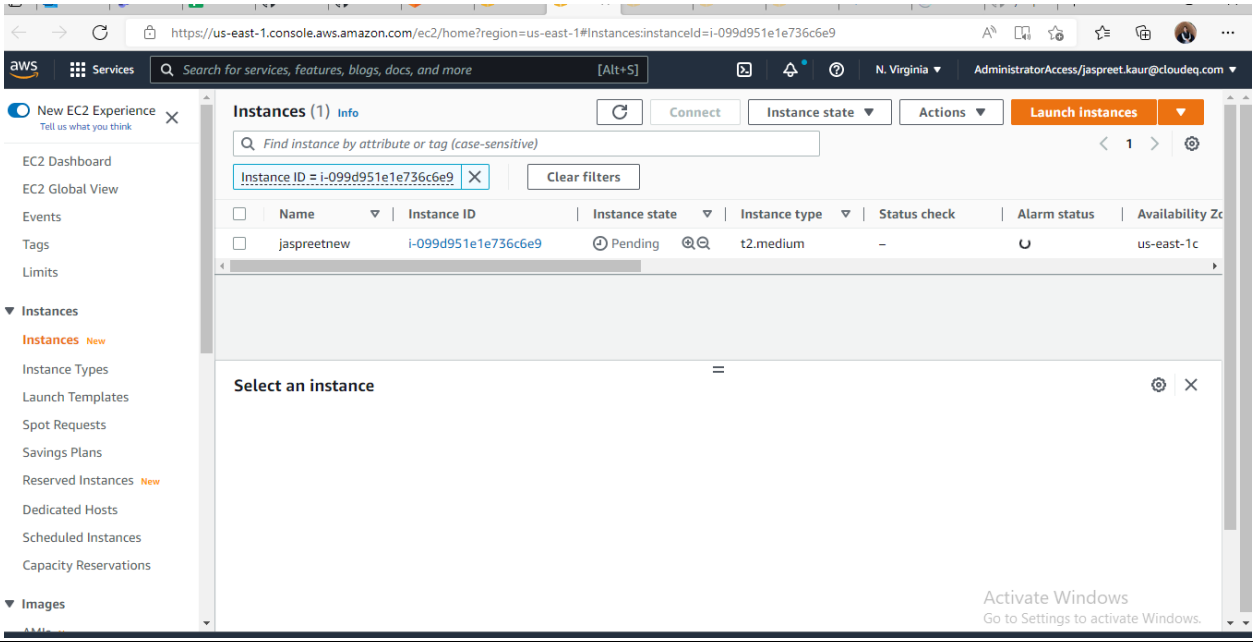
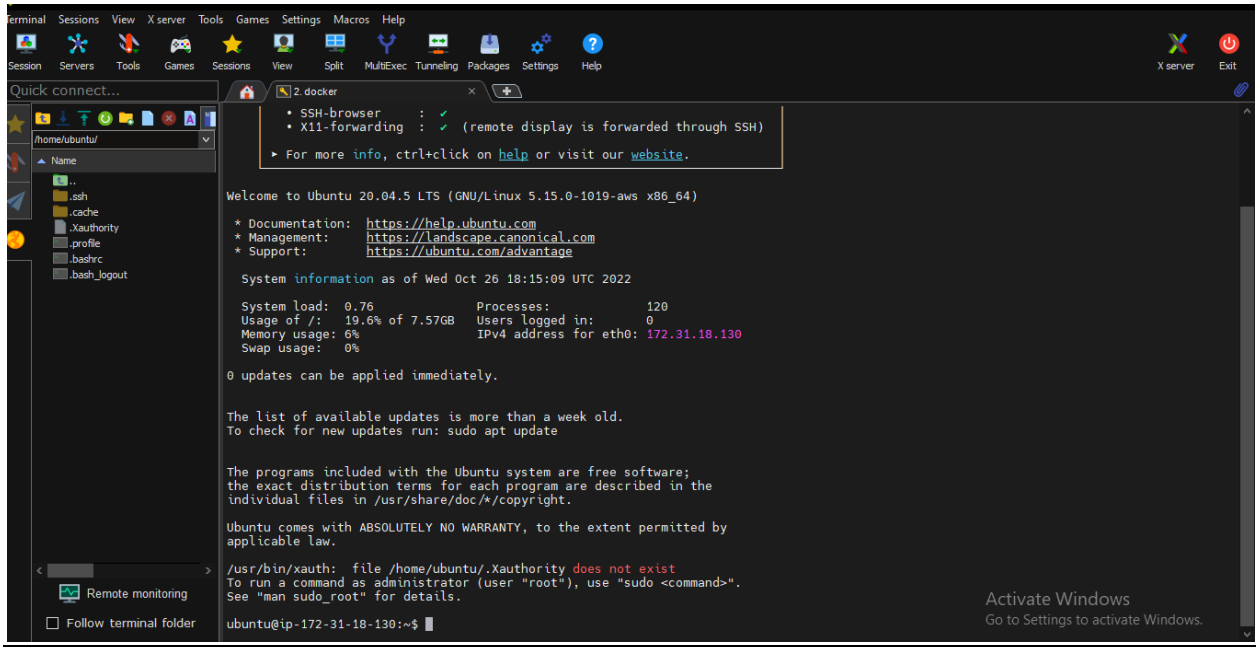
Docker-DAY3

