

Docker Task

Launching Ec2 Instance

The screenshot shows the AWS CloudFront interface for launching an EC2 instance. The top navigation bar includes tabs for GUUI, Docker Task - Google Docs, Launch an instance | EC2 | us-east-1, and Untitled document - Google Docs. The main content area is titled "Launch an instance" with a sub-section "Name and tags". A search bar at the top right says "Search [Alt+S]". The "Summary" section shows 1 instance, with "Software Image (AMI)" set to Amazon Linux 2023 AMI 2023.6.2... and "Virtual server type (instance type)" set to t2.micro. The "Launch instance" button is highlighted in orange. Below this, there's a "Preview code" button. The bottom section shows the "Amazon Machine Image (AMI)" selection, where "Amazon Linux 2023 AMI" is selected. It lists details like AMI ID (ami-05b10e08d247fb927), Free tier eligible, and Virtualization type (hvm). The "Description" section notes that Amazon Linux 2023 is a modern, general purpose Linux-based OS. The "Instance type" section shows "t2.micro" selected, with details about its performance and pricing. The bottom status bar indicates it's 23-02-2025, 00:20, and the user is in United States (N. Virginia).

GUVI Docker Task - Google Docs Launch an instance | EC2 | us-east-1 Untitled document - Google Docs

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

EC2 Instances Launch an instance

Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - required

LINUX-KEY Create new key pair

Network settings Info

Network | Info vpc-07f2dc389716a7f01

Subnet | Info No preference (Default subnet in any availability zone)

Auto-assign public IP | Info Enable Additional charges apply when outside of free tier allowance

Firewall (security groups) | Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group Select existing security group

We'll create a new security group called 'launch-wizard-4' with the following rules:

Allow SSH traffic from Anywhere 0.0.0.0/0 Helps you connect to your instance

Summary

Number of instances | Info 1

Software Image (AMI) Amazon Linux 2023 AMI 2023.6.2...read more ami-05b10e08d247fb927

Virtual server type (instance type) t2.micro

Firewall (security group) New security group

Storage (volumes) 1 volume(s) - 8 GiB

Cancel Launch instance Preview code

CloudShell Feedback Search ENG IN 00:21 23-02-2025

GUVI Docker Task - Google Docs Launch an instance | EC2 | us-east-1 Untitled document - Google Docs

us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances:

EC2 Instances Launch an instance

No preference (Default subnet in any availability zone)

Auto-assign public IP | Info Enable Additional charges apply when outside of free tier allowance

Firewall (security groups) | Info A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group Select existing security group

We'll create a new security group called 'launch-wizard-4' with the following rules:

Allow SSH traffic from Anywhere 0.0.0.0/0 Helps you connect to your instance

Allow HTTPS traffic from the internet To set up an endpoint, for example when creating a web server

Allow HTTP traffic from the internet To set up an endpoint, for example when creating a web server

⚠ Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Configure storage Info Advanced

1x 8 GiB gp3 Root volume 3000 IOPS (Not encrypted)

Summary

Number of instances | Info 1

Software Image (AMI) Amazon Linux 2023 AMI 2023.6.2...read more ami-05b10e08d247fb927

Virtual server type (instance type) t2.micro

Firewall (security group) New security group

Storage (volumes) 1 volume(s) - 8 GiB

Cancel Launch instance Preview code

CloudShell Feedback Search ENG IN 00:21 23-02-2025

The screenshot shows the AWS EC2 Instances Launch an instance page. A green success message box at the top states: "Success: Successfully initiated launch of instance (i-08286150e0cbd42be)". Below this, a "Launch log" section is shown. Under "Next Steps", there are four cards: "Create billing and free tier usage alerts", "Connect to your instance", "Connect an RDS database", and "Create EBS snapshot policy". Each card has a "Create [service] alerts" button. At the bottom of the page, there are links for "Manage detailed monitoring", "Create Load Balancer", "Create AWS budget", and "Manage CloudWatch alarms". The browser status bar indicates the URL is us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchInstances.

The screenshot shows the AWS EC2 Instances page. The left sidebar includes sections for Dashboard, EC2 Global View, Events, Instances (selected), Images, Elastic Block Store, and Network & Security. The main content area displays the "Instances (1) Info" table with one row for "DockerEc2" (Instance ID: i-08286150e0cbd42be, Instance state: Running, Instance type: t2.micro, Status check: Initializing). Below the table is a "Select an instance" dropdown menu. The browser status bar indicates the URL is us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances.

The screenshot shows the AWS EC2 Instances summary page for instance **i-08286150e0cbd42be (DockerEc2)**. The instance is running and has a Public IPv4 address of **54.158.125.126** and a Private IP DNS name of **ip-172-31-93-54.ec2.internal**. It is an **t2.micro** instance type, part of a VPC with ID **vpc-07f2dc389716a7f01**, located in subnet **subnet-0e07ae45177b4d083**. The instance ARN is **arn:aws:ec2:us-east-1:905418201986:instance/i-08286150e0cbd42be**. The instance was updated less than a minute ago.

The screenshot shows the "Connect to instance" page for the same instance. It provides instructions for connecting via SSH:

- Open an SSH client.
- Locate your private key file. The key used to launch this instance is **LINUX-KEY.pem**.
- Run this command, if necessary, to ensure your key is not publicly viewable:
`chmod 400 "LINUX-KEY.pem"`
- Connect to your instance using its Public DNS:
`ssh -i "LINUX-KEY.pem" ec2-user@ec2-54-158-125-126.compute-1.amazonaws.com`

A message indicates the command has been copied to the clipboard. A note at the bottom states: "Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username."



Connecting to the Ec2

Update packages:

```
$sudo yum update -y
```

```
xx Select ec2-user@ip-172-31-93-54:~  
Microsoft Windows [Version 10.0.26100.3194]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\mounixcd Downloads  
C:\Users\mounixDownloads>ssh -i "LINUX-KEY.pem" ec2-user@ec2-54-158-125-126.compute-1.amazonaws.com  
The authenticity of host 'ec2-54-158-125-126.compute-1.amazonaws.com (54.158.125.126)' can't be established.  
ED25519 key fingerprint is 1e:23:56:31:6d:4f:ff:0x7b:ff:1e:ff:ff:ff:ff:ff:4e.  
This key is not known by any other names.  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
Warning: Permanently added 'ec2-54-158-125-126.compute-1.amazonaws.com' (ED25519) to the list of known hosts.  
#  
  _\###_     Amazon Linux 2023  
~~ \####|\  
~~  \###|  
~~   #/  
~~   V_> https://aws.amazon.com/linux/amazon-linux-2023  
~~   /  
~~   /  
~~   /  
[ec2-user@ip-172-31-93-54 ~]$ sudo yum update -y  
Amazon Linux 2023 Kernel Livepatch repository  
Dependencies resolved.  
Nothing to do.  
Complete!  
[ec2-user@ip-172-31-93-54 ~]$  
128 kB/s | 14 kB 00:00  
  
9 25°C ENG  
Haze IN 23-02-2025  
Search 🌐 🚀 📁 🎨 🎮 📈 📺 📤 📥 📧 📱 📺
```

