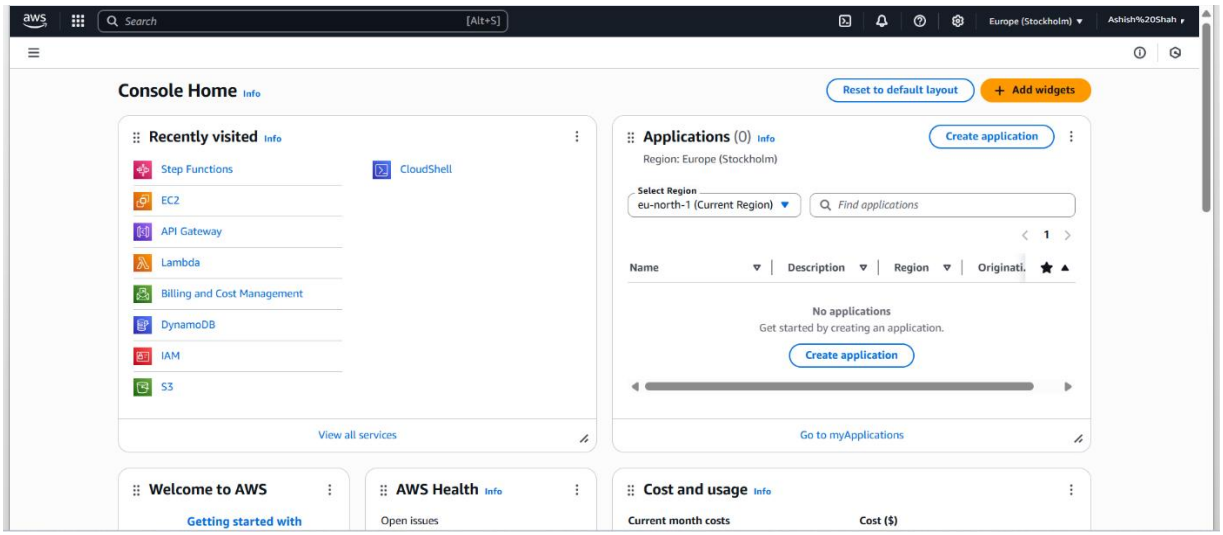
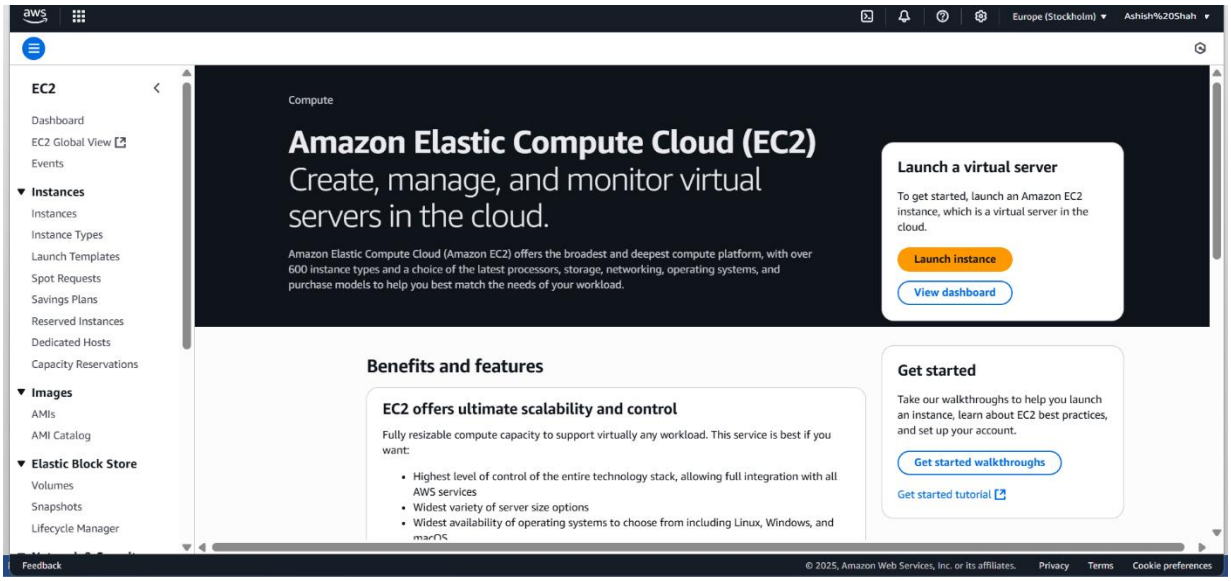
PROGRAM 6: Migrating a Web Application to Docker Containers

Steps for creating an EC2 Instance:

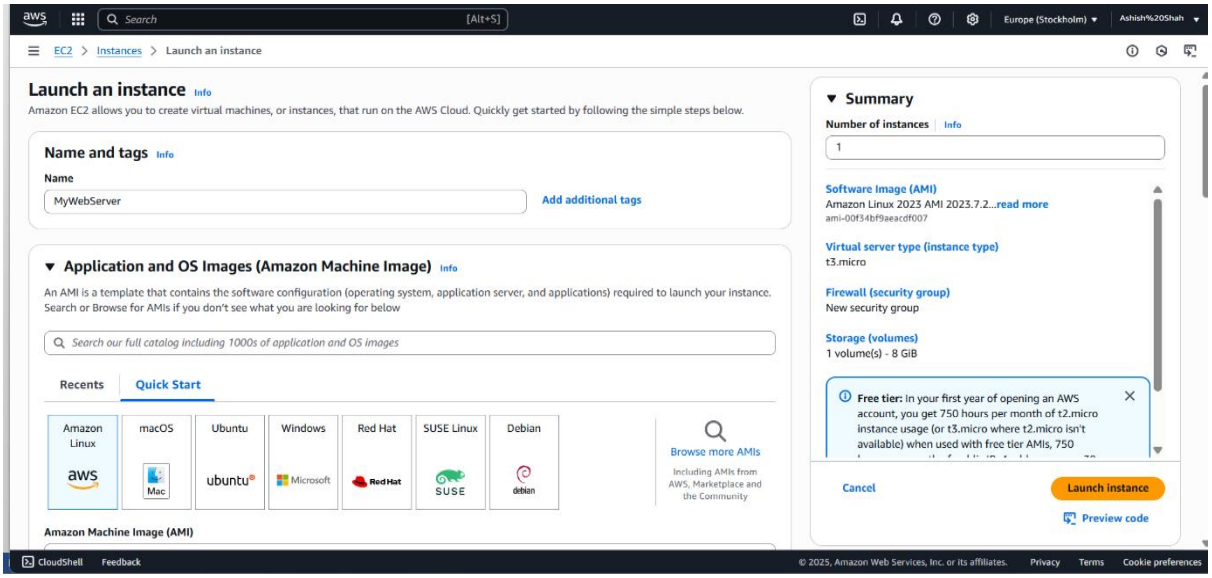
Step 1: Login to AWS Account.