Executing commands in mobaxterm

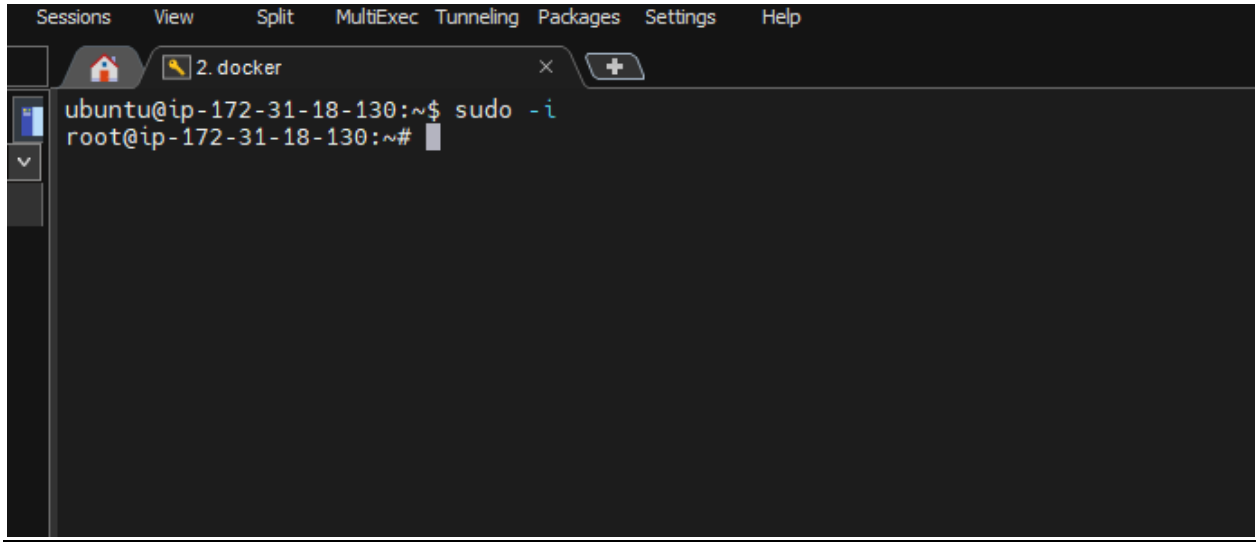
1.First we will create a EC2 instance



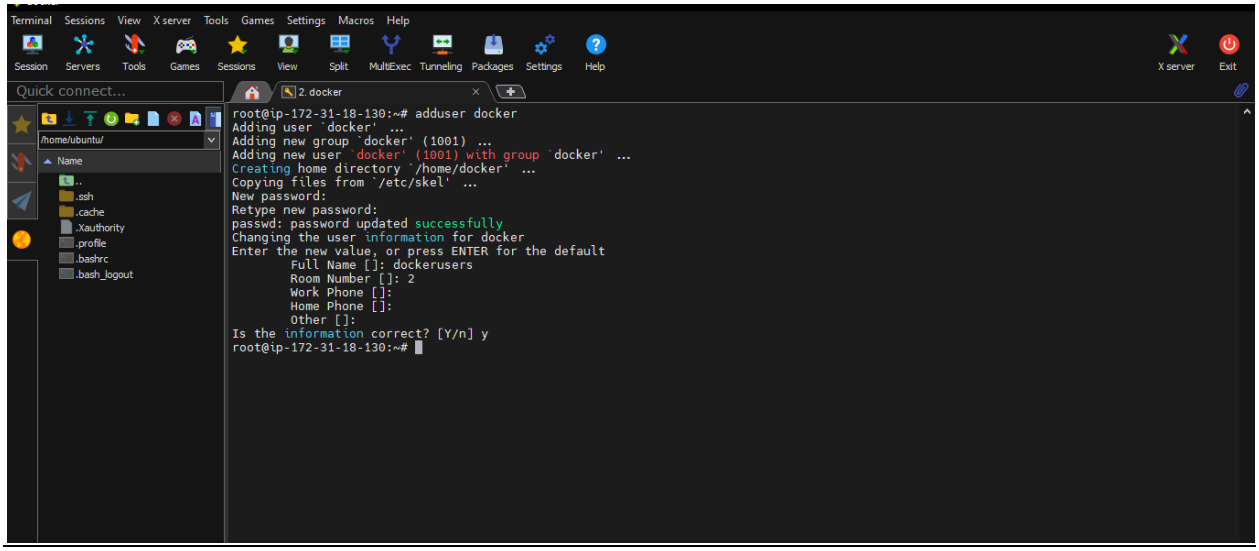
2. Next we will create a session use our public ip address