Install Docker:

```
$ sudo yum install docker
```

```
[ec2-user@ip-172-31-93-54:~]$ sudo yum install docker
Last metadata expiration check: 0:02:14 ago on Sat Feb 22 18:54:30 2025.
Dependencies resolved.

Transaction Summary
Install 10 Packages

Total download size: 84 M
Installed size: 319 M
Is this ok [y/N]: y
Downloading Packages:
(1/10): iptables-lib-1.8.8-3.amzn2023.0.2.x86_64.rpm 3.4 MB/s | 401 kB 00:00
(2/10): iptables-nft-1.8.8-2.amzn2023.0.2.x86_64.rpm 3.0 MB/s | 183 kB 00:00
(3/10): libcgroup-1.0.1-19.amzn2023.0.1.x86_64 1.6 MB/s | 78 kB 00:00
(4/10): libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64.rpm 2.1 MB/s | 58 kB 00:00
(5/10): libnftnl-1.2.2-2.amzn2023.0.2.x86_64.rpm 1.2 MB/s | 39 kB 00:00
(6/10): libnftnl-1.2.2-2.amzn2023.0.2.x86_64.rpm 1.4 MB/s | 84 kB 00:00
(7/10): pigz-2.5-1.amzn2023.0.3.x86_64.rpm 1.2 MB/s | 83 kB 00:00
(8/10): runc-1.2.4-1.amzn2023.0.1.x86_64.rpm 9.5 MB/s | 3.4 MB 00:00
(9/10): containerd-1.7.25-1.amzn2023.0.1.x86_64.rpm 33 MB/s | 36 MB 00:01
(10/10): docker-25.0.8-1.amzn2023.0.1.x86_64.rpm 28 MB/s | 44 MB 00:01

Total
Running transaction check
Transaction check succeeded.
Running transaction test
Transaction test succeeded.
Running transaction
Preparing : 1/1
Installing  : runc-1.2.4-1.amzn2023.0.1.x86_64 1/10
Installing  : containerd-1.7.25-1.amzn2023.0.1.x86_64 2/10
Running scriptlet: containerd-1.7.25-1.amzn2023.0.1.x86_64 2/10
Installing  : pigz-2.5-1.amzn2023.0.3.x86_64 3/10
Preparing : 4/10
Installing  : libcgroup-1.0.1-19.amzn2023.0.1.x86_64 5/10
Installing  : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 6/10
Installing  : libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64.rpm 7/10
Installing  : iptables-lib-1.8.8-3.amzn2023.0.2.x86_64 8/10
Running scriptlet: iptables-lib-1.8.8-3.amzn2023.0.2.x86_64 8/10
Installing  : libcgroup-3.0-1.amzn2023.0.1.x86_64 9/10
Running scriptlet: docker-25.0.8-1.amzn2023.0.1.x86_64 9/10
Installing  : docker-25.0.8-1.amzn2023.0.1.x86_64 10/10
Running scriptlet: docker-25.0.8-1.amzn2023.0.1.x86_64 10/10
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.

Verifying : containerd-1.7.25-1.amzn2023.0.1.x86_64 1/10
Verifying : docker-25.0.8-1.amzn2023.0.1.x86_64 2/10
Verifying : iptables-lib-1.8.8-3.amzn2023.0.2.x86_64 3/10
Verifying : libcgroup-3.0-1.amzn2023.0.1.x86_64 4/10
Verifying : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 5/10
Verifying : libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64 6/10
Verifying : libnftnl-1.2.2-2.amzn2023.0.2.x86_64 7/10
Verifying : pigz-2.5-1.amzn2023.0.3.x86_64 8/10
Verifying : runc-1.2.4-1.amzn2023.0.1.x86_64 9/10

Installed:
containerd-1.7.25-1.amzn2023.0.1.x86_64 docker-25.0.8-1.amzn2023.0.1.x86_64 iptables-lib-1.8.8-3.amzn2023.0.2.x86_64
libcgroup-3.0-1.amzn2023.0.1.x86_64 libnftnl-1.2.2-2.amzn2023.0.2.x86_64 libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64
pigz-2.5-1.amzn2023.0.3.x86_64 runc-1.2.4-1.amzn2023.0.1.x86_64 ipables-nft-1.8.8-3.amzn2023.0.2.x86_64

Complete!
[ec2-user@ip-172-31-93-54 ~]$
```

Start docker:

\$ sudo service docker start

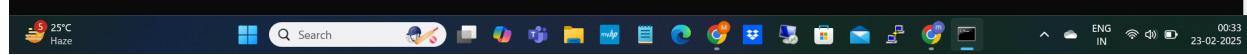
```
Select ec2-user@ip-172-31-93-54:~  
Running transaction  
Preparing :  
Installing  : runc-1.2.4-1.amzn2023.0.1.x86_64  
Installing  : containerd-1.7.25-1.amzn2023.0.1.x86_64  
Running scriptlet: containerd-1.7.25-1.amzn2023.0.1.x86_64  
Installing  : pigz-2.5-1.amzn2023.0.3.x86_64  
Installing  : libnftnl-1.2.2-2.amzn2023.0.2.x86_64  
Installing  : libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64  
Installing  : iptables-libs-1.8.8-3.amzn2023.0.2.x86_64  
Installing  : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64  
Running scriptlet: iptables-nft-1.8.8-3.amzn2023.0.2.x86_64  
Installing  : libcgroup-3.0-1.amzn2023.0.1.x86_64  
Running scriptlet: docker-25.0.8-1.amzn2023.0.1.x86_64  
Installing  : docker-25.0.8-1.amzn2023.0.1.x86_64  
Running scriptlet: docker-25.0.8-1.amzn2023.0.1.x86_64  
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.  
Verifying   : containerd-1.7.25-1.amzn2023.0.1.x86_64  
Verifying   : docker-25.0.8-1.amzn2023.0.1.x86_64  
Verifying   : iptables-libs-1.8.8-3.amzn2023.0.2.x86_64  
Verifying   : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64  
Verifying   : libcgroup-3.0-1.amzn2023.0.1.x86_64  
Verifying   : libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64  
Verifying   : libnftnl-1.2.2-2.amzn2023.0.2.x86_64  
Verifying   : pigz-2.5-1.amzn2023.0.3.x86_64  
Verifying   : runc-1.2.4-1.amzn2023.0.1.x86_64  
Installed:  
containerd-1.7.25-1.amzn2023.0.1.x86_64      docker-25.0.8-1.amzn2023.0.1.x86_64      iptables-libs-1.8.8-3.amzn2023.0.2.x86_64  
libcgroup-3.0-1.amzn2023.0.1.x86_64          runc-1.2.4-1.amzn2023.0.1.x86_64          libnftnl-1.2.2-2.amzn2023.0.2.x86_64  
pigz-2.5-1.amzn2023.0.3.x86_64  
Completed!  
[ec2-user@ip-172-31-93-54 ~]$ sudo service docker start  
Redirecting to /bin/systemctl start docker.service  
[ec2-user@ip-172-31-93-54 ~]$  
00:31 ENG IN 23-02-2025
```