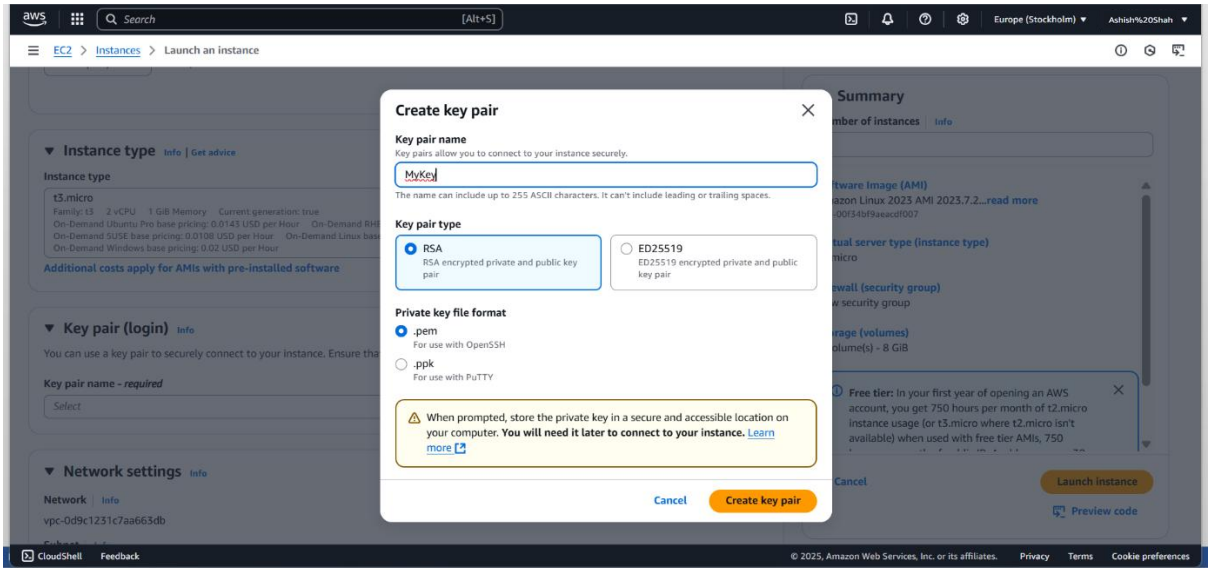
Step 2: Open Amazon EC2 dashboard and click on Launch Instance.



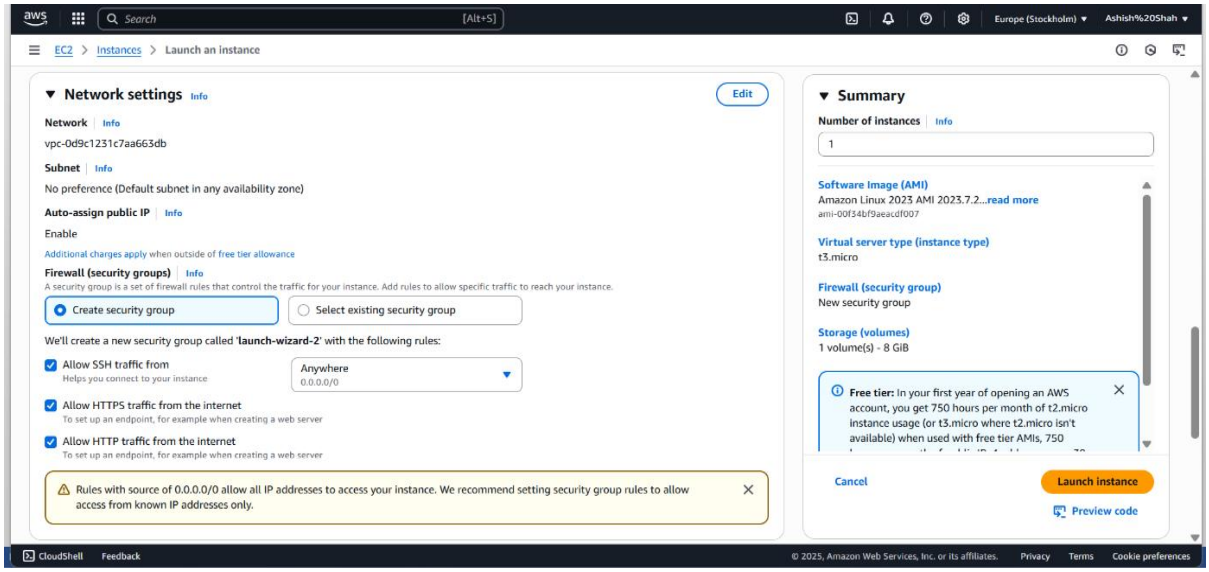
Step 3: Give instance a Name (e.g. MyWebServer) and Select Amazon Linux as Instance Type.



