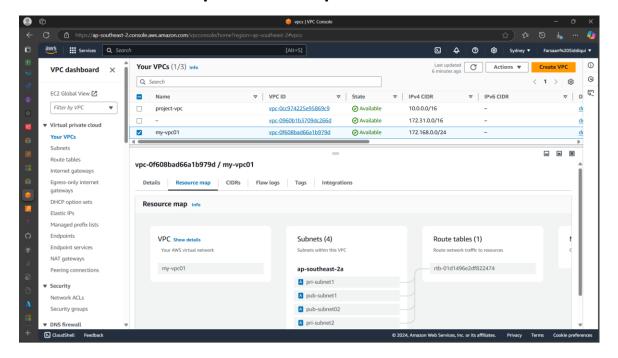
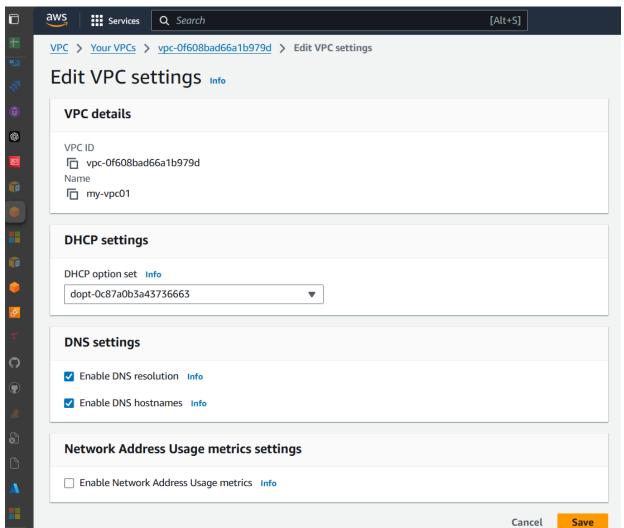
>>Create VPC with 2 private and 2 public subnets.



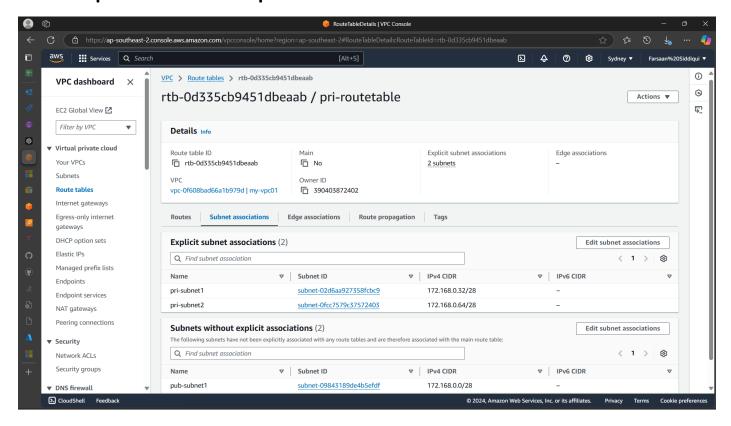
>>Enable DNS Hostname in VPC



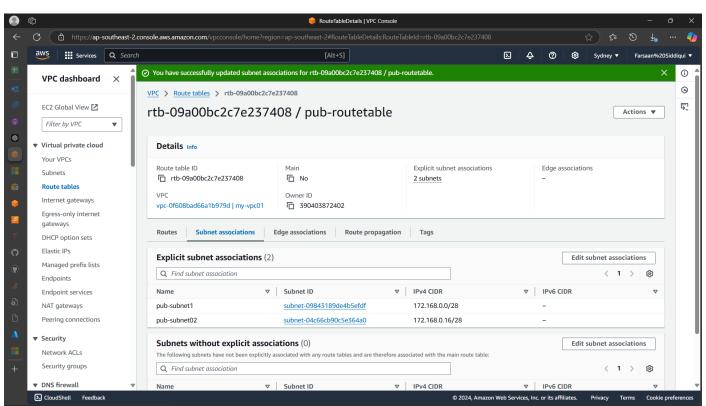
>>Enable Auto Assign Public ip in 2 public subnets