\$ sudo docker -version

\$ sudo docker info

```
Select ec2-user@ip-172-31-93-54:~  
Installing  : docker-25.0.8-1.amzn2023.0.1.x86_64  
Running scriptlet: docker-25.0.8-1.amzn2023.0.1.x86_64  
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /usr/lib/systemd/system/docker.socket.  
Verifying   : containerd-1.7.25-1.amzn2023.0.1.x86_64  
Verifying   : docker-25.0.8-1.amzn2023.0.1.x86_64  
Verifying   : iptables-libs-1.8.8-3.amzn2023.0.2.x86_64  
Verifying   : iptables-nft-1.8.8-3.amzn2023.0.2.x86_64  
Verifying   : libcgroup-3.0-1.amzn2023.0.1.x86_64  
Verifying   : libnetfilter_conntrack-1.0.8-2.amzn2023.0.2.x86_64  
Verifying   : libnftnl-1.2.2-2.amzn2023.0.2.x86_64  
Verifying   : pigz-2.5-1.amzn2023.0.3.x86_64  
Verifying   : runc-1.2.4-1.amzn2023.0.1.x86_64  
Installed:  
containerd-1.7.25-1.amzn2023.0.1.x86_64      docker-25.0.8-1.amzn2023.0.1.x86_64      iptables-libs-1.8.8-3.amzn2023.0.2.x86_64  
libcgroup-3.0-1.amzn2023.0.1.x86_64          libnftnl-1.2.2-2.amzn2023.0.2.x86_64      libnftnl-1.2.2-2.amzn2023.0.2.x86_64  
pigz-2.5-1.amzn2023.0.3.x86_64  
Completed!  
[ec2-user@ip-172-31-93-54 ~]$ sudo service docker start  
Redirecting to /bin/systemctl start docker.service  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker -version  
Docker version 25.0.8, build 0bab087  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker info  
Client:  
Version: 25.0.8  
Context: default  
Debug Mode: false  
Plugins:  
buildx: Docker Buildx (Docker Inc.)  
Version: v0.0.0+unknown  
Path: /usr/libexec/docker/cli-plugins/docker-buildx  
Server:  
Containers: 0  
Running: 0  
Paused: 0  
Stopped: 0  
Images: 0  
Server Version: 25.0.8  
Storage Driver: overlay2  
Backing Filesystem: xfs  
Supports d_type: true  
Using metacopy: false  
Native Overlay Diff: true  
userxattr: false  
Logging Driver: json-file  
AUS-ENG Game score 00:32 ENG IN 23-02-2025
```

```
ec2 Select ec2-user@ip-172-31-93-54:~  
Server:  
Containers: 0  
Running: 0  
Paused: 0  
Stopped: 0  
Images: 0  
Server Version: 25.0.8  
Storage Driver: overlay2  
Backing Filesystem: xfs  
Driver Status: Clean  
Using metacopy: false  
Native Overlay Diff: true  
userxattr: false  
Logging Driver: json-file  
Cgroup Driver: systemd  
Cgroup Version: 2  
Plugins:  
Volume: local  
Network: bridge host ipvlan macvlan null overlay  
Log: awslogs fluentd gcplogs gelf journald json-file local splunk syslog  
Swarm: inactive  
Runtime: io.containerd.runc.v2 runc  
Default Runtime: runc  
Init Binary: docker-init  
containerd version: bcc810d6b9066471b0b6fa75f557a15a1cbf31bb  
runc version: 6c52b3fc541fb26fe8c374d5f58112a0a5dbda66  
init version: de40ad0  
Security Options:  
seccomp  
Profile: builtin  
cgroups  
Kernel Version: 6.1.128-136.201.amzn2023.x86_64  
Operating System: Amazon Linux 2023.6.20250218  
OSType: linux  
Architecture: x86_64  
CPUs: 1  
Total Memory: 949.5MiB  
Name: ip-172-31-93-54.ec2.internal  
ID: 34bd7a7f-98bc-400d-8d5a-f2469bd4e20e  
Docker Root Dir: /var/lib/docker  
Debug Mode: false  
Experimental: false  
Insecure Registries:  
127.0.0.0/8  
Live Restore Enabled: false  
[ec2-user@ip-172-31-93-54 ~]$
```

A screenshot of a Linux desktop environment. At the top is a terminal window titled 'Select ec2-user@ip-172-31-93-54:~'. It displays the output of the 'docker info' command. Below the terminal is a dark-themed desktop interface with a taskbar containing various application icons like file manager, browser, and system tools. The desktop background is a light blue gradient. In the bottom right corner, there's a system tray with icons for battery, signal, and date/time (23-02-2025).

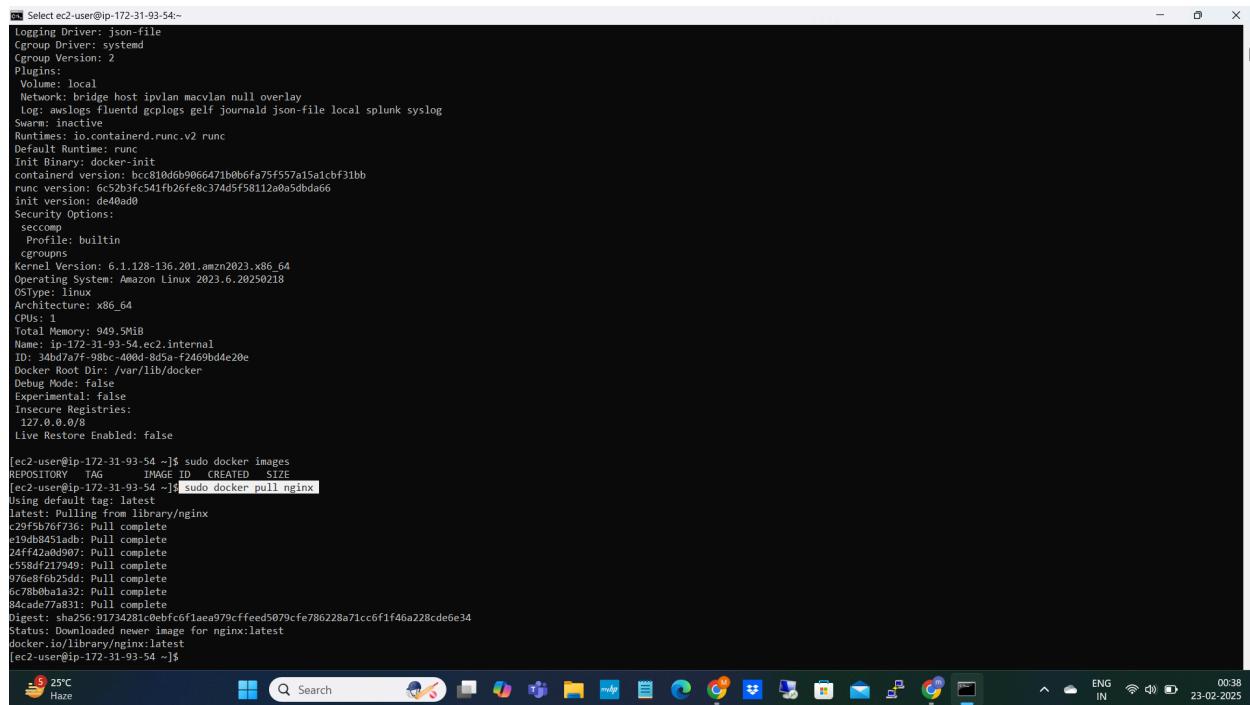
Docker Image Commands:

\$ Sudo docker images → it will list the images

```
ec2 Select ec2-user@ip-172-31-93-54:~  
Supports d_type: true  
Using metacopy: false  
Native Overlay Diff: true  
userxattr: false  
Logging Driver: json-file  
Cgroup Driver: systemd  
Cgroup Version: 2  
Plugins:  
Volume: local  
Network: bridge host ipvlan macvlan null overlay  
Log: awslogs fluentd gcplogs gelf journald json-file local splunk syslog  
Swarm: inactive  
Runtimes: io.containerd.runc.v2 runc  
Default Runtime: runc  
Init Binary: docker-init  
containerd version: bcc810d6b9066471b0b6fa75f557a15a1cbf31bb  
runc version: 6c52b3fc541fb26fe8c374d5f58112a0a5dbda66  
init version: de40ad0  
Security Options:  
seccomp  
Profile: builtin  
cgroups  
Kernel Version: 6.1.128-136.201.amzn2023.x86_64  
Operating System: Amazon Linux 2023.6.20250218  
OSType: linux  
Architecture: x86_64  
CPUs: 1  
Total Memory: 949.5MiB  
Name: ip-172-31-93-54.ec2.internal  
ID: 34bd7a7f-98bc-400d-8d5a-f2469bd4e20e  
Docker Root Dir: /var/lib/docker  
Debug Mode: false  
Experimental: false  
Insecure Registries:  
127.0.0.0/8  
Live Restore Enabled: false  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$
```