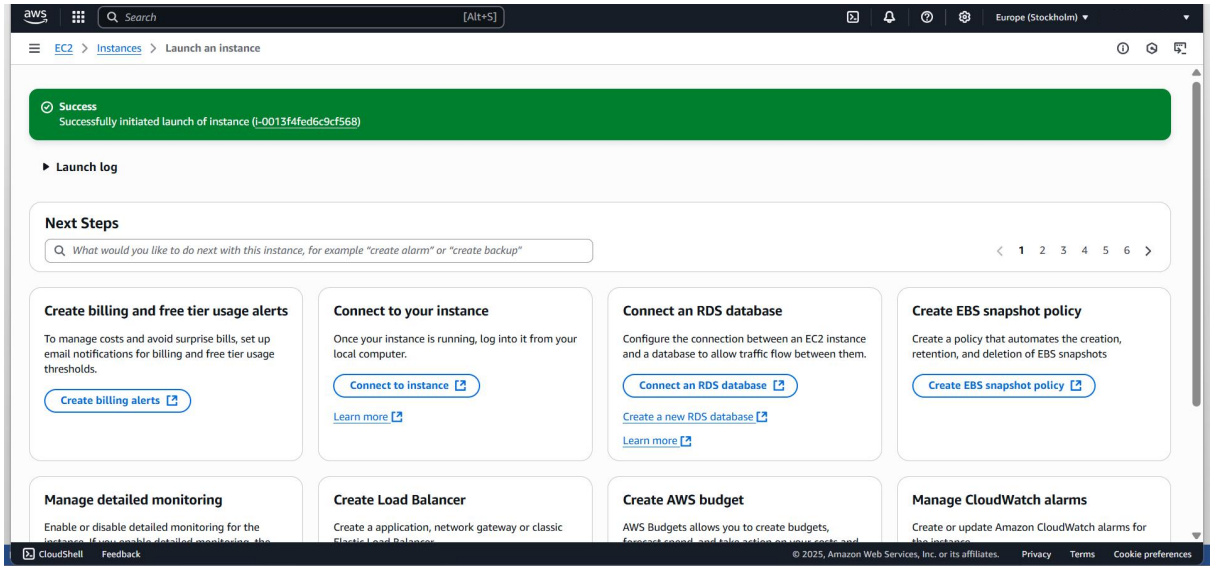
Step 4: Select Key pair or create new key pair.



Step 5: Under Firewall Allow HTTPS and HTTP traffic from Internet and click on Launch Instance.

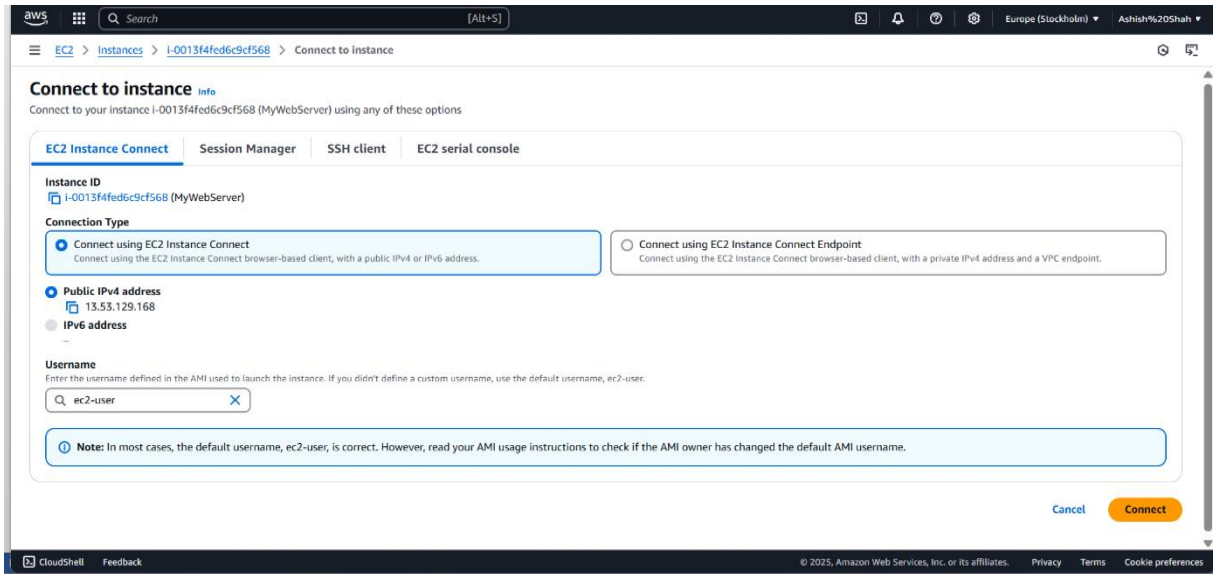


Step 6: A successful launch initiation notification is displayed.

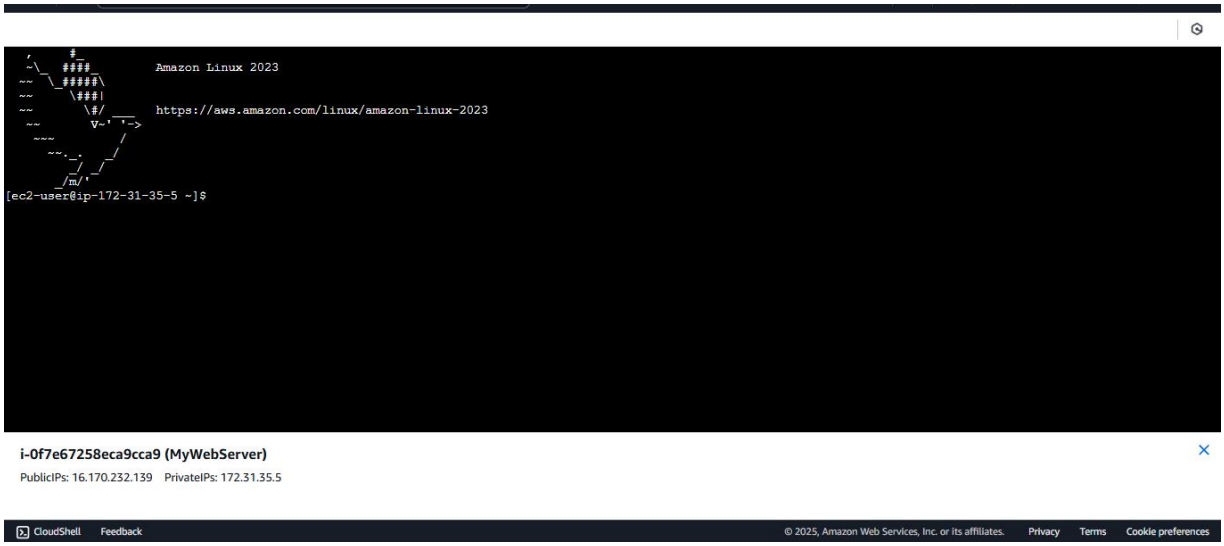


Steps for migrating a Web Application to Dockers:

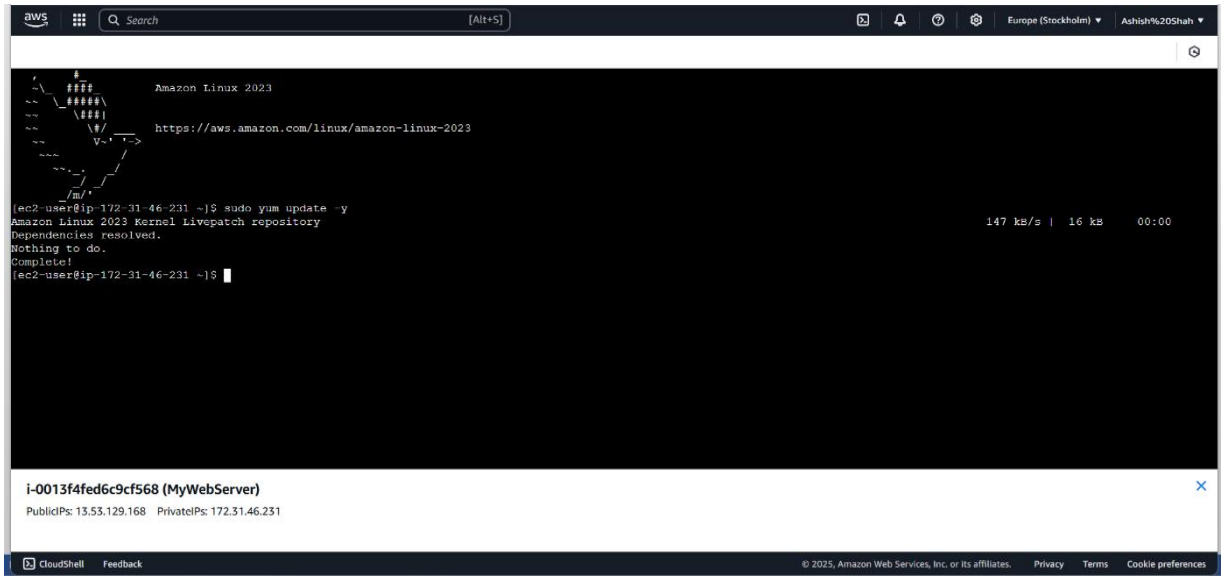
Step 1: Connect to instance created (e.g. MyWebServer).



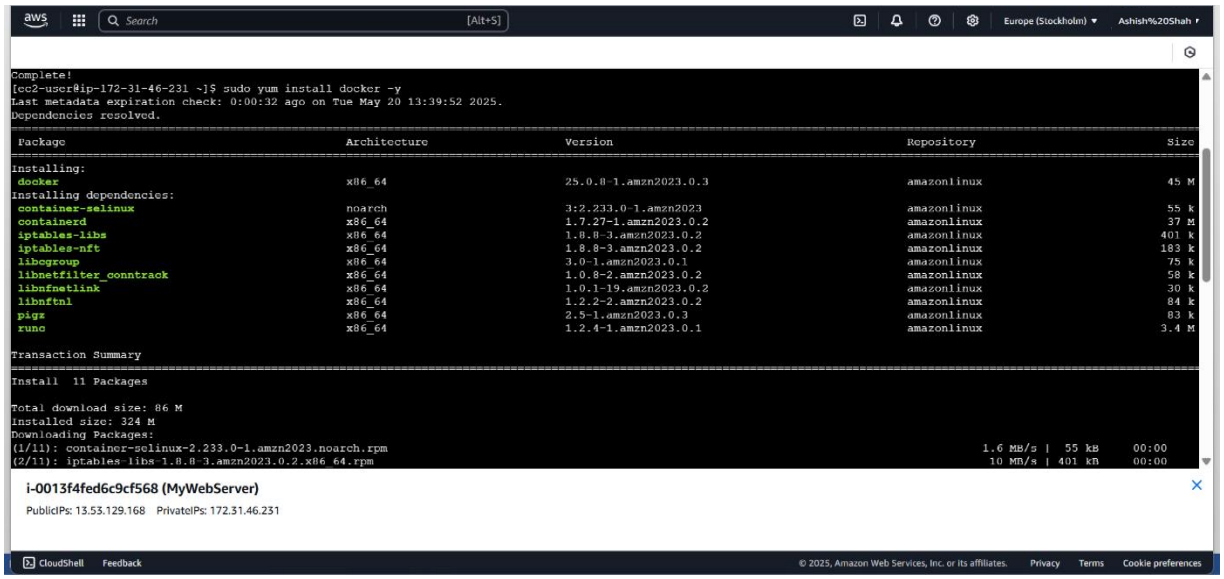
Step 2: Amazon Linux Shell is opened.