> Subnets > subnet-09843189de4b5efdf >	Edit subnet settings
lit subnet settings Info	
Subnet	
Subnet ID subnet-09843189de4b5efdf	Name pub-subnet1
Auto-assign IP settings Info	ddress to a new primary network interface for an instance in this subnet.
✓ Enable auto-assign public IPv4 address Info	
Enable auto-assign customer-owned IPv4 addre Option disabled because no customer owned pools four	
Resource-based name (RBN) settings pecify the hostname type for EC2 instances in this subnet a	
Enable resource name DNS A record on launch	Info
Enable resource name DNS AAAA record on laur	nch Info
Hostname type Info	
Resource name	
_	> Edit subnet settings
Resource name IP name	> Edit subnet settings
Resource name IP name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info	➤ Edit subnet settings Name □ pub-subnet02
Resource name IP name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet - 04c66cb90c5e364a0 Auto-assign IP settings Info	Name
Resource name IP name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet - 04c66cb90c5e364a0 Auto-assign IP settings Info	Name ☐ pub-subnet02
Resource name IP name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet-04c66cb90c5e364a0 Auto-assign IP settings Info Enable AWS to automatically assign a public IPv4 or IPv6 acceptable in the property of	Name pub-subnet02 address to a new primary network interface for an instance in this subnet.
Resource name IP name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet ID Subnet-04c66cb90c5e364a0 Auto-assign IP settings Info Enable AWS to automatically assign a public IPv4 or IPv6 accepted and IPv4 address Info Enable auto-assign public IPv4 address Info Enable auto-assign customer-owned IPv4 address	Name pub-subnet02 address to a new primary network interface for an instance in this subnet.
Resource name IP name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet ID Subnet-04c66cb90c5e364a0 Auto-assign IP settings Info Enable AWS to automatically assign a public IPv4 or IPv6 accepted auto-assign public IPv4 address Info Enable auto-assign customer-owned IPv4 address Option disabled because no customer owned pools four Resource-based name (RBN) settings	Name pub-subnet02 address to a new primary network interface for an instance in this subnet. The pub-subnet02 The pub
Resource name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet ID Subnet-04c66cb90c5e364a0 Auto-assign IP settings Info Enable AWS to automatically assign a public IPv4 or IPv6 a Enable auto-assign public IPv4 address Info Enable auto-assign customer-owned IPv4 address Option disabled because no customer owned pools for Resource-based name (RBN) settings Specify the hostname type for EC2 instances in this subnet	Name pub-subnet02 address to a new primary network interface for an instance in this subnet. Tess Infound. Info t and optional RBN DNS query settings. Info
Resource name PC > Subnets > subnet-04c66cb90c5e364a0 > Edit subnet settings Info Subnet Subnet ID Subnet-04c66cb90c5e364a0 Auto-assign IP settings Info Enable AWS to automatically assign a public IPv4 or IPv6 a Enable auto-assign customer-owned IPv4 addroption disabled because no customer owned pools for Resource-based name (RBN) settings Specify the hostname type for EC2 instances in this subnet Enable resource name DNS A record on launch	Name pub-subnet02 address to a new primary network interface for an instance in this subnet. Tess Infound. Info t and optional RBN DNS query settings. Info

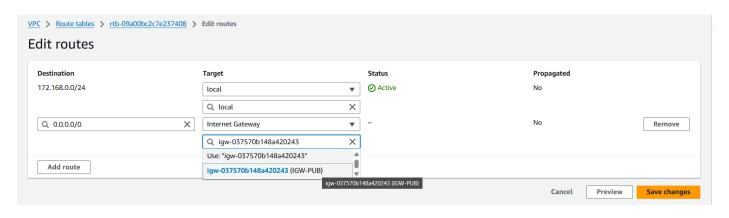
>>Add 2 private subnets in private route table