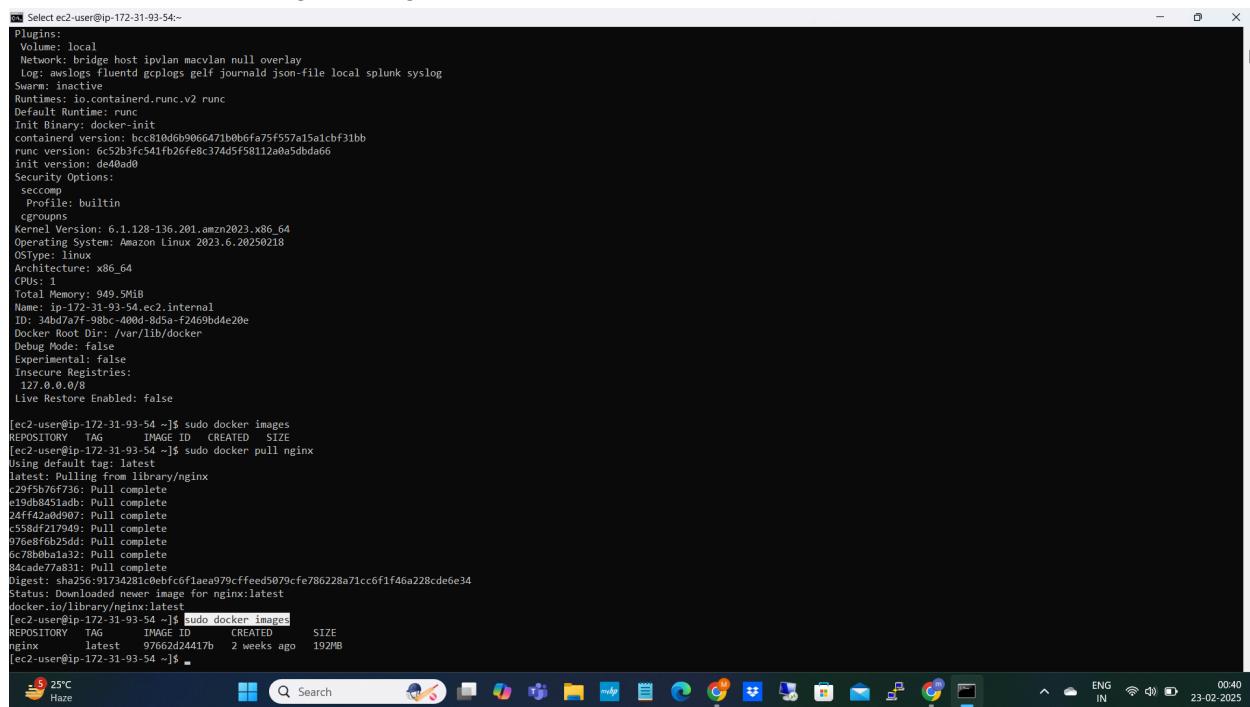
\$ sudo docker pull nginx → it will pull the nginx image from docker hub

```
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
c29f5b76f736: Pull complete
e19db8451adb: Pull complete
24ff42ad9d97: Pull complete
c598df2f17949: Pull complete
976e8fb625dd: Pull complete
bc78bf0b1a32: Pull complete
bb0d677a831: Pull complete
Digest: sha256:91734281c0efc6f1aa979cffeed5079cf786228a71cc6f1f46a228cde6e3a
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
[ec2-user@ip-172-31-93-54 ~]$
```



Now we can see the nginx image

```
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx
Using default tag: latest
latest: Pulling from library/nginx
c29f5b76f736: Pull complete
e19db8451adb: Pull complete
24ff42ad9d97: Pull complete
c598df2f17949: Pull complete
976e8fb625dd: Pull complete
bc78bf0b1a32: Pull complete
bb0d677a831: Pull complete
Digest: sha256:91734281c0efc6f1aa979cffeed5079cf786228a71cc6f1f46a228cde6e3a
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
nginx    latest  97662d24d17b  2 weeks ago  192MB
[ec2-user@ip-172-31-93-54 ~]$
```



\$ sudo docker rmi nginx → it will delete image

```
cd Select ec2-user@ip-172-31-93-54:~  
Docker Root Dir: /var/lib/docker  
Debug Mode: false  
Experimental: false  
Insecure Registries:  
 127.0.0.0/8  
Live Restore Enabled: false  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx:latest  
c29f5b76f736: Pull complete  
e19db8451adb: Pull complete  
24ff42ad9d97: Pull complete  
c558df2f17949: Pull complete  
976e8fb625dd: Pull complete  
bc78b0b01a32: Pull complete  
bc78b0b01a32: Pull complete  
Digest: sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
nginx latest 97662d24417b 2 weeks ago 192MB  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rmi nginx  
Untagged: nginx:latest  
Untagged: nginx@sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:97662d24417b16f6060/afbcfa97226a2ba58f09d42f27b8e197a89959ddc8e  
Deleted: sha256:370743f4a662caa24478adea02f5df5e064b030d5ae991f9d559cf80484103  
Deleted: sha256:d5d79136c17528de696:227500187603584c16bfc28f4bc5f6d232af6803  
Deleted: sha256:d4f136228a7249d3e64065a734b0be12f4a546c77451902156e66383efb2  
Deleted: sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:870227b568adc7a6b9fa4cb758672126b793a6b70826266e8ed0b7e071f2  
Deleted: sha256:a3379c4e839742c249d3e64065a734b0be12f4a546c77451902156e66383efb2  
Deleted: sha256:7914cb4ff00f532b7adbd0b003888e3aa921687d62dbe2f1f829d0ab6234a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$
```

Docker Container Commands:

\$ sudo docker pull nginx

```
cd Select ec2-user@ip-172-31-93-54:~  
c558df2f17949: Pull complete  
976e8fb625dd: Pull complete  
bc78b0b01a32: Pull complete  
84cad77a831: Pull complete  
Digest: sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
nginx latest 97662d24417b 2 weeks ago 192MB  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rmi nginx  
Untagged: nginx:latest  
Untagged: nginx@sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:97662d24417b16f6060/afbcfa97226a2ba58f09d42f27b8e197a89959ddc8e  
Deleted: sha256:370743f4a662caa24478adea02f5df5e064b030d5ae991f9d559cf80484103  
Deleted: sha256:d5d79136c17528de696:227500187603584c16bfc28f4bc5f6d232af6803  
Deleted: sha256:d4f136228a7249d3e64065a734b0be12f4a546c77451902156e66383efb2  
Deleted: sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:870227b568adc7a6b9fa4cb758672126b793a6b70826266e8ed0b7e071f2  
Deleted: sha256:a3379c4e839742c249d3e64065a734b0be12f4a546c77451902156e66383efb2  
Deleted: sha256:7914cb4ff00f532b7adbd0b003888e3aa921687d62dbe2f1f829d0ab6234a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b76f736: Pull complete  
e19db8451adb: Pull complete  
24ff42ad9d97: Pull complete  
c558df2f17949: Pull complete  
976e8fb625dd: Pull complete  
bc78b0b01a32: Pull complete  
84cad77a831: Pull complete  
Digest: sha256:91734281c0ebfc6flaea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$
```

\$ sudo docker ps -a –it will list all the containers there is no containers

```
ca Select ec2-user@ip-172-31-93-54:~  
c29f5b7f736: Pull complete  
e19db845adb: Pull complete  
24ff42ad907: Pull complete  
c558df2f17949: Pull complete  
976e8f60b1a32: Pull complete  
6c78b0b1a32: Pull complete  
Digest: sha256:91734281c0ebfc6f1aae979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
nginx latest 97662d24417b 2 weeks ago 192MB  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rmi nginx  
Untagged: nginx:latest  
Untagged: nginx@sha256:91734281c0ebfc6f1aae979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:97662d24417b16f6b607afbc9226a2b58f90d42f2fb6197a89f59dd8e8  
Deleted: sha256:c558df2f17949:22790013876935584d10ffcc284fb3c5f6132af6803  
Deleted: sha256:d4f13622e247fa53bafe365ad9b9d3ed32a46d288bc8040a06169f965b241  
Deleted: sha256:0712905f54a4cd6093513de5b3d4ebca1e7f2041d8105c49df767894c6964  
Deleted: sha256:870227b58adcc7a6b9f4a4cb759622126b793a6b70826266e8eda0f7e071f2  
Deleted: sha256:43379c4e8397d2c249d16406574d0b01e2fa4a546c77451902156e665383efb2  
Deleted: sha256:7914c8f600f532b7adbd0b00388e3aa021687d62be2f1f8290d0ab6234a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b7f736: Pull complete  
e19db845adb: Pull complete  
24ff42ad907: Pull complete  
c558df2f17949: Pull complete  
976e8f60b25dd: Pull complete  
6c78b0b1a32: Pull complete  
84cadef7a831: Pull complete  
Digest: sha256:91734281c0ebfc6f1aae979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$
```

