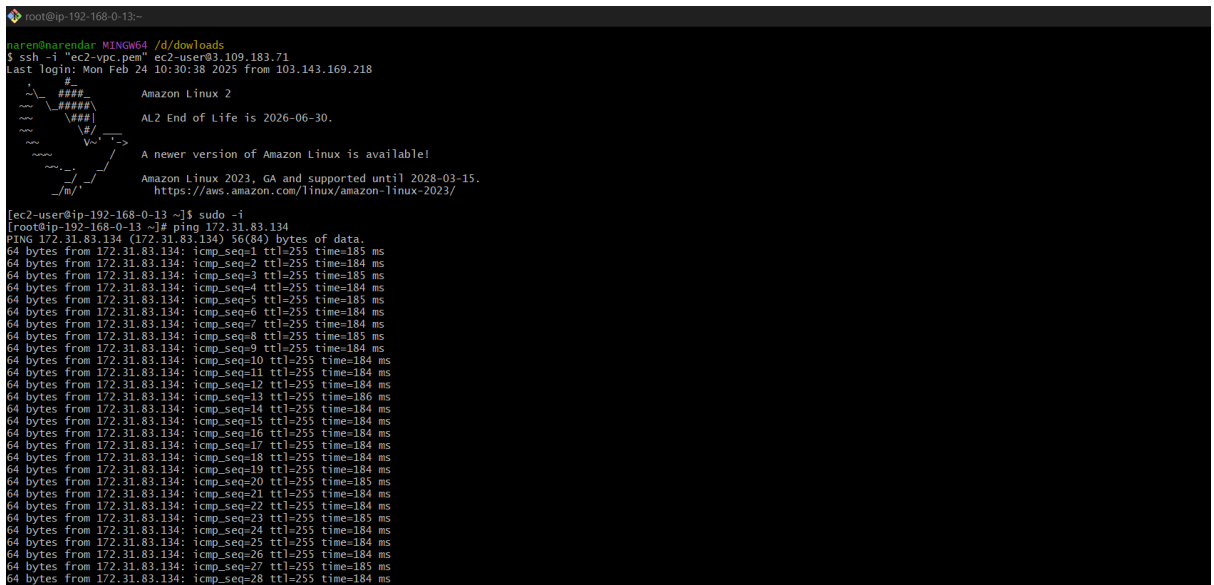
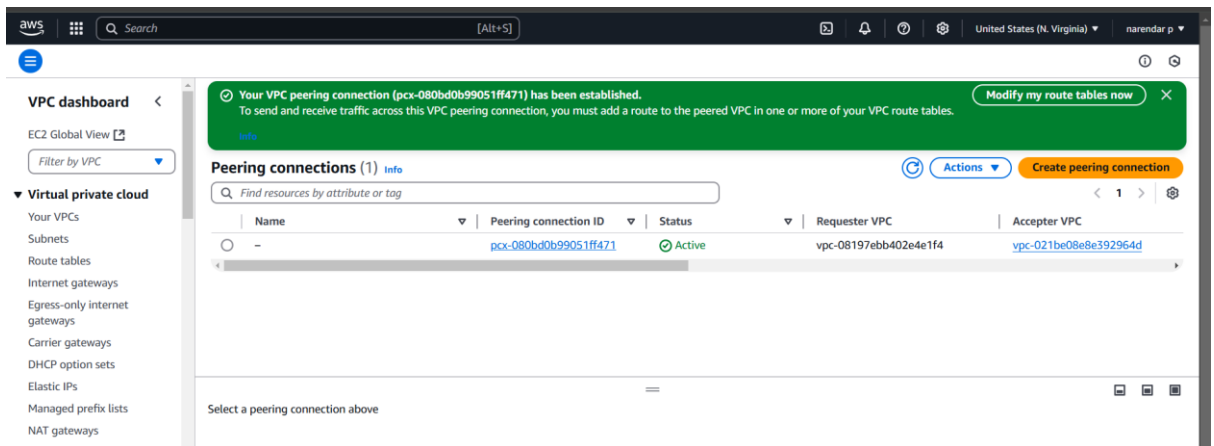
**VPC Peering connection ARN**: arn:aws:ec2:ap-south-1:971422718404:vpc-peering-connection/pcx-080bd0b99051ff471

