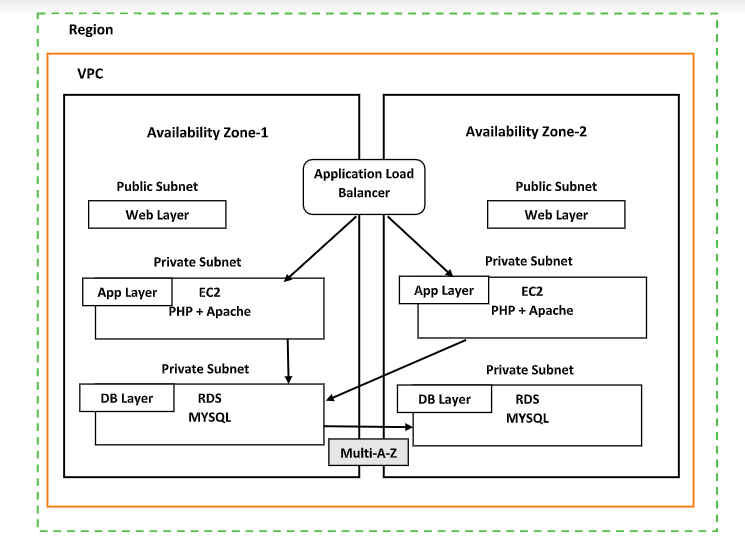
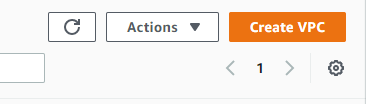
**Assignment #1 (AWS)**