Create a container from the nginx image and run:

\$ sudo docker run --name nginx_container -p 8080:80 -d nginx

```
ca Select ec2-user@ip-172-31-93-54:~  
Digest: sha256:91734281c0ebfc6f1aae979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
nginx latest 97662d24417b 2 weeks ago 192MB  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rmi nginx  
Untagged: nginx@sha256:91734281c0ebfc6f1aae979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:97662d24417b16f6b607afbc9226a2b58f90d42f2fb6197a89f59dd8e8  
Deleted: sha256:070743f4a662ca2a16878adaea5b3d4ebca1e7f2043d8105c49df767894c6964  
Deleted: sha256:d4f13622e247fa53bafe365ad9b9d3ed32a46d288bc8040a06169f965b241  
Deleted: sha256:0712905f54a4cd6093513de5b3d4ebca1e7f2043d8105c49df767894c6964  
Deleted: sha256:870227b58adcc7a6b9f4a4cb759622126b793a6b70826266e8eda0f7e071f2  
Deleted: sha256:43379c4e8397d2c249d16406574d0b01e2fa4a546c77451902156e665383efb2  
Deleted: sha256:7914c8f600f532b7adbd0b00388e3aa021687d62be2f1f8290d0ab6234a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b7f736: Pull complete  
e19db845adb: Pull complete  
24ff42ad907: Pull complete  
c558df2f17949: Pull complete  
976e8f60b25dd: Pull complete  
6c78b0b1a32: Pull complete  
84cadef7a831: Pull complete  
Digest: sha256:91734281c0ebfc6f1aae979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b989820 7914c8f600f532b7adbd0b00388e3aa021687d62be2f1f8290d0ab6234a158c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 44 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$
```

We can see the **nginx_container** created

\$ sudo docker ps -it can display only the containers which are running

```
$ sudo docker stop nginx_container (or 'b7ef9b989820')
```

```
$ sudo docker ps
```

```
Select ec2-user@ip-172-31-93-54:~  
6c78Bdbba1a32: Pull complete  
84code77a831: Pull complete  
Digest: sha256:91734281c0ebfc6f1ea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
nginx latest 97662d24417b 2 weeks ago 192MB  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rmi nginx  
Untagged: nginx:latest  
Deleted: sha256:91734281c0ebfc6f1ea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Deleted: sha256:97662d24417b316f60607afbcfa9226a2b58f0d642f27b6e197a8995ddc8e  
Deleted: sha256:370743fa4662caaa4478adaea2f5df5e06d0b3d5ae91f9f959f80484103  
Deleted: sha256:dsd7a9136c7528de9696227500178603584c16fbce28fb4bc5f6d232f6803  
Deleted: sha256:d4f3622e2347fa63b6a63e6adbb96d53ed3a46d28bb8c8040a6bd1d965b241  
Deleted: sha256:0712905e449dc0b983e59b10ebeacafe1f2b4a3b8105c49d76/b94ce6b64  
Deleted: sha256:275568adcd75932126b793a0d78826668ed0bf7e871f2  
Deleted: sha256:43379c5929492594914084734db0e12f4a46c77451982156e66383efb2  
Deleted: sha256:7814a8f6007532b7adbd0b03388e3e921687d62dbe2f1f2900a66234a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b76f73d: Pull complete  
e19db4513d: Pull complete  
24ff42a0d907: Pull complete  
c558df217949: Pull complete  
9768bf6b250d: Pull complete  
38686632: Pull complete  
0cc5c77a831: Pull complete  
Digest: sha256:91734281c0ebfc6f1ea979cffeed5079cf786228a71cc6f1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -name nginx_container -p 8080:80 -d nginx  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$
```

We can see container was stopped

Delete container:

```
$ sudo docker rm nginx_container (or b7ef9b989820)
```

```
$ sudo docker ps -a
```

```
[ec2-user@ip-172-31-93-54 ~]$ Select ec2-user@ip-172-31-93-54:~  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b75f736: Pull complete  
Deleted: sha256:c7652d2441fb16f6607a7bcfa97226a2ba58f09d642f27fb8e197a8895ddc8e  
Deleted: sha256:37074314a602caaa244a78ad4ea2f235df5e004d930d9ae991f99d559cf90484103  
Deleted: sha256:d5d7a9136c17528de96c22750013876035584c16bfcfx294fbccffed232af6803  
Deleted: sha256:d4f133622c2347fa53ba6c3e6adbd9hd53ed3aa4dd28bd8040a0b61d5965b241  
Deleted: sha256:0712905f64a4cd6083513de4e5b534debcac7f2b43d8105c49df767b84c6e064  
Deleted: sha256:870227b5b58ad7ca6b9f4ac7b5862126b793ab670826766e8da0bf7e071f2  
Deleted: sha256:43379c4eb397dc2c249f3646565734b0be01e2fa4546c77451902156e65383efb2  
Deleted: sha256:914c8f600f532b7adhb0b888beaa21687d62dbe2f1f8290a0b623a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
nginx: default tag: latest  
latest: Pulling from library/nginx  
c29f5b75f736: Pull complete  
e10db8451adb: Pull complete  
24ff42ad9907: Pull complete  
c558df217949: Pull complete  
976e8f6b25dd: Pull complete  
6c78b0b1a32: Pull complete  
84cad77a33: Pull complete  
Digest: sha256:91734281c0ebfc6flaea979cffeed5879cef86228a71cc6ff1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b989820203a40fb239e25ef8be36d7a7ec0054dcf61f31d643b1b5c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." About a minute ago Up About a minute 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 7 minutes ago Exited (0) About a minute ago nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b989820203a40fb239e25ef8be36d7a7ec0054dcf61f31d643b1b5c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 7 minutes ago Exited (0) About a minute ago nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls  
DRIVER VOLUME NAME  
[ec2-user@ip-172-31-93-54 ~]$
```

Docker Volume commands:

```
$ sudo docker volume ls →list the docker volumes here no volumes created yet
```

```
[ec2-user@ip-172-31-93-54 ~]$ Select ec2-user@ip-172-31-93-54:~  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b75f736: Pull complete  
Deleted: sha256:c7652d2441fb16f6607a7bcfa97226a2ba58f09d642f27fb8e197a8895ddc8e  
Deleted: sha256:37074314a602caaa244a78ad4ea2f235df5e004d930d9ae991f99d559cf90484103  
Deleted: sha256:d5d7a9136c17528de96c22750013876035584c16bfcfx294fbccffed232af6803  
Deleted: sha256:d4f133622c2347fa53ba6c3e6adbd9hd53ed3aa4dd28bd8040a0b61d5965b241  
Deleted: sha256:0712905f64a4cd6083513de4e5b534debcac7f2b43d8105c49df767b84c6e064  
Deleted: sha256:870227b5b58ad7ca6b9f4ac7b5862126b793ab670826766e8da0bf7e071f2  
Deleted: sha256:43379c4eb397dc2c249f3646565734b0be01e2fa4546c77451902156e65383efb2  
Deleted: sha256:914c8f600f532b7adhb0b888beaa21687d62dbe2f1f8290a0b623a158a  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker images  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
nginx: default tag: latest  
latest: Pulling from library/nginx  
c29f5b75f736: Pull complete  
e10db8451adb: Pull complete  
24ff42ad9907: Pull complete  
c558df217949: Pull complete  
976e8f6b25dd: Pull complete  
6c78b0b1a32: Pull complete  
84cad77a33: Pull complete  
Digest: sha256:91734281c0ebfc6flaea979cffeed5879cef86228a71cc6ff1f46a228cde6e34  
Status: Downloaded newer image for nginx:latest  
docker.library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b989820203a40fb239e25ef8be36d7a7ec0054dcf61f31d643b1b5c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 7 minutes ago Exited (0) About a minute ago nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b989820203a40fb239e25ef8be36d7a7ec0054dcf61f31d643b1b5c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b989820 nginx "/docker-entrypoint..." 7 minutes ago Exited (0) About a minute ago nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls  
DRIVER VOLUME NAME  
[ec2-user@ip-172-31-93-54 ~]$
```