Accepter VPC	Accepter CIDRs	Accepter Region
vpc-021be08e8e392964d	-	N. Virginia (us-east-1)

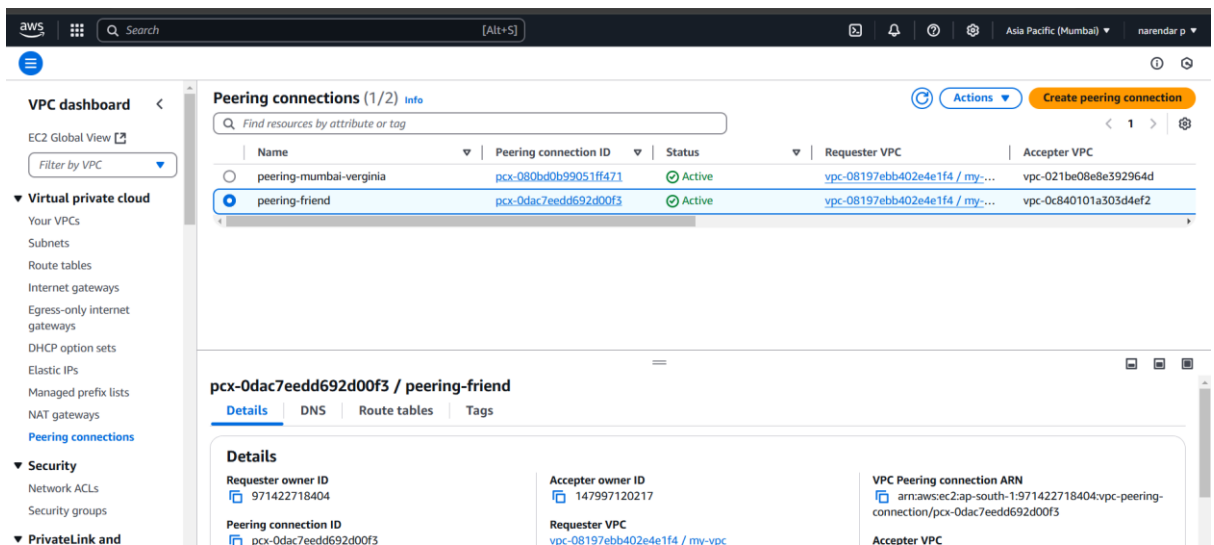
**DNS settings**

**Requester VPC** (vpc-08197ebb402e4e1f4 / my-vpc) Info

Allow accepter VPC to resolve DNS of hosts in requester VPC to private IP addresses