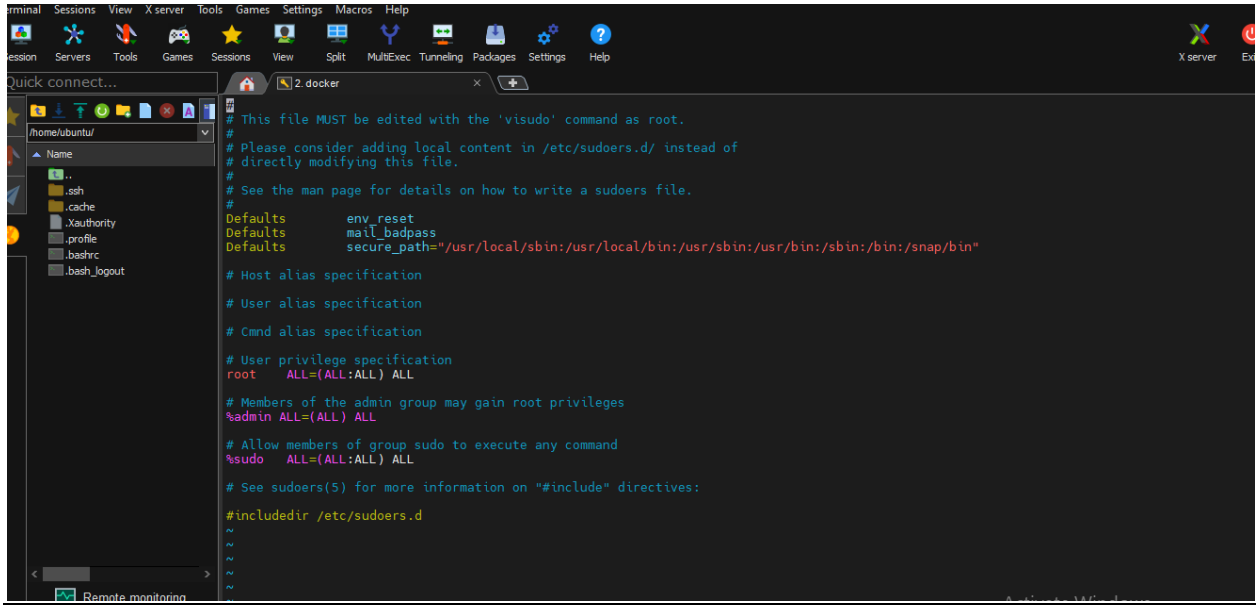
3. We will write “$ sudo -I” to make our docker route user