Create a docker volume:

\$ sudo docker volume create myvolume

\$ sudo docker volume ls

```
[ec2-user@ip-172-31-93-54 ~]$ Select ec2-user@ip-172-31-93-54:~  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume create myvolume  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls  
[ec2-user@ip-172-31-93-54 ~]$  
  
REPOSITORY TAG IMAGE ID CREATED SIZE  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b7f736: Pull complete  
e19db8451adb: Pull complete  
24ff42a0d907: Pull complete  
c558df217949: Pull complete  
976e8f6b25dd: Pull complete  
6c78b0b1a32: Pull complete  
84cadef7a831: Pull complete  
Digest: sha256:91734281c0ebfc6f1aea979cffeed5079cf7e86228a71cc6f1f46a228cde634  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b99820203a40fb9239e25ea9fb8e36d77acc054dcf61f31d643b1b5c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b99820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b99820 nginx "/docker-entrypoint..." About a minute ago Up About a minute 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b99820 nginx "/docker-entrypoint..." 7 minutes ago Exited (0) About a minute ago nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls  
DRIVER VOLUME NAME  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume create myvolume  
myvolume  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls  
DRIVER VOLUME NAME  
local myvolume  
[ec2-user@ip-172-31-93-54 ~]$  
  
25°C Haze Search ENG IN 01:18 23-02-2025
```

Mount the volume to a container and image

\$ docker run -d -v myvolume:/data --name nginx_container nginx

```
[ec2-user@ip-172-31-93-54 ~]$ Select ec2-user@ip-172-31-93-54:~  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker pull nginx  
Using default tag: latest  
latest: Pulling from library/nginx  
c29f5b7f736: Pull complete  
e19db8451adb: Pull complete  
24ff42a0d907: Pull complete  
c558df217949: Pull complete  
976e8f6b25dd: Pull complete  
6c78b0b1a32: Pull complete  
84cadef7a831: Pull complete  
Digest: sha256:91734281c0ebfc6f1aea979cffeed5079cf7e86228a71cc6f1f46a228cde634  
Status: Downloaded newer image for nginx:latest  
docker.io/library/nginx:latest  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run --name nginx_container -p 8080:80 -d nginx  
b7ef9b99820203a40fb9239e25ea9fb8e36d77acc054dcf61f31d643b1b5c  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b99820 nginx "/docker-entrypoint..." 44 seconds ago Up 43 seconds 0.0.0.0:8080->80/tcp, :::8080->80/tcp nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
b7ef9b99820 nginx "/docker-entrypoint..." 7 minutes ago Exited (0) About a minute ago nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container  
nginx_container  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls  
DRIVER VOLUME NAME  
local myvolume  
[ec2-user@ip-172-31-93-54 ~]$ docker run -d -v myvolume:/data --name nginx_container nginx  
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied  
See 'docker run --help'.  
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -d -v myvolume:/data --name nginx_container nginx  
f5ef2ac62ef21eb7bf13b5b549c0c6dc149269cd356ed462d93d526424121dd  
[ec2-user@ip-172-31-93-54 ~]$  
  
25°C Haze Search ENG IN 01:22 23-02-2025
```

Inspect volume:

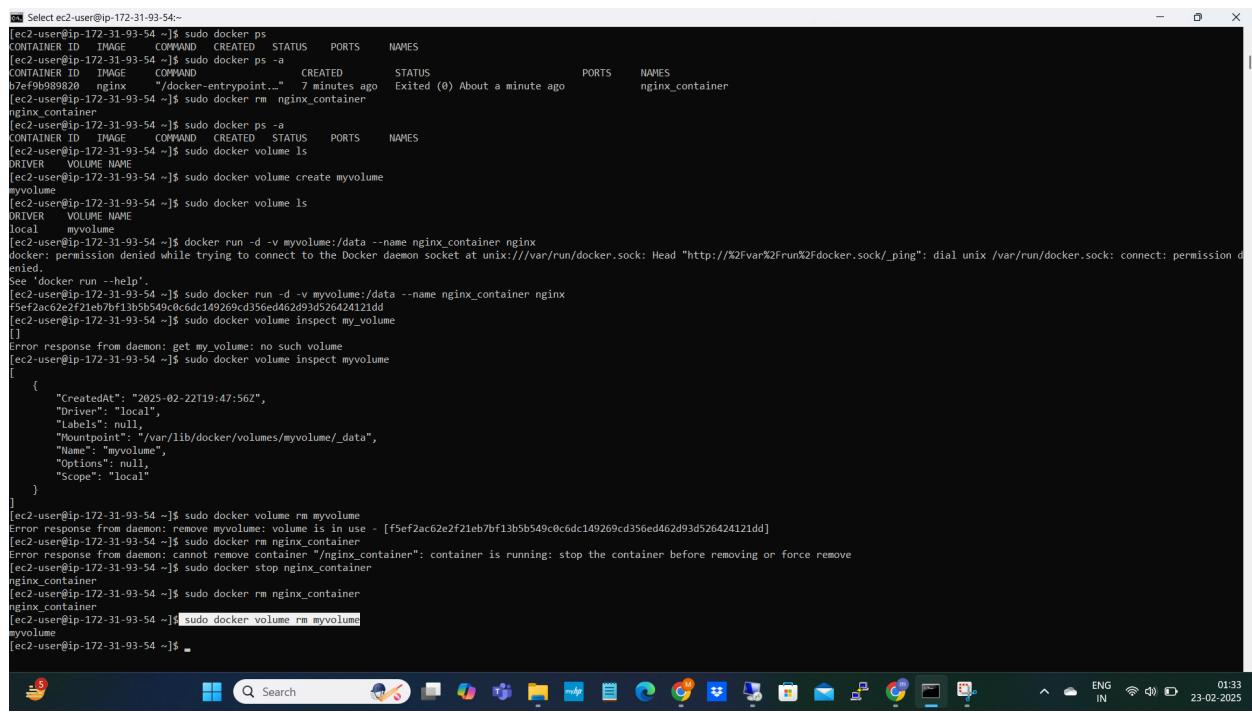
\$ sudo docker volume inspect myvolume

```
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume
[
  {
    "CreatedAt": "2025-02-22T19:47:56Z",
    "Driver": "local",
    "Labels": null,
    "Mountpoint": "/var/lib/docker/volumes/myvolume/_data",
    "Name": "myvolume",
    "Options": null,
    "Scope": "local"
  }
]
[ec2-user@ip-172-31-93-54 ~]$
```

Delete volume:

To delete container we should make volume unused(by stop and delete the container)

\$ sudo docker volume rm myvolume



```
Select ec2-user@ip-172-31-93-54~
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
[ec2-user@ip-172-31-93-54 ~]$ sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER VOLUME NAME
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume create myvolume
myvolume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER VOLUME NAME
local myvolume
[ec2-user@ip-172-31-93-54 ~]$ docker run -d -v myvolume:/data --name nginx_container nginx
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://%2Fvar%2Frun%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied
See 'docker run --help'.
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -d -v myvolume:/data --name nginx_container nginx
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect my_volume
[]
Error response from daemon: get my_volume: no such volume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume
[
  {
    "CreatedAt": "2025-02-22T19:47:56Z",
    "Driver": "local",
    "Labels": null,
    "Mountpoint": "/var/lib/docker/volumes/myvolume/_data",
    "Name": "myvolume",
    "Options": null,
    "Scope": "local"
  }
]
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
Error response from daemon: remove myvolume: volume is in use - [f5ef2ac62e2f21eb7bf13b5b549c0c6dc149269cd356ed462d93d526424121dd]
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
Error response from daemon: cannot remove container "/nginx_container": container is running: stop the container before removing or force remove
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
myvolume
[ec2-user@ip-172-31-93-54 ~]$
```

\$ sudo docker volume ls —Volume deleted

```
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
myvolume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER VOLUME NAME
[ec2-user@ip-172-31-93-54 ~]$
```

Docker network commands:

\$ sudo docker network ls → it will list all the networks

```
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER      VOLUME NAME
local      myvolume
[ec2-user@ip-172-31-93-54 ~]$ docker run -d -v myvolume:/data --name nginx_container nginx
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://$Fvar%2Fr%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied.
See 'docker run --help'.
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -d -v myvolume:/data --name nginx_container nginx
f5ef2ac62e2f21eb7bf13b5b549c0c6dc149269cd356ed462d93d526424121dd
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume
[]
Error response from daemon: get myvolume: no such volume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume
[
    {
        "CreatedAt": "2025-02-22T19:47:56Z",
        "Driver": "local",
        "Labels": null,
        "Mountpoint": "/var/lib/docker/volumes/myvolume/_data",
        "Name": "myvolume",
        "Options": null,
        "Scope": "local"
    }
]
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
Error response from daemon: remove myvolume: volume is in use - [f5ef2ac62e2f21eb7bf13b5b549c0c6dc149269cd356ed462d93d526424121dd]
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
Error response from daemon: cannot remove container "/nginx_container": container is running: stop the container before removing or force remove
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
myvolume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER      VOLUME NAME
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network ls
NETWORK ID     NAME      DRIVER      SCOPE
8ce1d65b0e0c1   bridge    bridge      local
ce2957ade099   host      host       local
a72552b10b7b   none     null       local
[ec2-user@ip-172-31-93-54 ~]$
```

Create docker network:

\$ sudo docker network create mynew_network → created mynew_network

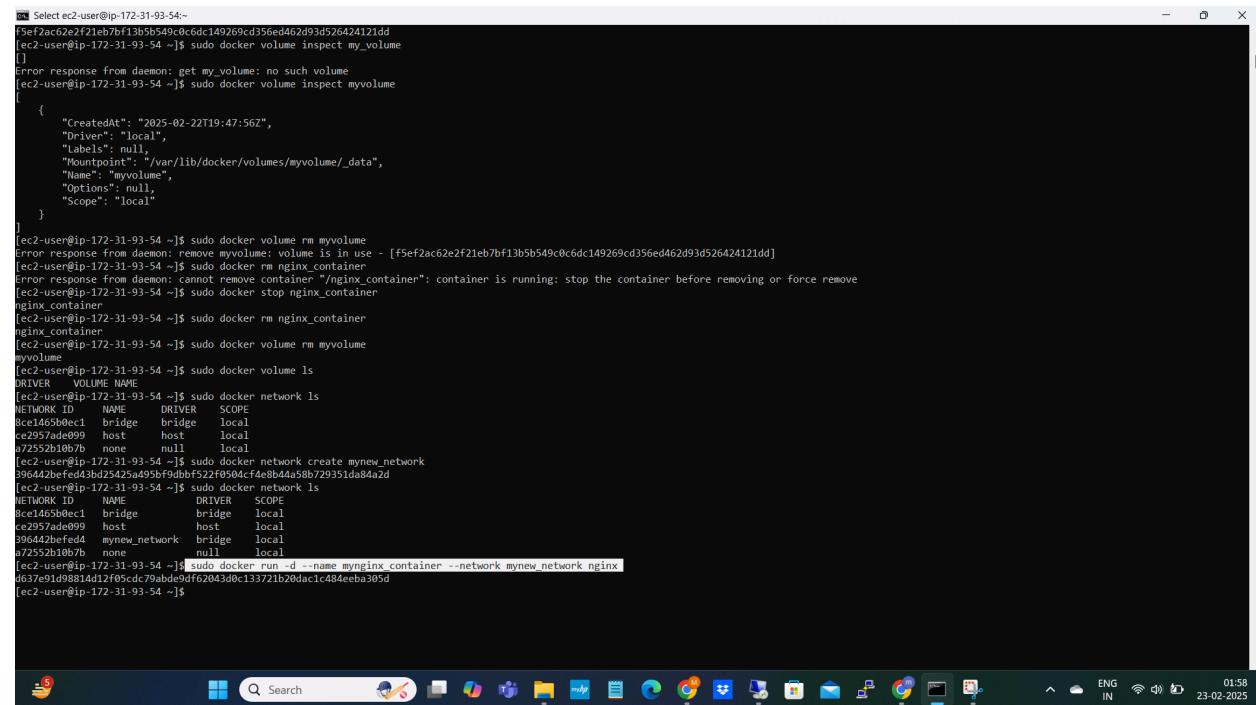
\$ sudo docker network ls

```
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER      VOLUME NAME
local      myvolume
[ec2-user@ip-172-31-93-54 ~]$ docker run -d -v myvolume:/data --name nginx_container nginx
docker: permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Head "http://$Fvar%2Fr%2Fdocker.sock/_ping": dial unix /var/run/docker.sock: connect: permission denied.
See 'docker run --help'.
[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -d -v myvolume:/data --name nginx_container nginx
f5ef2ac62e2f21eb7bf13b5b549c0c6dc149269cd356ed462d93d526424121dd
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume
[]
Error response from daemon: get myvolume: no such volume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume
[
    {
        "CreatedAt": "2025-02-22T19:47:56Z",
        "Driver": "local",
        "Labels": null,
        "Mountpoint": "/var/lib/docker/volumes/myvolume/_data",
        "Name": "myvolume",
        "Options": null,
        "Scope": "local"
    }
]
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
Error response from daemon: remove myvolume: volume is in use - [f5ef2ac62e2f21eb7bf13b5b549c0c6dc149269cd356ed462d93d526424121dd]
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
Error response from daemon: cannot remove container "/nginx_container": container is running: stop the container before removing or force remove
[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_container
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_container
nginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume
myvolume
[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume ls
DRIVER      VOLUME NAME
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network ls
NETWORK ID     NAME      DRIVER      SCOPE
8ce1d65b0e0c1   bridge    bridge      local
ce2957ade099   host      host       local
a72552b10b7b   none     null       local
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network create mynew_network
396442befd43b25425a495fd0dbbf522f0504cf4d8b44a58729351da84a2d
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network ls
NETWORK ID     NAME      DRIVER      SCOPE
8ce1d65b0e0c1   bridge    bridge      local
ce2957ade099   host      host       local
396442befd4   mynew_network bridge      local
a72552b10b7b   none     null       local
[ec2-user@ip-172-31-93-54 ~]$
```