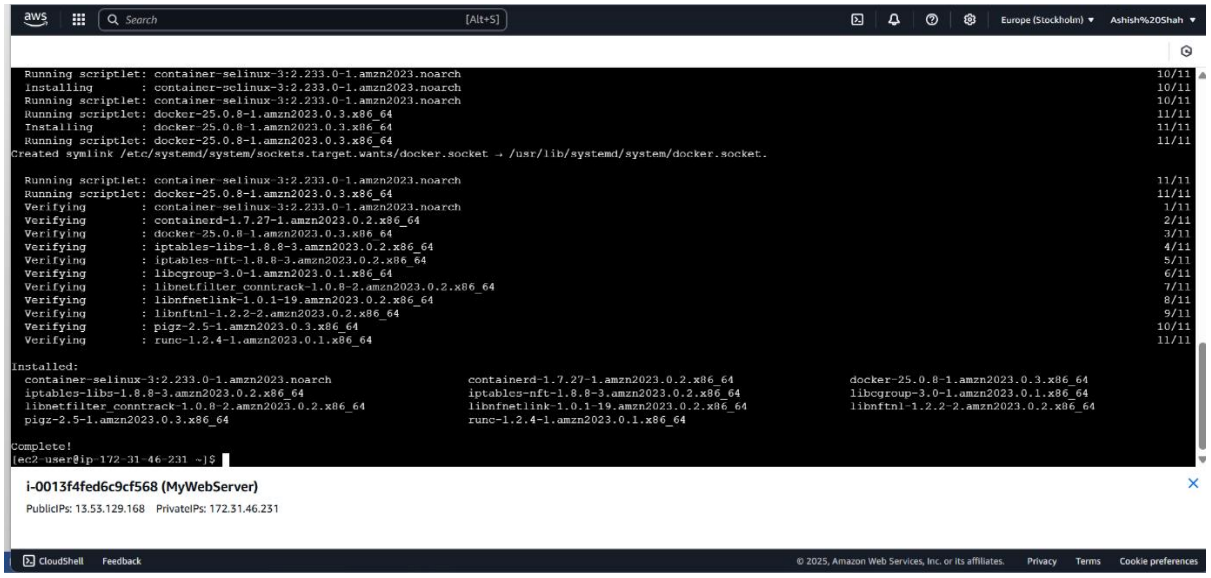


Step 3: Run 'sudo yum update -y' command to update or get newer features if available.

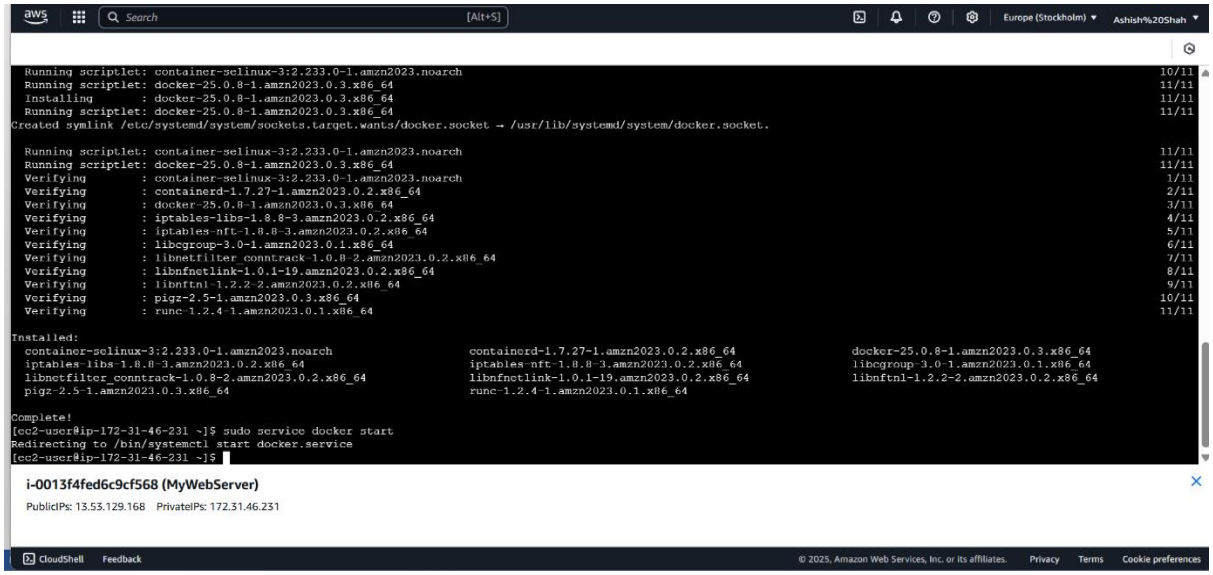


Step 4: Run 'sudo yum install docker -y' command to install Docker application on our instance.