### 3) Enable VPC peering for cross account. (You can collaborate with your friend and do this task:



aws VPC > Peering connections > pcx-0dac7eedd692d00f3

**VPC dashboard**

EC2 Global View

Filter by VPC

**Virtual private cloud**

- Your VPCs
- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways

**Details**

**Requester owner ID**  
971422718404

**Peering connection ID**  
pcx-0dac7eedd692d00f3

**Status**  
Active

**Expiration time**  
-

**Accepter owner ID**  
147997120217

**Requester VPC**  
vpc-08197ebb402e4e1f4

**Requester CIDRs**  
192.168.0.0/16

**Requester Region**  
Mumbai (ap-south-1)

**VPC Peering connection ARN**  
arn:aws:ec2:us-east-2:147997120217:vpc-peering-connection/pcx-0dac7eedd692d00f3

**Accepter VPC**  
vpc-0c840101a303d4ef2 / my vpc

**Accepter CIDRs**  
190.168.0.0/25

**Accepter Region**  
Ohio (us-east-2)

```
Amazon Linux 2
AL2 End of Life is 2026-06-30.

A newer version of Amazon Linux is available!
Amazon Linux 2023, GA and supported until 2028-03-15.
https://aws.amazon.com/linux/amazon-linux-2023/

[ec2-user@ip-192-168-0-13 ~]$ sudo -i
[root@ip-192-168-0-13 ~]# ping 172.31.83.134
PING 172.31.83.134 (172.31.83.134): 56(84) bytes of data:
64 bytes from 172.31.83.134: icmp_seq=1 ttl=255 time=185 ms
64 bytes from 172.31.83.134: icmp_seq=2 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=3 ttl=255 time=185 ms
64 bytes from 172.31.83.134: icmp_seq=4 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=5 ttl=255 time=185 ms
64 bytes from 172.31.83.134: icmp_seq=6 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=7 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=8 ttl=255 time=185 ms
64 bytes from 172.31.83.134: icmp_seq=9 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=10 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=11 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=12 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=13 ttl=255 time=186 ms
64 bytes from 172.31.83.134: icmp_seq=14 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=15 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=16 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=17 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=18 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=19 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=20 ttl=255 time=185 ms
64 bytes from 172.31.83.134: icmp_seq=21 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=22 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=23 ttl=255 time=185 ms
64 bytes from 172.31.83.134: icmp_seq=24 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=25 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=26 ttl=255 time=184 ms
64 bytes from 172.31.83.134: icmp_seq=27 ttl=255 time=185 ms
```

#### 4) Setup VPC Transit Gateway:

Connection between default vpc to vpc1:

```
[ec2-user@ip-172-31-17-45 ~]$ ping 10.0.0.4
PING 10.0.0.4 (10.0.0.4) 56(84) bytes of data.
64 bytes from 10.0.0.4: icmp_seq=127 ttl=254 time=1.95 ms
64 bytes from 10.0.0.4: icmp_seq=128 ttl=254 time=1.34 ms
64 bytes from 10.0.0.4: icmp_seq=129 ttl=254 time=3.20 ms
64 bytes from 10.0.0.4: icmp_seq=130 ttl=254 time=1.32 ms
64 bytes from 10.0.0.4: icmp_seq=131 ttl=254 time=1.27 ms
64 bytes from 10.0.0.4: icmp_seq=132 ttl=254 time=1.37 ms
64 bytes from 10.0.0.4: icmp_seq=133 ttl=254 time=1.57 ms
64 bytes from 10.0.0.4: icmp_seq=134 ttl=254 time=1.36 ms
64 bytes from 10.0.0.4: icmp_seq=135 ttl=254 time=1.25 ms
64 bytes from 10.0.0.4: icmp_seq=136 ttl=254 time=1.29 ms
64 bytes from 10.0.0.4: icmp_seq=137 ttl=254 time=1.37 ms
64 bytes from 10.0.0.4: icmp_seq=138 ttl=254 time=1.39 ms
64 bytes from 10.0.0.4: icmp_seq=139 ttl=254 time=1.34 ms
64 bytes from 10.0.0.4: icmp_seq=140 ttl=254 time=1.43 ms
64 bytes from 10.0.0.4: icmp_seq=141 ttl=254 time=1.40 ms
64 bytes from 10.0.0.4: icmp_seq=142 ttl=254 time=1.35 ms
64 bytes from 10.0.0.4: icmp_seq=143 ttl=254 time=1.46 ms
64 bytes from 10.0.0.4: icmp_seq=144 ttl=254 time=1.35 ms
64 bytes from 10.0.0.4: icmp_seq=145 ttl=254 time=1.31 ms
64 bytes from 10.0.0.4: icmp_seq=146 ttl=254 time=1.39 ms
64 bytes from 10.0.0.4: icmp_seq=147 ttl=254 time=1.31 ms
64 bytes from 10.0.0.4: icmp_seq=148 ttl=254 time=1.34 ms
64 bytes from 10.0.0.4: icmp_seq=149 ttl=254 time=1.41 ms
64 bytes from 10.0.0.4: icmp_seq=150 ttl=254 time=1.37 ms
64 bytes from 10.0.0.4: icmp_seq=151 ttl=254 time=1.33 ms
64 bytes from 10.0.0.4: icmp_seq=152 ttl=254 time=1.34 ms
```

