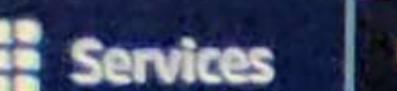


Module-3: Docker - I Assignment - 3

You have been asked to:

- Use the saved image in the previous assignment
 - Upload this image on Dockerhub
 - On a separate machine pull this dockerhub image, and launch it on port 80
 - Start the apache2 service
 - Verify if you are able to see the apache2 service
-



Search

2

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V. Viro

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ERMA

```
ubuntu@ip-172-31-31-157:~$ sudo docker images
REPOSITORY      TAG          IMAGE ID      CREATED       SIZE
assignment2     latest        9eee48ae9203   24 hours ago  226MB
ubuntu          latest        74f2314a03de   13 days ago   77.8MB
ubuntu@ip-172-31-31-157:~$
```

Wasm is a fast, light alternative to Linux containers – try it out today with the Docker+Wasm Beta.



 Search Docker Hub

Explore Repositories Organizations Help ▾

Upgrade



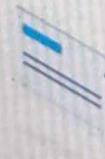
vaibhavverma01

Welcome to Docker

Download the desktop application

[Download for Windows](#)

Also available for Mac and Linux



Create a Repository

Push container images to a repository
Docker Hub.



Docker Hub Basic

Watch the guide on how to create and push your first image into a Docker Hub repository.

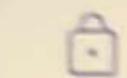


Language-Specific Guides

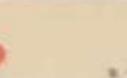
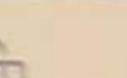
Learn how to containerize language-specific applications using Docker.

Access the world's largest library of container images





<https://us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0cdc547b0c1f3000d&osUser=ubuntu®ion=us-east-1&ssh...>



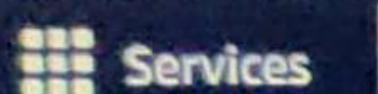
 Search



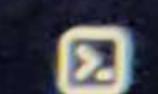
N. V. I. R.

VAIBHAV VERMA

```
ubuntu@ip-172-31-31-157:~$ sudo docker images
REPOSITORY      TAG      IMAGE ID      CREATED       SIZE
assignment2      latest   9eee48ae9203  24 hours ago  228MB
ubuntu          latest   74f2314a03de  13 days ago   77.8MB
ubuntu@ip-172-31-31-157:~$ sudo docker tag 9eee48ae9203 vaibhavverma01/testing2
ubuntu@ip-172-31-31-157:~$
```



 Search



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nia ▼ VAIBHAV VERMA ▼

```
ubuntu@ip-172-31-31-157:~$ sudo docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://hub.docker.com to create one.
Username: vaibhavverma01
```

Password:

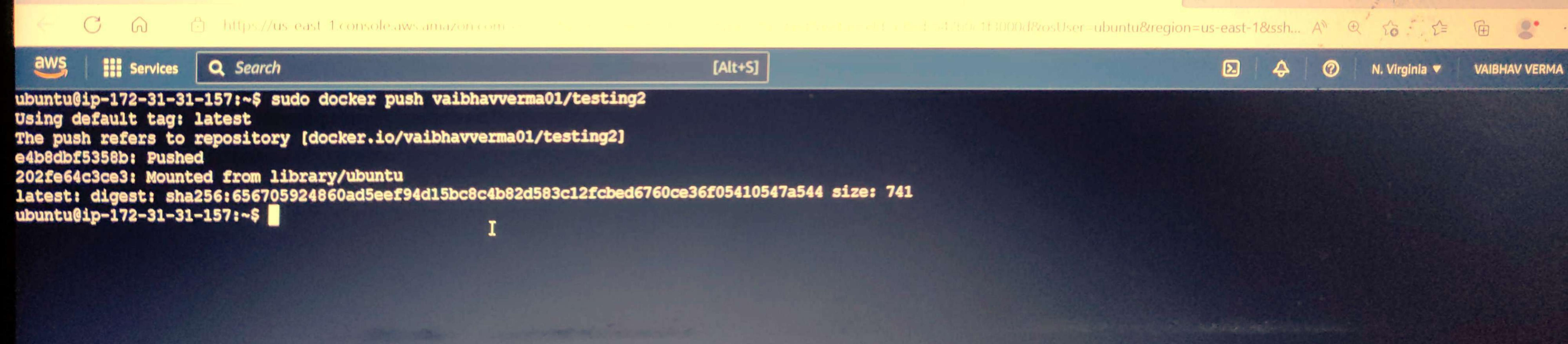
WARNING! Your password will be stored unencrypted in /root/.docker/config.json.

Configure a credential helper to remove this warning. See [man git-credential](#).