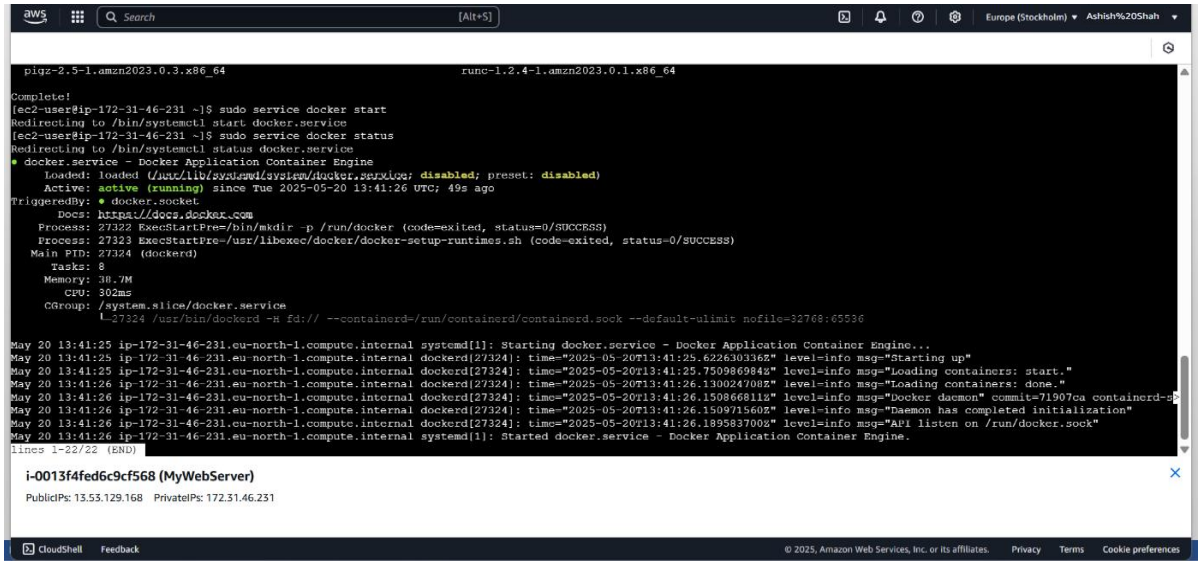




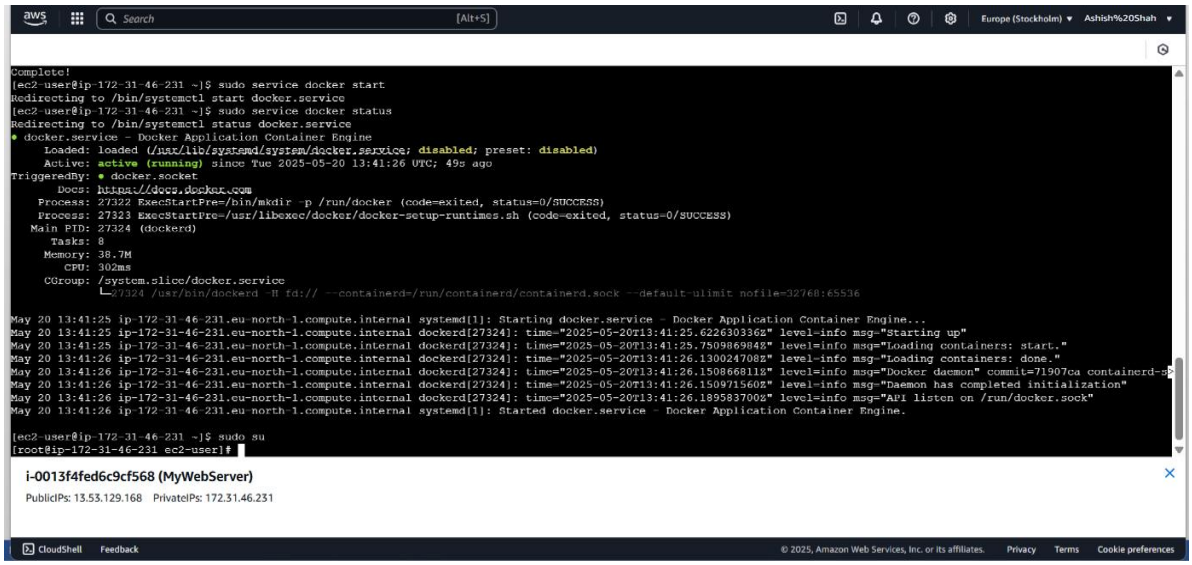
Step 5: Run 'sudo service docker start' command to start docker service on our instance.



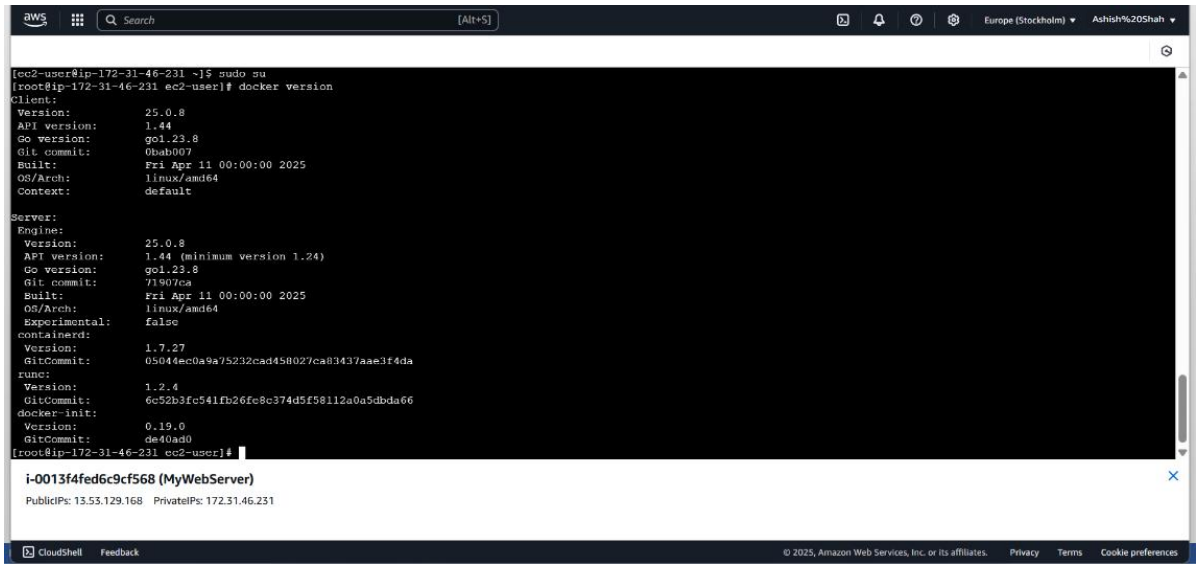
Step 6: Run 'sudo service docker status' command to check if Docker is running.



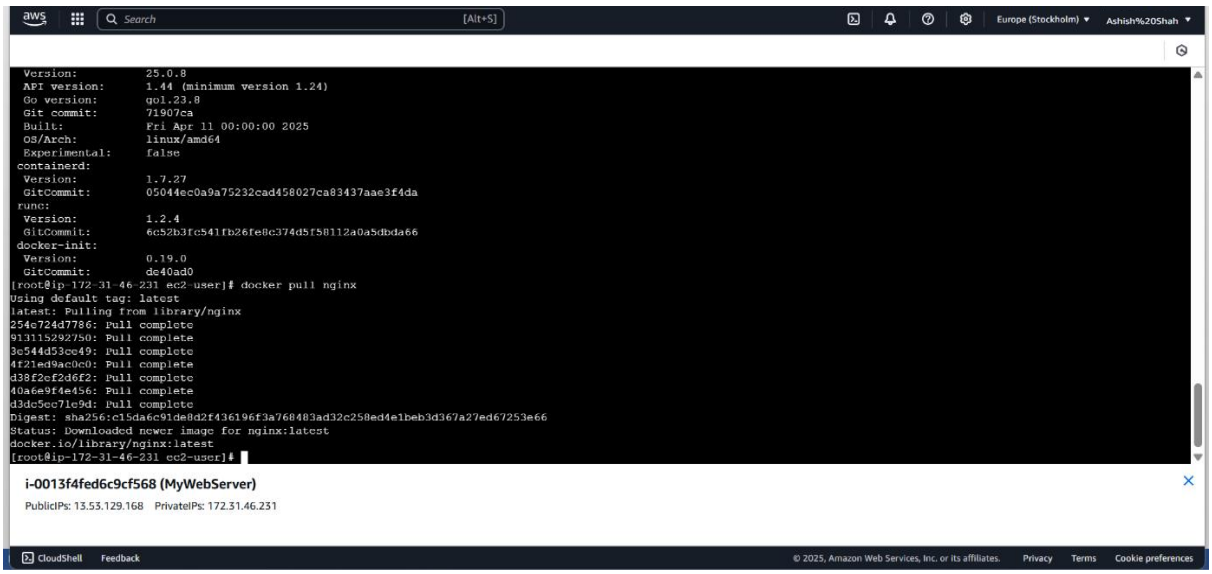
Step 7: Run 'sudo su' command to go to root directory on our instance.