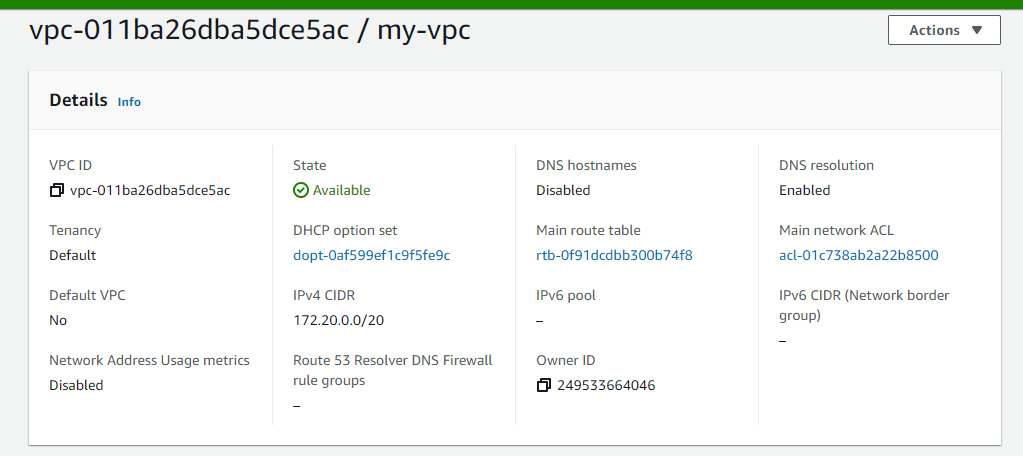
**Group member Name:**

**P19-1652 Hifza Majeed  
 P19-1664 Noman  
 P19-1672 Ahmad**

****

**Step 1: Create a VPC:**



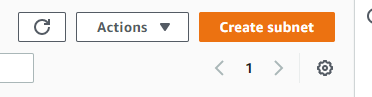


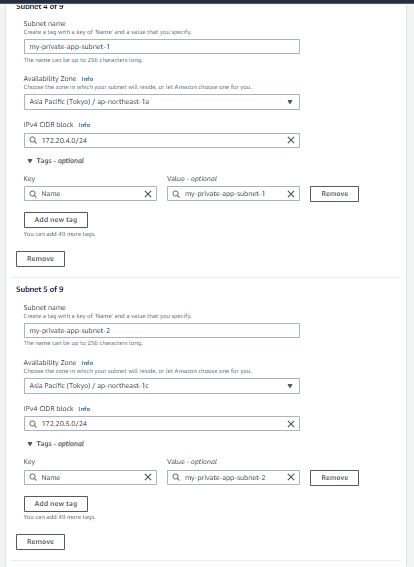
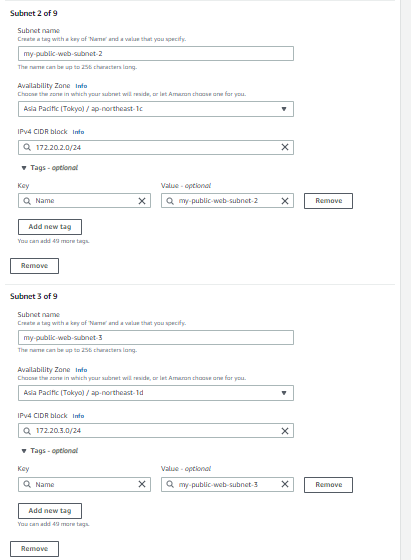
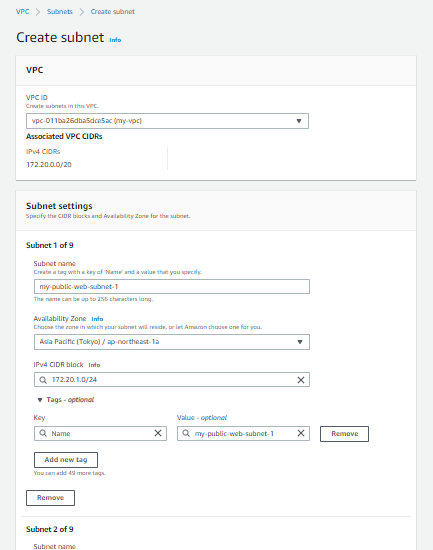
**Step 2: Create Subnet:**

**1. Create 3 public web subnets**

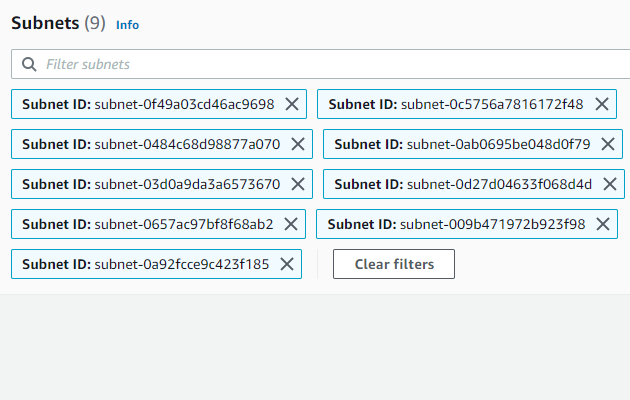
**2. create 3 private app subnets**

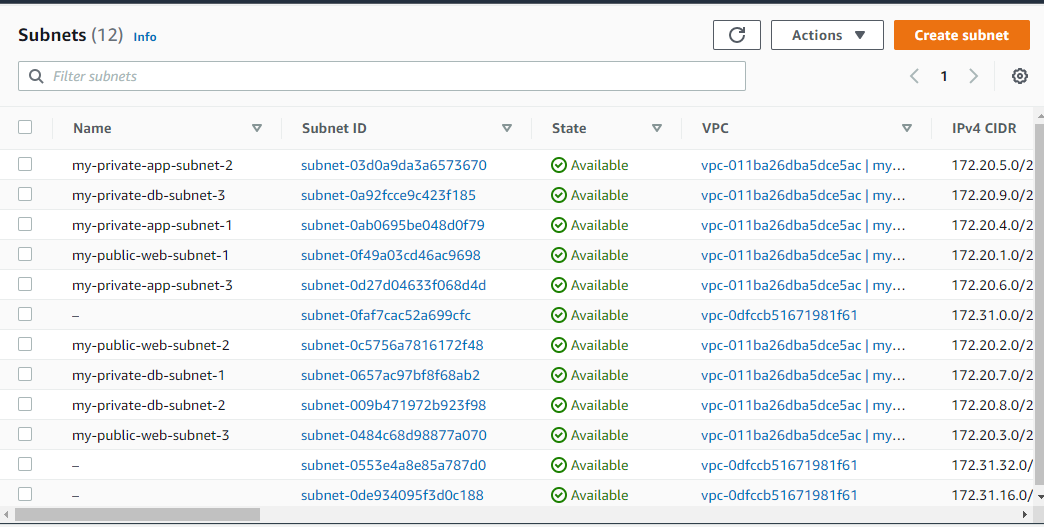
**3.create 3 private DB subnet**



Graphical user interface, application

Description automatically generatedGraphical user interface, application

Description automatically generated



**Step 3: Create a routing table**

1. **Create public web route table**
2. **Create a private app route table**
3. **Create private DB route table**