<https://docs.docker.com/engine/reference/commandline/login/#credentials-store>

Login Succeeded

ubuntu@ip-172-31-31-157:~\$



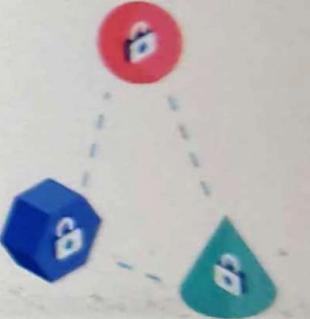
https://hub.docker.com

Wasm is a fast, light alternative to Linux containers – try it out today with the Docker+Wasm Beta.

docker hub Search Docker Hub Explore Repositories Organizations Help Upgrade vaibhavverma01

vaibhavverma01 Search by repository name All Content Create repository

vaibhavverma01 / testing2 Contains: Image | Last pushed: 2 minutes ago Inactive 0 Public



Create an Organization
Manage Docker Hub repositories
with your team



Community All-Hands:

Wasm is a fast, light alternative to Linux containers – try it out today with the Docker+Wasm Beta.



Search Docker Hub

Explore Repositories Organizations Help

Upgrade



vaibhavverma01

Repositories

testing2

General

Using 0 of 1 private repositories. [Get more](#)

General

Tags

Builds

Collaborators

Webhooks

Settings



Add a short description for this repository

Update

The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results

vaibhavverma01 / testing2

Description

This repository does not have a description

Last pushed: 3 minutes ago

Docker commands

Public View

To push a new tag to this repository,

`docker push vaibhavverma01/testing2:tagname`

Tags

This repository contains 1 tag(s)

IMAGE INSIGHTS INACTIVE

All tags

Tag

OS

Type

Pulled

Pushed

latest

Image

3 minutes ago

[See all](#)

[Go to Advanced Image Management](#)

Automated Builds

Manually pushing images to Hub? Connect your account to GitHub or Bitbucket to automatically build and tag new images whenever your code is updated, so you can focus your time on creating.

Available with Pro, Team and Business subscriptions. [Read more](#)

Upgrade

Instances (1/2) [Info](#)

Find instance by attribute or tag (case-sensitive)

C Connect Instance state Actions Launch instances

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	
Docker-test	i-0cdc547b0c1f3000d	<input checked="" type="checkbox"/> Running		t2.micro	<input checked="" type="checkbox"/> 2/2 checks passed	No alarms	us-east-1a
Docker-test2	i-06e788e75245c27f8	<input checked="" type="checkbox"/> Running		t2.micro	<input checked="" type="checkbox"/> 2/2 checks passed	No alarms	us-east-1c

Instance: i-06e788e75245c27f8 (Docker-test2)

[Details](#) [Security](#) [Networking](#) [Storage](#) [Status checks](#) [Monitoring](#) [Tags](#)

Instance summary [Info](#)

Instance ID

[i-06e788e75245c27f8 \(Docker-test2\)](#)

Public IPv4 address

[3.237.82.15 | open address](#)

Private IPv4 addresses

[172.31.15.107](#)

IPv6 address

-

Instance state

Running

Public IPv4 DNS

[ec2-3-237-82-15.compute-1.amazonaws.com | open address](#)

Hostname type

IP name: ip-172-31-15-107.ec2.internal

Private IP DNS name (IPv4 only)

[ip-172-31-15-107.ec2.internal](#)

Elastic IP addresses

-

Answer private resource DNS name

IPv4 (A)

Instance type

t2.micro

AWS Compute Optimizer finding

Auto-assigned IP address

VPC ID

ubuntu@ip-172-31-15-107:~\$ sudo apt update

```
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [119 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [107 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [945 kB]
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [204 kB]
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [13.6 kB]
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [679 kB]
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [106 kB]
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [584 B]
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [884 kB]
Get:18 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [689 kB]
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [175 kB]
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [18.0 kB]
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [9652 B]
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [3260 B]
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [444 B]
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [40.7 kB]
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [9800 B]
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [392 B]
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
```

i-06e788e75245c27f8 (Docker-test2)

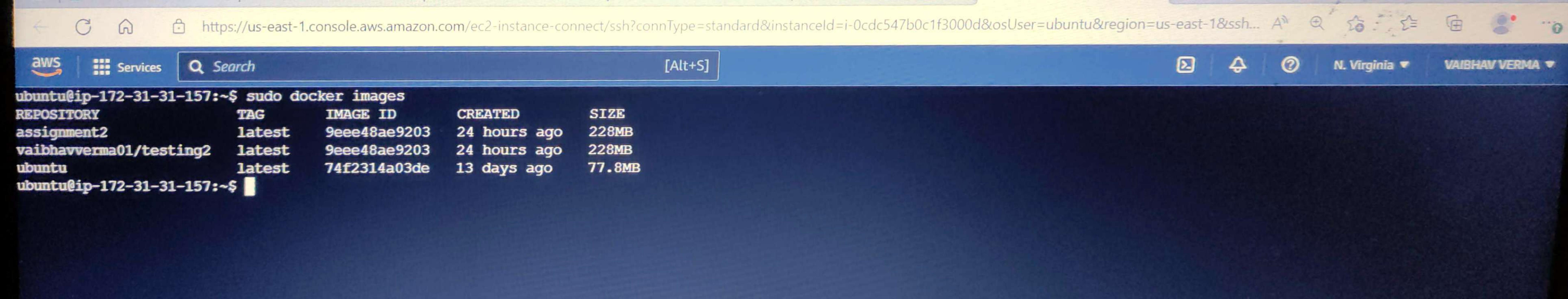
Public IPs: 3.237.82.15 Private IPs: 172.31.15.107