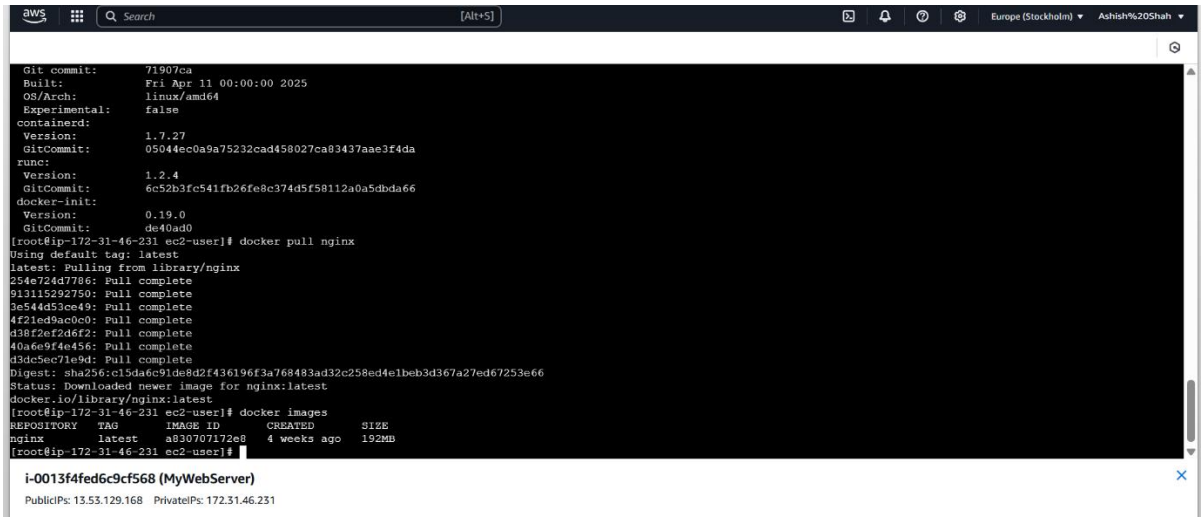
Step 8: Run 'docker version' command to check version of Docker installed.



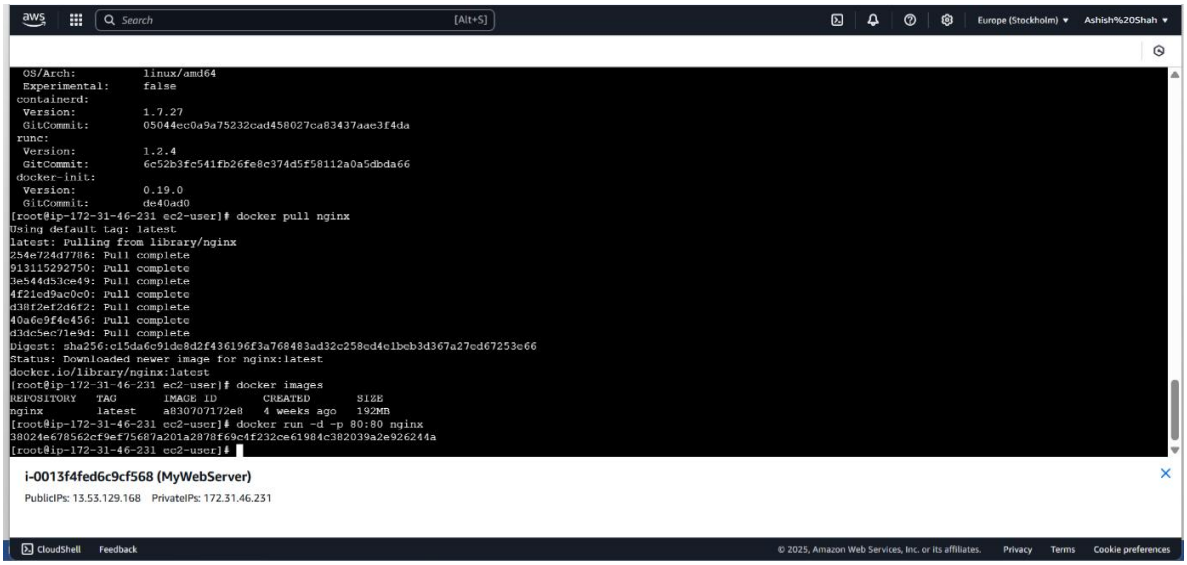
Step 9: Run 'docker pull nginx' command to download the nginx web application from Docker's repository.



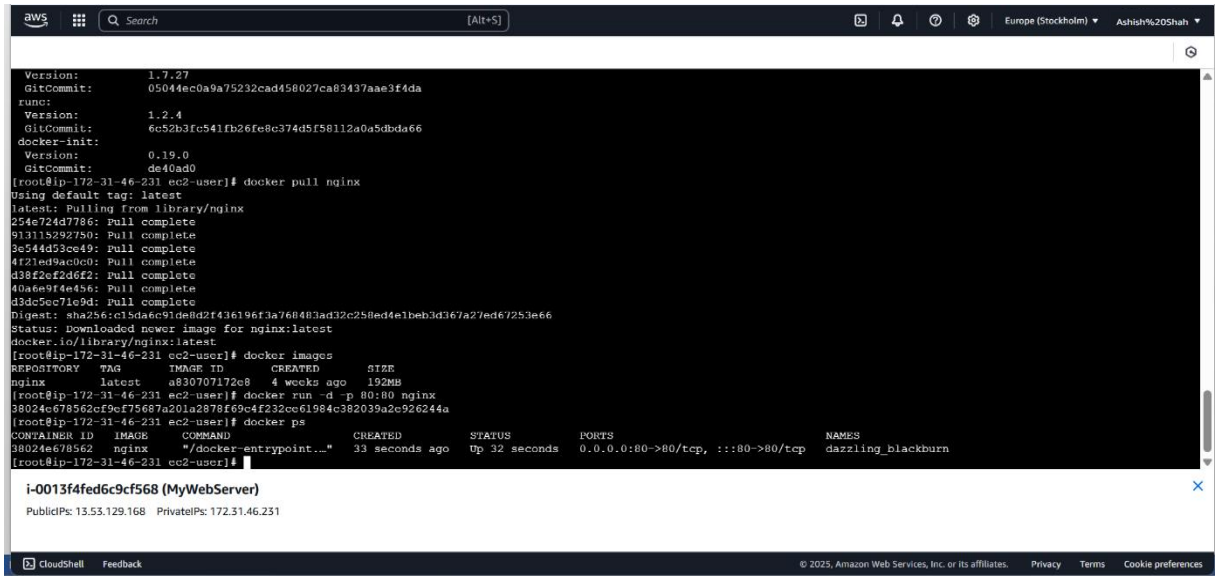
Step 10: Run 'docker images' command to see downloaded application images.