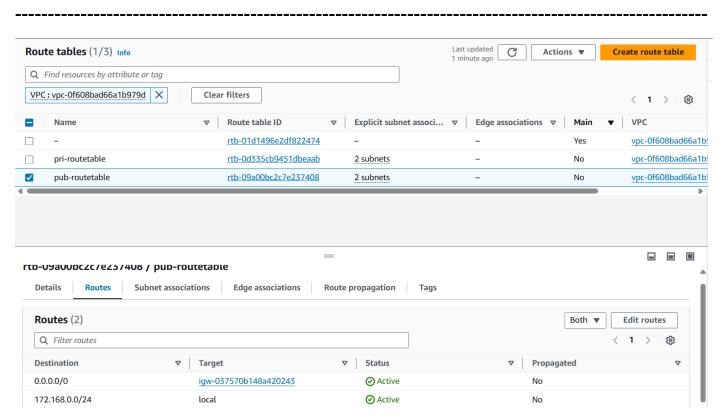


>>Add 2 public subnets in public route table

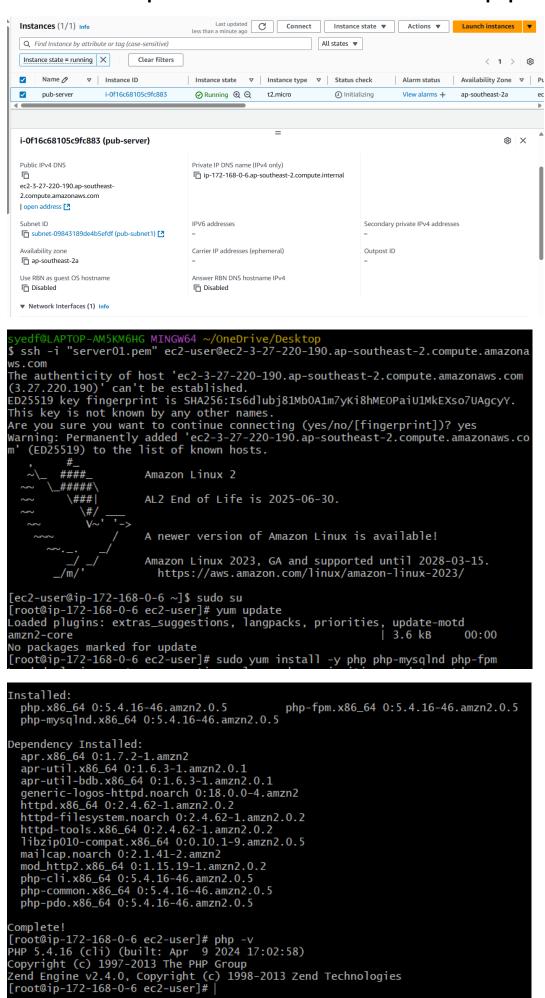


>>Public route table will have the routes to internet and local

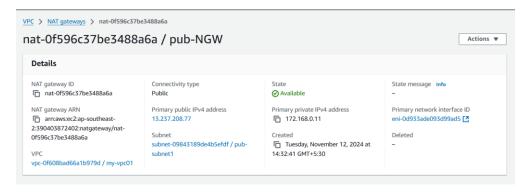




>>Create Ec2 in public subnet with t2micro and install php



>>COnfigure Nat gateway in public subnet and connect to private Instance

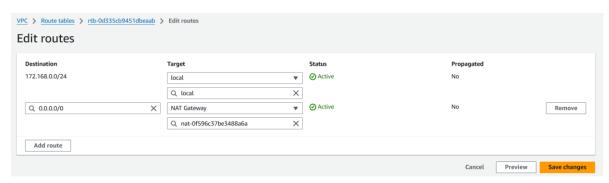


```
syedf@LAPTOP-AM5KM6HG MINGW64 ~/OneDrive/Desktop
$ ssh -i "server01.pem" ec2-user@172.168.0.44
ssh: connect to host 172.168.0.44 port 22: Connection timed out
```

>>Install Apache Tomcat in private ec2 and deploy a sample app.

To access internet o private subnet

Go to routes > private routes > add routes > add the nat gateway that is created.



Update system

Sudo yum install java

Sudo wget <tomcat url>

Extract the zip file then start the service from apache-tomcat-x.x.x/bin/tomcat # vi /etc/systemd/system/tomcat.service

2) Add the below content

[Unit]

Description=Tomcat - instance %i

After=syslog.target network.target[Service]

Type=forkingUser=root

Group=rootExecStart=/opt/apache-tomcat-9.0.78/bin/startup.sh #check the path of startup.sh

ExecStop=/opt/apache-tomcat-9.0.78/bin/shutdown.sh #check the path of shutdown.shRestartSec=10

Restart=always3)Restart Daemon

systemctl daemon-reload4) Start tomcat using systemctl.

systemctl start tomcat

<to start/stop/enable/disable service with systemctl>

>>COnfigure VPC flow logs and store the logs in s3 and cloudwatch.

```
version account-id interface-id srcaddr dstaddr srcport dstport protocol packets bytes start end action log-status
 390403872402 eni-018b134e50e5b494c 3.5.167.100 172.168.0.6 443 37202 6 15 11865 1731409714 1731409716 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 3.5.167.100 37202 443 6 16 2013 1731409714 1731409716 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 99.83.81.77 172.168.0.6 443 35516 6 24 7227 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 99.83.81.77 35516 443 6 14 3729 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 52.95.130.20 172.168.0.6 443 45908 6 2706 3946173 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 52.95.130.20 45908 443 6 250 14015 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 27.124.125.252 0 0 1 1 104 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 162.159.200.1 172.168.0.6 123 48353 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 162.159.200.1 48353 123 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 162.159.200.1 172.168.0.6 123 49269 17 1 76 1731409715 1731409759 ACCEPT OK
2
  390403872402 eni-018b134e50e5b494c 172.168.0.6 162.159.200.1 49269 123 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 220.158.215.20 172.168.0.6 123 40298 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 220.158.215.20 40298 123 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 220.158.215.20 172.168.0.6 123 60031 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 220.158.215.20 60031 123 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 27.124.125.252 172.168.0.6 123 54624 17
                                                                             1 76 1731409715 1731409759 ACCEPT
  390403872402 eni-018b134e50e5b494c 172.168.0.6 27.124.125.252 54624 123 17 1 76 1731409715 1731409759 ACCEPT OK
2
  390403872402 eni-018b134e50e5b494c 194.180.49.70 172.168.0.6 59464 16740 6 2 86 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 194.180.49.70 16740 59464 6 1 40 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 162.159.200.1 172.168.0.6 123 37307 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 162.159.200.1 37307 123 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 180.150.8.191 172.168.0.6 123 60919 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 172.168.0.6 180.150.8.191 60919 123 17 1 76 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c 35.203.211.196 172.168.0.6 52679 48796 6 1 44 1731409715 1731409759 ACCEPT OK
2
  390403872402 eni-018b134e50e5b494c 172.168.0.6 35.203.211.196 48796 52679 6 1 40 1731409715 1731409759 ACCEPT OK
  390403872402 eni-018b134e50e5b494c
                                     20.118.68.107 172.168.0.6 37248 4444 6 1 40 1731409715 1731409759 ACCEPT OF
```