ubuntu@ip-172-31-15-107:~\$ sudo apt install docker.io -y
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
bridge-utils containerd dns-root-data dnsmasq-base pigz runc ubuntu-fan
Suggested packages:
ifupdown aufs-tools cgroupfs-mount | cgroup-lite debootstrap docker-doc rinse zfs-fuse | zfsutils
The following NEW packages will be installed:
bridge-utils containerd dns-root-data dnsmasq-base docker.io pigz runc ubuntu-fan
0 upgraded, 8 newly installed, 0 to remove and 49 not upgraded.
Need to get 72.4 MB of archives.
After this operation, 287 MB of additional disk space will be used.
Get:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 pigz amd64 2.6-1 [63.6 kB]
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 bridge-utils amd64 1.7-1ubuntu3 [34.4 kB]
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 runc amd64 1.1.4-0ubuntu1~22.04.1 [4241 kB]
Get:4 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 containerd amd64 1.6.12-0ubuntu1~22.04.1 [34.4 kB]
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/main amd64 dns-root-data all 2021011101 [5256 B]
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 dnsmasq-base amd64 2.86-1.1ubuntu0.1 [354 kB]
Get:7 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 docker.io amd64 20.10.21-0ubuntu1~22.04.2 [33.2 kB]
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 ubuntu-fan all 0.12.16 [35.2 kB]
Fetched 72.4 MB in 1s (50.1 MB/s)
Preconfiguring packages ...
Selecting previously unselected package pigz.
(Reading database ... 63605 files and directories currently installed.)
Preparing to unpack .../0-pigz_2.6-1_amd64.deb ...
Unpacking pigz (2.6-1) ...
Selecting previously unselected package bridge-utils.

i-06e788e75245c27f8 (Docker-test2)

Public IPs: 3.237.82.15 Private IPs: 172.31.15.107

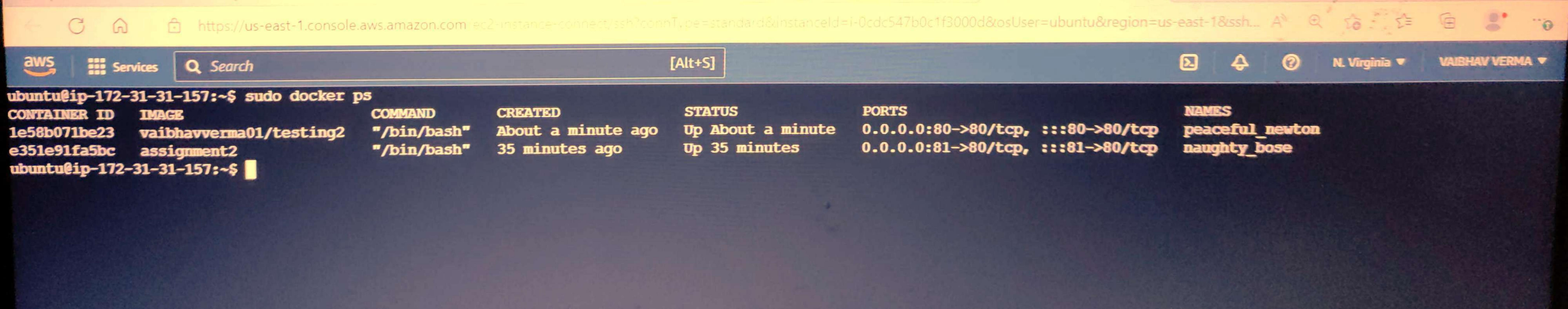
```
ubuntu@ip-172-31-31-157:~$ sudo docker pull vaibhavverma01/testing2
Using default tag: latest
latest: Pulling from vaibhavverma01/testing2
Digest: sha256:656705924860ad5eef94d15bc8c4b82d583c12fcbed6760ce36f05410547a544
Status: Image is up to date for vaibhavverma01/testing2:latest
docker.io/vaibhavverma01/testing2:latest
ubuntu@ip-172-31-31-157:~$ █
```