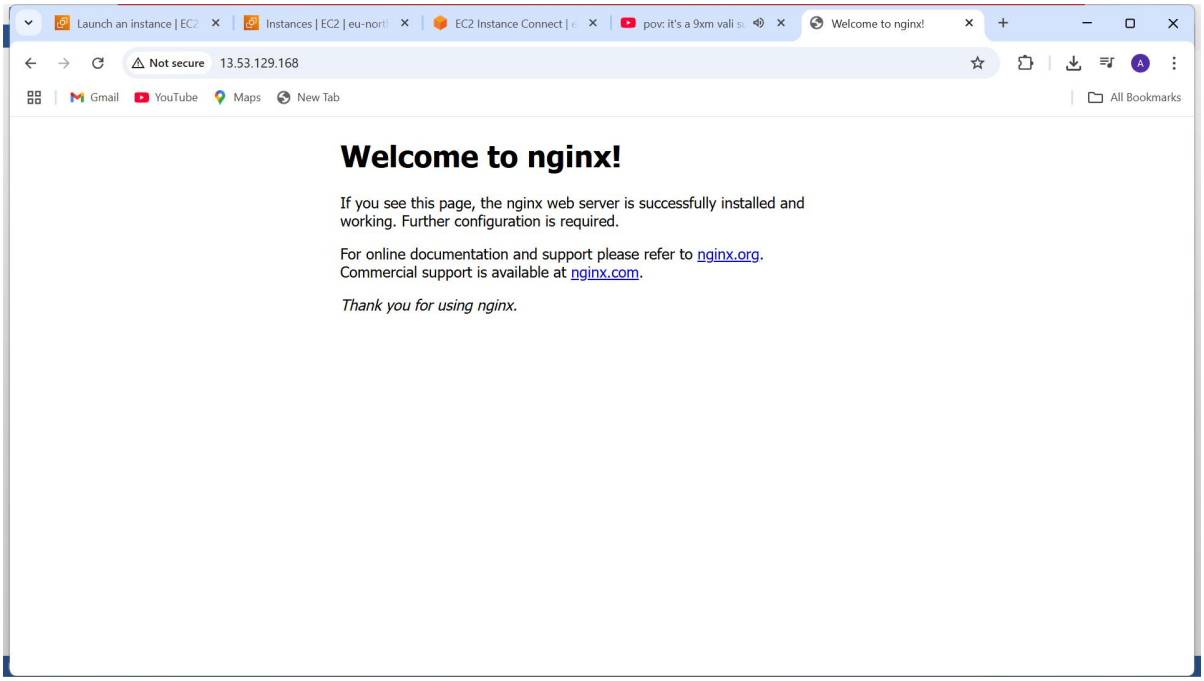
Step 11: Run 'docker run -d -p 80:80 nginx' command to start the nginx application.



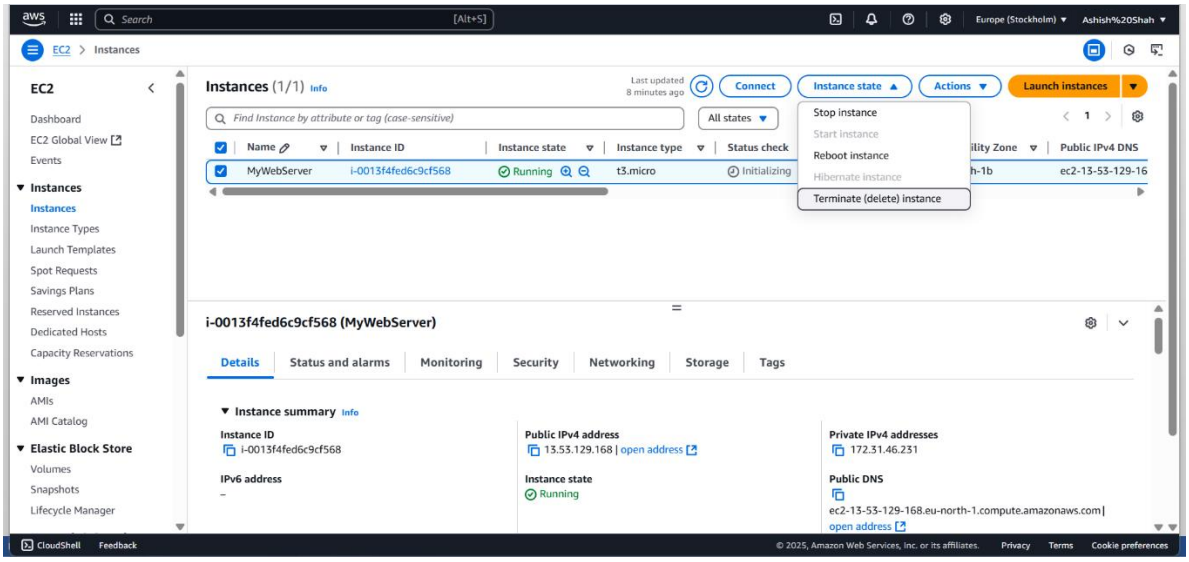
Step 12: Run 'docker ps' command to check the status of running processes under docker.



Step 13: Copy the public IP Address (e.g. 13.53.129.168) to a new tab to view the running nginx application.



Step 14: Delete the EC2 instance after execution by clicking on Terminate(delete) instance.



Step 15: Indicates the successful termination of the instance. Also delete the corresponding key pair and Security groups associated with this instance.

User can sign-out of the AWS account after these steps.