Question 1

Step 1 :
Create an EC2 instance and choose AMazon Linux AMI.

Step 2 :
Choose instance type t2 micro

Step 3 :
In the configure instance detail tab enable the auto assign public IP and add the following code in the Advance Detail user data body

```
#!/bin/bash
yum update -y
amazon-linux-extras install -y lamp-mariadb10.2-php7.2 php7.2
yum install -y httpd mariadb-server
systemctl start httpd
systemctl enable httpd
usermod -a -G apache ec2-user
chown -R ec2-user:apache /var/www
chmod 2775 /var/www
find /var/www -type d -exec chmod 2775 {} \;
find /var/www -type f -exec chmod 0664 {} \;
echo "<?php phpinfo(); ?>" > /var/www/html/phpinfo.php
```

Step 4 :
Add storage and tags as per the need.

Step 5 :
Configure the security group for the instance by allowing HTTP port to the instance.

Step 6 :
Review and launch the instance.

Step 7 :
Connect to your instance with following command
ssh -i "ketavbhatt-PE.pem" ec2-user@ec2-3-87-219-152.compute-1.amazonaws.com

Step 8 :
Command ‘sudo service httpd start’ is to start the apache server.

Step 9 :
Add index .html in html folder

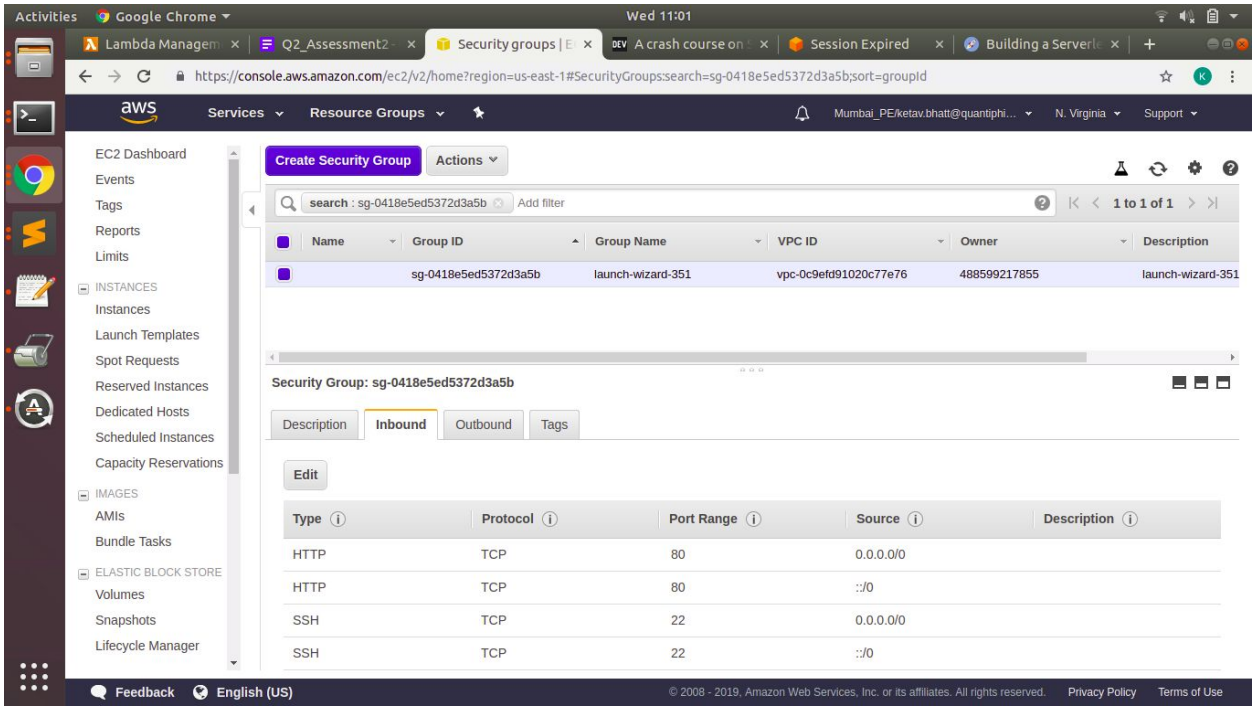
cd /var/www/html
nano index.html
Hence we have added an index.html file in our EC2 instance.

Step 10 :
Attach Auto scaling group to the instance.
Create a new Auto Scaling Group by giving name to it.

Step 11 :
Create a new Load Balancer and a new target group.

Step 12 :
Now add target to your Auto scaling group which is already connected to your instance.

Security Group Rules:



Listener Configuration :