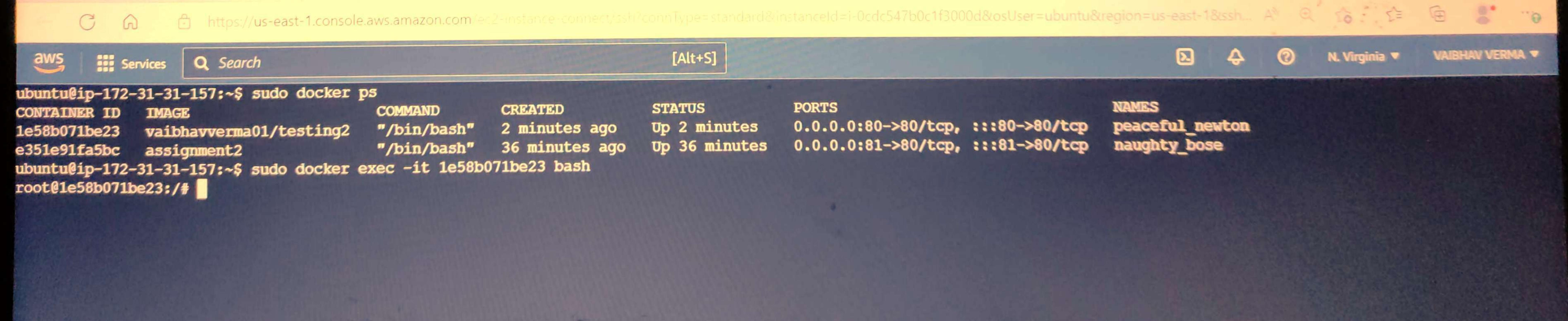




```
aws | Services | Search [Alt+S] | N. Virginia | VAIBHAV VERMA | 🔍 | ⚡ | ? | [Alt+I]

ubuntu@ip-172-31-31-157:~$ sudo docker run -itd -p 80:80 vaibhavverma01/testing2
1e58b071be231d6c2a9c516439a361a1752de8a678da04a3eb87a61caf72e12b
ubuntu@ip-172-31-31-157:~$ █
```





https://us-east-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0cdc547b0c1f3000d&osUser=ubuntu®ion=us-east-1&ssh... A 🔍 ⚡ 🌐 ⚙️ 🌐 🌐

aws Services Search [Alt+S] N. Virginia VAIBHAV VERMA

```
root@1e58b071be23:/# service apache2 status
 * apache2 is not running
root@1e58b071be23:/# service apache2 start
 * Starting Apache httpd web server apache2
AH00558: apache2: Could not reliably determine the server's fully qualified domain name, using 172.17.0.3. Set the 'ServerName' directive globally to suppress this message
 *
root@1e58b071be23:/# service apache2 status
 * apache2 is running
root@1e58b071be23:/# ]
```

Instances (1/2) Info

Connect

Instance state ▾

Actions ▾

Launch instances

< 1 >

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
<input type="checkbox"/> Docker-test	i-0cdc547b0c1f3000d	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a
<input checked="" type="checkbox"/> Docker-test2	i-06e788e75245c27f8	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c

Instance: i-06e788e75245c27f8 (Docker-test2)

[Details](#) [Security](#) [Networking](#) [Storage](#) [Status checks](#) [Monitoring](#) [Tags](#)
▼ Instance summary Info

Instance ID

 i-06e788e75245c27f8 (Docker-test2)

IPv6 address

-

Hostname type

IP name: ip-172-31-15-107.ec2.internal

Answer private resource DNS name

IPv4 (A)

Auto-assigned IP address

Public IPv4 address copied

 3.237.82.15 | open address

Instance state

Running

Private IP DNS name (IPv4 only)

 ip-172-31-15-107.ec2.internal

Instance type

t2.micro

Private IPv4 addresses

 172.31.15.107

Public IPv4 DNS

 ec2-3-237-82-15.compute-1.amazonaws.com | open address

Elastic IP addresses

-

AWS Compute Optimizer finding



Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented** in `/usr/share/doc/apache2/README.Debian.gz`. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/  
|-- apache2.conf  
|     '-- ports.conf  
|-- mods-enabled  
|     |-- *.load  
|     '-- *.conf  
|-- conf-enabled  
|     '-- *.conf  
|-- sites-enabled  
|     '-- *.conf
```

- `apache2.conf` is the main configuration file. It puts the pieces together by including all remaining configuration files when starting up the web server.
 - `ports.conf` is always included from the main configuration file. It is used to determine the listening ports for incoming connections, and this file can be customized anytime.
 - Configuration files in the `mods-enabled/`, `conf-enabled/` and `sites-enabled/` directories contain particular configuration snippets which manage modules, global configuration fragments, or virtual host configurations respectively.