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

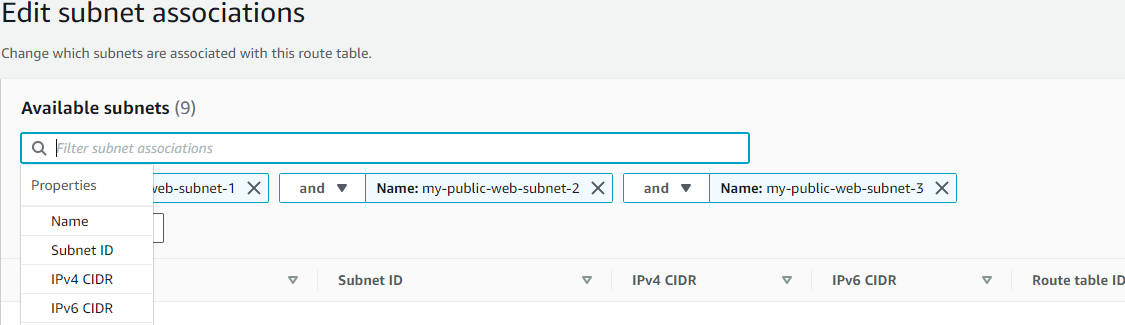
Description automatically generated

Graphical user interface, application

Description automatically generated

**After creating the routing table now to associate with the related subnet:**

**Public web router associated with public web subnet:**

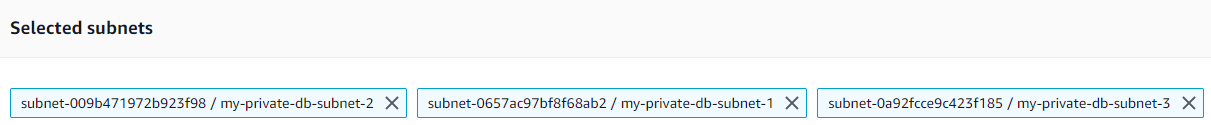


Private app router associated with Private app subnet:

Graphical user interface, text, application

Description automatically generated

**Private db router associated with Private db subnet:**



Graphical user interface, text, application, email

Description automatically generated

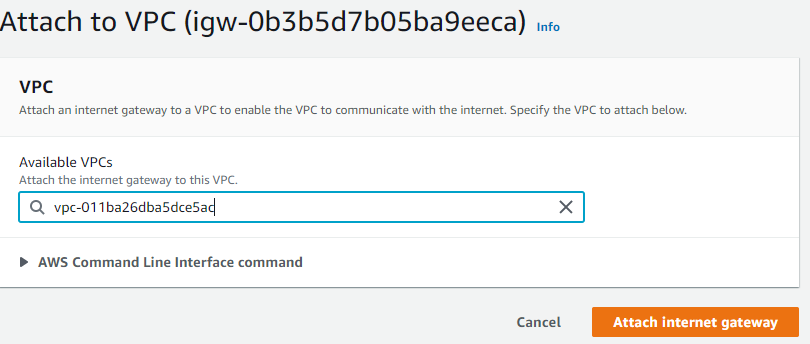
**Step 4: Create Internet gateway:**

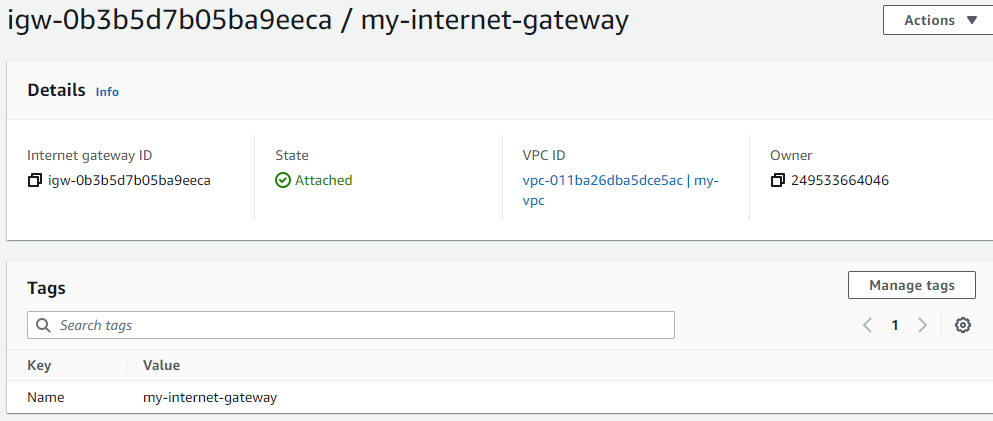


Graphical user interface, text, application, email

Description automatically generated

**After Creating then attached to VPC:**

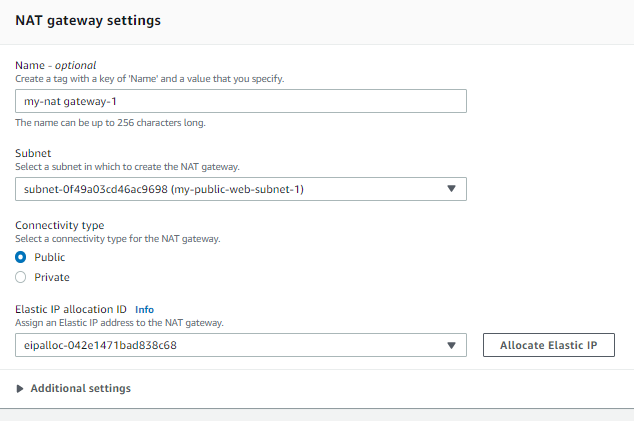




**Step 5: Create NAT gateway:**

Rectangle

Description automatically generated

 Graphical user interface, application

Description automatically generated

**Connect the internet gateway with bublic router:**

Graphical user interface, text, application

Description automatically generated

**Connect the NAT gateway with the private app router:**

Graphical user interface, text, application, email

Description automatically generated

**Connect the NAT gateway with a Private DB router:**

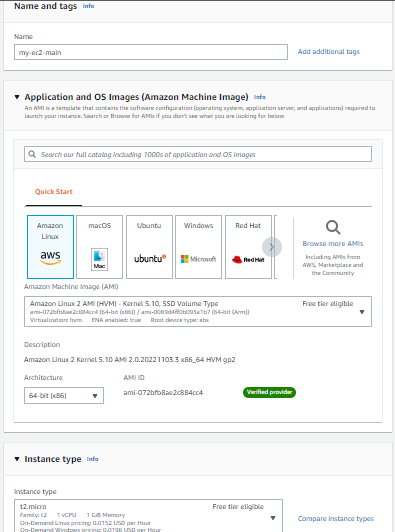
Graphical user interface, text, application, email