Connection vpc1 to vpc2:

```
64 bytes from 10.0.0.4: icmp_seq=154 ttl=254 time=1.34 ms
64 bytes from 10.0.0.4: icmp_seq=155 ttl=254 time=2.57 ms
64 bytes from 10.0.0.4: icmp_seq=156 ttl=254 time=1.28 ms
64 bytes from 10.0.0.4: icmp_seq=157 ttl=254 time=1.36 ms
^C
--- 10.0.0.4 ping statistics ---
157 packets transmitted, 31 received, 80% packet loss, time 159021ms
rtt min/avg/max/mdev = 1.253/1.480/3.205/0.398 ms
[ec2-user@ip-172-31-17-45 ~]$ ping
Usage: ping [-aAbBdDfhLNoqrRUVV64] [-c count] [-i interval] [-I interface]
        [-m mark] [-M pmtudisc_option] [-l preload] [-p pattern] [-Q tos]
        [-s packetsize] [-S sndbuf] [-t ttl] [-T timestamp_option]
        [-w deadline] [-W timeout] [hop1 ...] destination
Usage: ping -6 [-aAbBdDfhLNoqrRUVV] [-c count] [-i interval] [-I interface]
        [-l preload] [-m mark] [-M pmtudisc_option]
        [-N nodeinfo_option] [-p pattern] [-Q tclass] [-s packetsize]
        [-S sndbuf] [-t ttl] [-T timestamp_option] [-w deadline]
        [-W timeout] destination
[ec2-user@ip-172-31-17-45 ~]$ ping 10.0.1.11
PING 10.0.1.11 (10.0.1.11) 56(84) bytes of data.
64 bytes from 10.0.1.11: icmp_seq=19 ttl=254 time=1.37 ms
64 bytes from 10.0.1.11: icmp_seq=20 ttl=254 time=0.907 ms
64 bytes from 10.0.1.11: icmp_seq=21 ttl=254 time=1.49 ms
64 bytes from 10.0.1.11: icmp_seq=22 ttl=254 time=0.881 ms
64 bytes from 10.0.1.11: icmp_seq=23 ttl=254 time=0.864 ms
64 bytes from 10.0.1.11: icmp_seq=24 ttl=254 time=0.786 ms
64 bytes from 10.0.1.11: icmp_seq=25 ttl=254 time=0.844 ms
```



### Connection between vpc2 to vpc3:

```
[ec2-user@ip-172-31-17-45 ~]$ ping 10.0.2.11
PING 10.0.2.11 (10.0.2.11) 56(84) bytes of data.
64 bytes from 10.0.2.11: icmp_seq=1 ttl=254 time=3.32 ms
64 bytes from 10.0.2.11: icmp_seq=2 ttl=254 time=1.57 ms
64 bytes from 10.0.2.11: icmp_seq=3 ttl=254 time=1.52 ms
64 bytes from 10.0.2.11: icmp_seq=4 ttl=254 time=1.64 ms
64 bytes from 10.0.2.11: icmp_seq=5 ttl=254 time=1.60 ms
64 bytes from 10.0.2.11: icmp_seq=6 ttl=254 time=2.27 ms
64 bytes from 10.0.2.11: icmp_seq=7 ttl=254 time=2.13 ms
64 bytes from 10.0.2.11: icmp_seq=8 ttl=254 time=1.54 ms
64 bytes from 10.0.2.11: icmp_seq=9 ttl=254 time=1.56 ms
64 bytes from 10.0.2.11: icmp_seq=10 ttl=254 time=1.56 ms
64 bytes from 10.0.2.11: icmp_seq=11 ttl=254 time=1.53 ms
64 bytes from 10.0.2.11: icmp_seq=12 ttl=254 time=1.54 ms
64 bytes from 10.0.2.11: icmp_seq=13 ttl=254 time=2.62 ms
64 bytes from 10.0.2.11: icmp_seq=14 ttl=254 time=1.61 ms
^C
--- 10.0.2.11 ping statistics ---
15 packets transmitted, 14 received, 6% packet loss, time 14021ms
rtt min/avg/max/mdev = 1.520/1.862/3.321/0.521 ms
[ec2-user@ip-172-31-17-45 ~]$
```