Connect the container to the network

\$ docker run -d --name mynginx_container --network mynew_network nginx

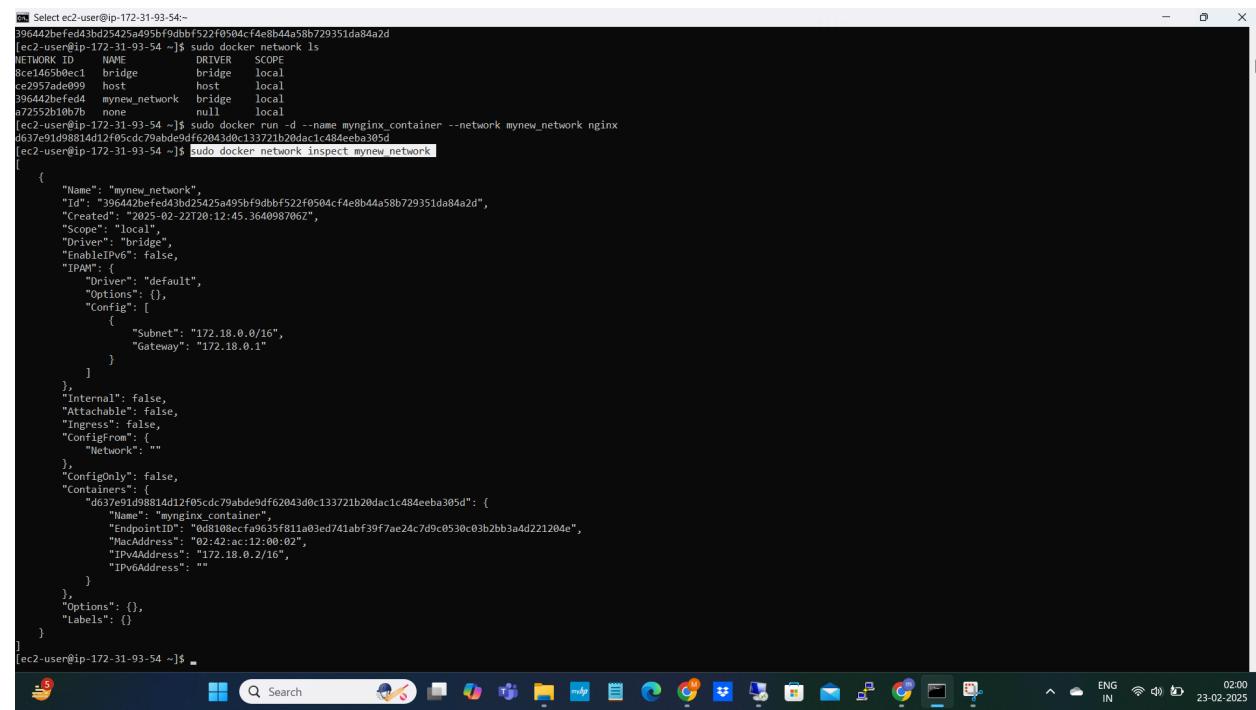
Above command can create a mynginx_container and connect to the mynew_network



```
[ec2-user@ip-172-31-93-54 ~]$ Select ec2-user@ip-172-31-93-54:~[5$ f5ef2ac62e2f21eb7b13b5b549c0c6dc149269cd356ed462d93d526424121dd[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume[]]Error response from daemon: get myvolume: no such volume[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume inspect myvolume[]{"Createdat": "2025-02-22T19:47:56Z", "Driver": "local", "Labels": null, "Mountpoint": "/var/lib/docker/volumes/myvolume/_data", "Name": "myvolume", "Options": null, "Scope": "local"}[]][ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolumeError response from daemon: remove myvolume: volume is in use - [f5ef2ac62e2f21eb7b13b5b549c0c6dc149269cd356ed462d93d526424121dd][ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_containerError response from daemon: cannot remove container "/nginx_container": container is running: stop the container before removing or force remove[ec2-user@ip-172-31-93-54 ~]$ sudo docker stop nginx_containernginx_container[ec2-user@ip-172-31-93-54 ~]$ sudo docker rm nginx_containernginx_container[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume rm myvolume[]]myvolume[ec2-user@ip-172-31-93-54 ~]$ sudo docker volume lsDRIVER VOLUME NAME[ec2-user@ip-172-31-93-54 ~]$ sudo docker network lsNETWORK ID NAME DRIVER SCOPE8cc1d650e0c1 bridge bridge localce2957ade999 host host locala72552b10b7b none null local[ec2-user@ip-172-31-93-54 ~]$ sudo docker network create mynew_network396442beffed43bd25425a995fb9dbbf522f0504cf4e8b4a58b729351da84a2d[ec2-user@ip-172-31-93-54 ~]$ sudo docker network lsNETWORK ID NAME DRIVER SCOPE8cc1d650e0c1 bridge bridge localce2957ade999 host host local396442beffed4 mynew_network bridge locala72552b10b7b none null local[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -d --name mynginx_container --network mynew_network nginxd617e91d98814df2f05cdc79abde9df62043d0c133721b20dac1c484eeba305d[ec2-user@ip-172-31-93-54 ~]$
```

To see the network details

\$ sudo docker network inspect mynew_network



```
[ec2-user@ip-172-31-93-54 ~]$ Select ec2-user@ip-172-31-93-54:~[5$ 396442beffed43bd25425a995fb9dbbf522f0504cf4e8b4a58b729351da84a2d[ec2-user@ip-172-31-93-54 ~]$ sudo docker network lsNETWORK ID NAME DRIVER SCOPE8cc1d650e0c1 bridge bridge localce2957ade999 host host local396442beffed4 mynew_network bridge locala72552b10b7b none null local[ec2-user@ip-172-31-93-54 ~]$ sudo docker run -d --name mynginx_container --network mynew_network nginxd617e91d98814df2f05cdc79abde9df62043d0c133721b20dac1c484eeba305d[ec2-user@ip-172-31-93-54 ~]$ sudo docker network inspect mynew_network[]{"Name": "mynew_network", "Id": "396442beffed43bd25425a995fb9dbbf522f0504cf4e8b4a58b729351da84a2d", "Created": "2025-02-22T20:12:45:564098706Z", "Scope": "local", "Driver": "bridge", "EnableIPv6": false, "IPAM": {"Driver": "default", "Options": {}, "Config": [{"Subnet": "172.18.0.0/16", "Gateway": "172.18.0.1"}]}, "Internal": false, "Attachable": false, "Ingress": false, "ConfigFrom": {}, "Network": {}, "ConfigOnly": false, "Containers": [{"Name": "mynginx_container", "EndpointID": "0d8108ecfa9635f811a03ed741abf39f7ae24c7d9c0530c03b2bb3a4d221204e", "MacAddress": "02:42:ac:12:00:02", "IPv4Address": "172.18.0.2/16", "IPv6Address": ""}], "Options": {}, "Labels": {}}, []][ec2-user@ip-172-31-93-54 ~]$
```

We can able to view the containers which are connected to this network

Disconnect the container from the network

```
$ sudo docker network disconnect mynew_network mynginx_container
$ sudo docker network inspect mynew_network
```

```
ec2-user@ip-172-31-93-54:~$ sudo docker network disconnect mynew_network mynginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network inspect mynew_network
[{"Name": "mynew_network", "Id": "396442bef43bd25425a495bf9dbbf522f0504cf4e8b44a58b729351da84a2d", "Created": "2025-02-22T20:12:45.364098706Z", "Scope": "local", "Driver": "bridge", "EnableIPv6": false, "IPAM": {"Driver": "default", "Options": {}}, "Config": [{"Subnet": "172.18.0.0/16", "Gateway": "172.18.0.1"}]}, {"Name": "mynginx_container", "Id": "d637e91d98814d12ff05cdc79abde9dff62043d0c133721b20dac1c484eeba305d", "Created": "2025-02-22T20:12:45.364098706Z", "Scope": "local", "Driver": "bridge", "EnableIPv6": false, "IPAM": {"Driver": "default", "Options": {}}, "Config": [{"Subnet": "172.18.0.0/16", "Gateway": "172.18.0.1"}]}]
```

We can see no containers connected now

Delete the mynew_network:

```
$ sudo docker network rm mynew_network
```

```
ec2-user@ip-172-31-93-54:~$ sudo docker network disconnect mynew_network mynginx_container
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network inspect mynew_network
[{"Name": "mynew_network", "Id": "396442bef43bd25425a495bf9dbbf522f0504cf4e8b44a58b729351da84a2d", "Created": "2025-02-22T20:12:45.364098706Z", "Scope": "local", "Driver": "bridge", "EnableIPv6": false, "IPAM": {"Driver": "default", "Options": {}}, "Config": [{"Subnet": "172.18.0.0/16", "Gateway": "172.18.0.1"}]}, {"Name": "mynginx_container", "Id": "d637e91d98814d12ff05cdc79abde9dff62043d0c133721b20dac1c484eeba305d", "Created": "2025-02-22T20:12:45.364098706Z", "Scope": "local", "Driver": "bridge", "EnableIPv6": false, "IPAM": {"Driver": "default", "Options": {}}, "Config": [{"Subnet": "172.18.0.0/16", "Gateway": "172.18.0.1"}]}]
```

```
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
8ce14650e0c1   bridge    bridge    local
ce2957ade099   host      host     local
396442bef4dd  mynew_network bridge    local
a72552b10b7b   none     null     local
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network rm mynew_network
mynew_network
[ec2-user@ip-172-31-93-54 ~]$ sudo docker network ls
NETWORK ID     NAME      DRIVER    SCOPE
8ce14650e0c1   bridge    bridge    local
ce2957ade099   host      host     local
a72552b10b7b   none     null     local
[ec2-user@ip-172-31-93-54 ~]$
```