Description automatically generated

**Step 6: Create Instances:**

Graphical user interface

Description automatically generated with medium confidence

 Graphical user interface, text, application

Description automatically generated

**Create 3 instances:**

Graphical user interface, application

Description automatically generated

**Step 7: Connect EC2 with the local machine(ubuntu)**

**Text

Description automatically generated**

**Connect public EC2 with Private EC2:**

**Text

Description automatically generated**

**Connect public EC2 with another Private EC2:**

**Text

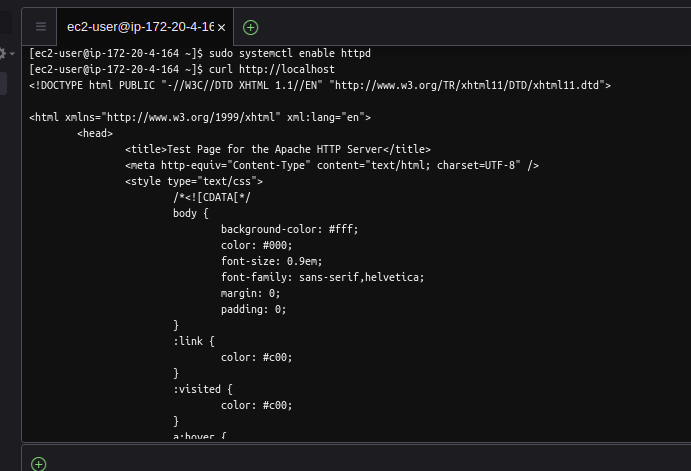
Description automatically generated**

**Step 8: Commands for app server php installment**

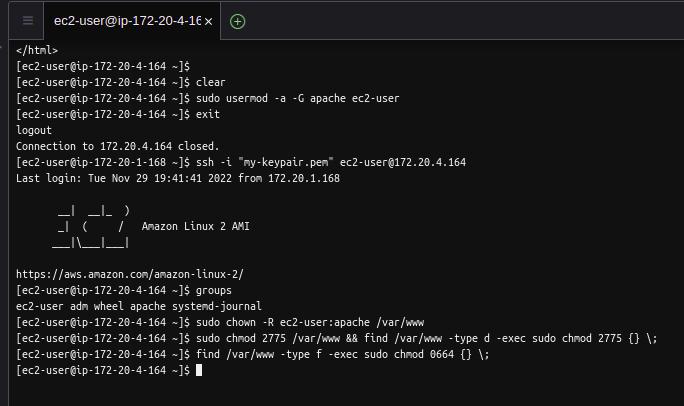
1. sudo yum update -y
2. sudo amazon-linux-extras install -y lamp-mariadb10.2 -php7.2 php7.2
3. sudo yum install -y httpd mariadb-server

Stating services

1. sudo systemctl start httpd
2. sudo systemctl enable httpd
3. curl <http://localhost>

****

**Step 9: Giving permission**

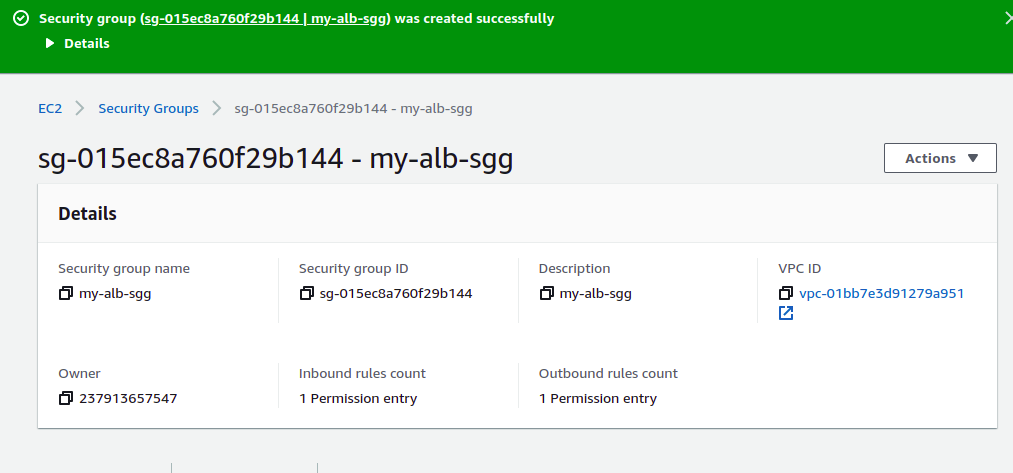
****

**Step 10: Install PHP on my admin**

**Steps**

1. sudo yum install php-mbstring php-xml -y
2. sudo systemctl restart httpd
3. sudo systemctl restart php-fpm
4. cd /var/www/html
5. wget <https://www.phpmyadmin.net/downloads/phpMyAdmin-latest-all-languages.tar.gz>
6. mkdir phpMyAdmin && tar -xvzf phpMyAdmin-latest-all-languages.tar.gz -C phpMyAdmin --strip-components 1
7. rm phpMyAdmin-latest-all-languages.tar.gz
8. sudo systemctl start MariaDB

**Step 11: Load Balancers**

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**Graphical user interface, application

Description automatically generated**

**Step 12:**

**Editing security groups of instances**

**Inbound changes**

**Graphical user interface, text, application, email

Description automatically generated**

**Checking the health state of target groups**

**Graphical user interface, text, application, email

Description automatically generated**

**Copy the DNS NAME of the load balancer and check to work**

**Graphical user interface, application, Word

Description automatically generated**

**Graphical user interface, application, Word

Description automatically generated**

**NOW DATA BASE**

**CREATE SUBNETS**

**Graphical user interface, text, application, email

Description automatically generated**

**Creating database**

**Graphical user interface, application, Teams

Description automatically generated**

**Db security group inbound rules**

**Graphical user interface, application, Word

Description automatically generated**

**File local host to DB**

**Text

Description automatically generated**

**PHP my admin**

**Graphical user interface

Description automatically generated**

**Graphical user interface, text, application

Description automatically generated**