### Connection between vpc3 to default vpc:

```

~~~ \###| AL2 End of Life is 2025-06-30.
~~~ \#/
~~~ V~' _->
~~~~
~~~~
~~~~ _./ _./
~~~~ _/m/' _/

```

A newer version of Amazon Linux is available!

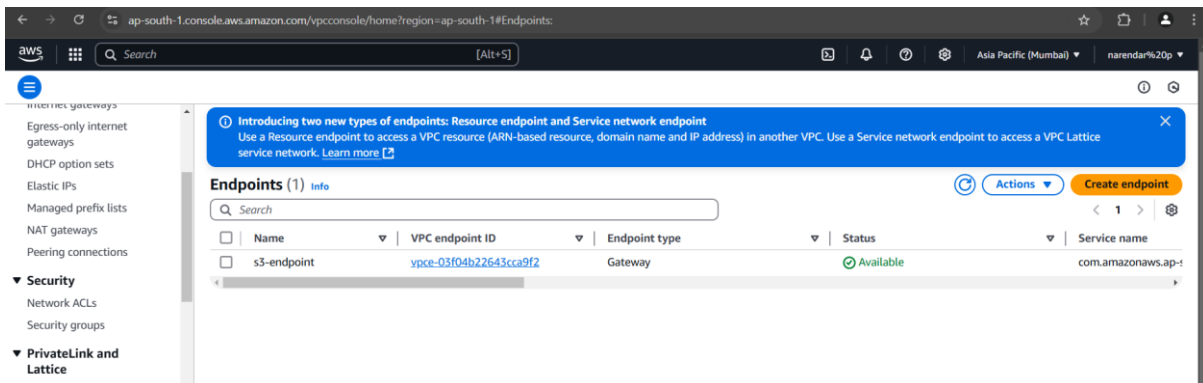
Amazon Linux 2023, GA and supported until 2028-03-15.  
<https://aws.amazon.com/linux/amazon-linux-2023/>

```

[ec2-user@ip-10-0-0-4 ~]$ ping 172.31.17.45
PING 172.31.17.45 (172.31.17.45) 56(84) bytes of data.
64 bytes from 172.31.17.45: icmp_seq=1 ttl=254 time=1.94 ms
64 bytes from 172.31.17.45: icmp_seq=2 ttl=254 time=1.34 ms
64 bytes from 172.31.17.45: icmp_seq=3 ttl=254 time=1.34 ms
64 bytes from 172.31.17.45: icmp_seq=4 ttl=254 time=1.41 ms
64 bytes from 172.31.17.45: icmp_seq=5 ttl=254 time=1.27 ms

```

### 5) Setup VPC End Point:



aws

Search

[Alt+S]

Asia Pacific (Mumbai)

narendar%20p

VPC dashboard

EC2 Global View

Filter by VPC

Virtual private cloud

Your VPCs

Subnets

Route tables

Internet gateways

Egress-only internet gateways

DHCP option sets

Elastic IPs

Managed prefix lists

NAT gateways

Peering connections

Security

Network ACLs

Security groups

PrivateLink and

Route tables (1/3)

Find resources by attribute or tag

Last updated 1 minute ago

Actions

Create route table

Name

Route table ID

Explicit subnet associ...

Edge associations

Main

VPC

☐

public-RT

rtb-0c8ffcd16fd73d82b

subnet-0452e9c0caa7e6...

-

Yes

vpc-08197ebb402e4e1f4 | r

☐

-

rtb-09dacb594492f6696

-

-

Yes

vpc-03d6da058f5de6f2f

☒

pri-RT

rtb-08e6d81867e276ebd

subnet-066bcf1f5909ea9...

-

No

vpc-08197ebb402e4e1f4 | r

Details

Routes

Subnet associations

Edge associations

Route propagation

Tags

Routes (2)

Filter routes

Both

Edit routes

Destination

Target

Status

Propagated

192.168.0.0/16

local

Active

No

192.168.0.0/16

local

Active

No