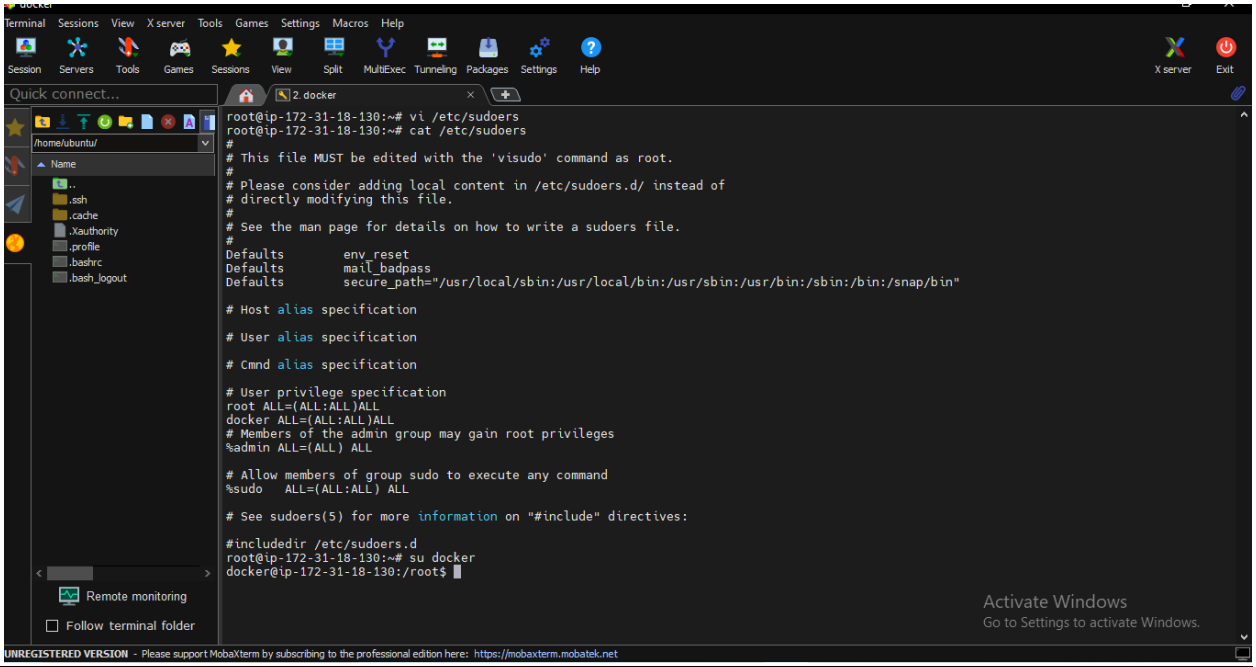
4. Next we will adduser by writing “add user docker” and create a docker folder



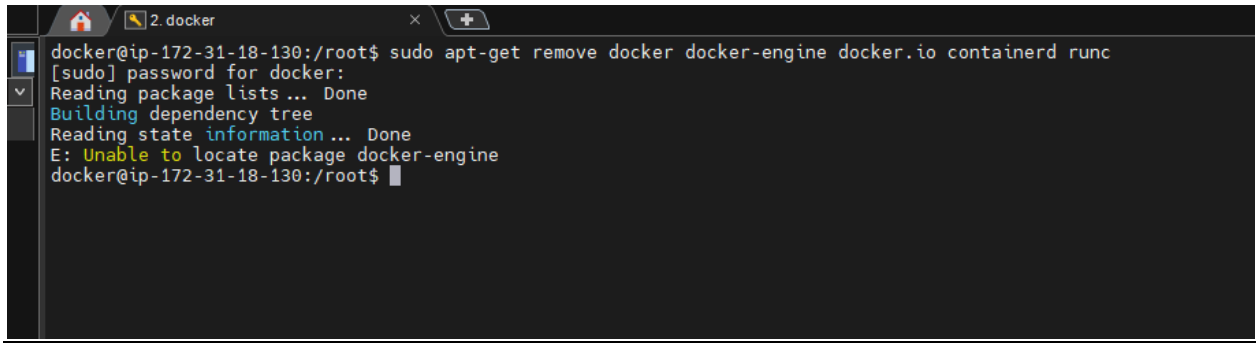
5. We will give our root permissions by “vi /etc/sudoers”



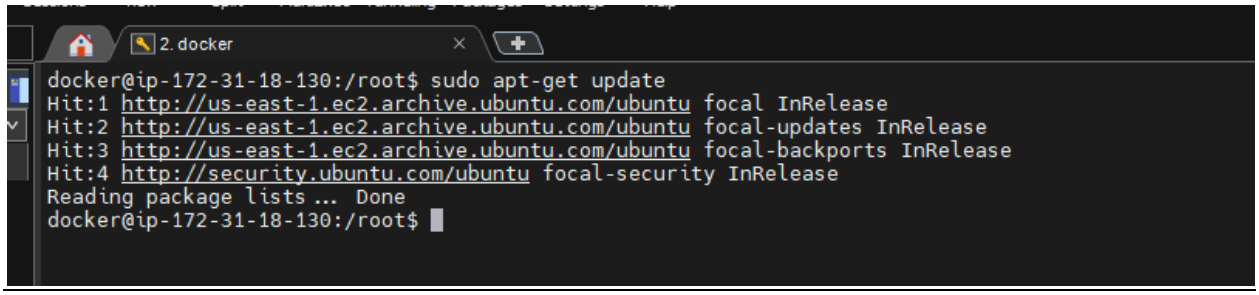
6. Then for checking our permissions assigned by “cat /etc/sudoers



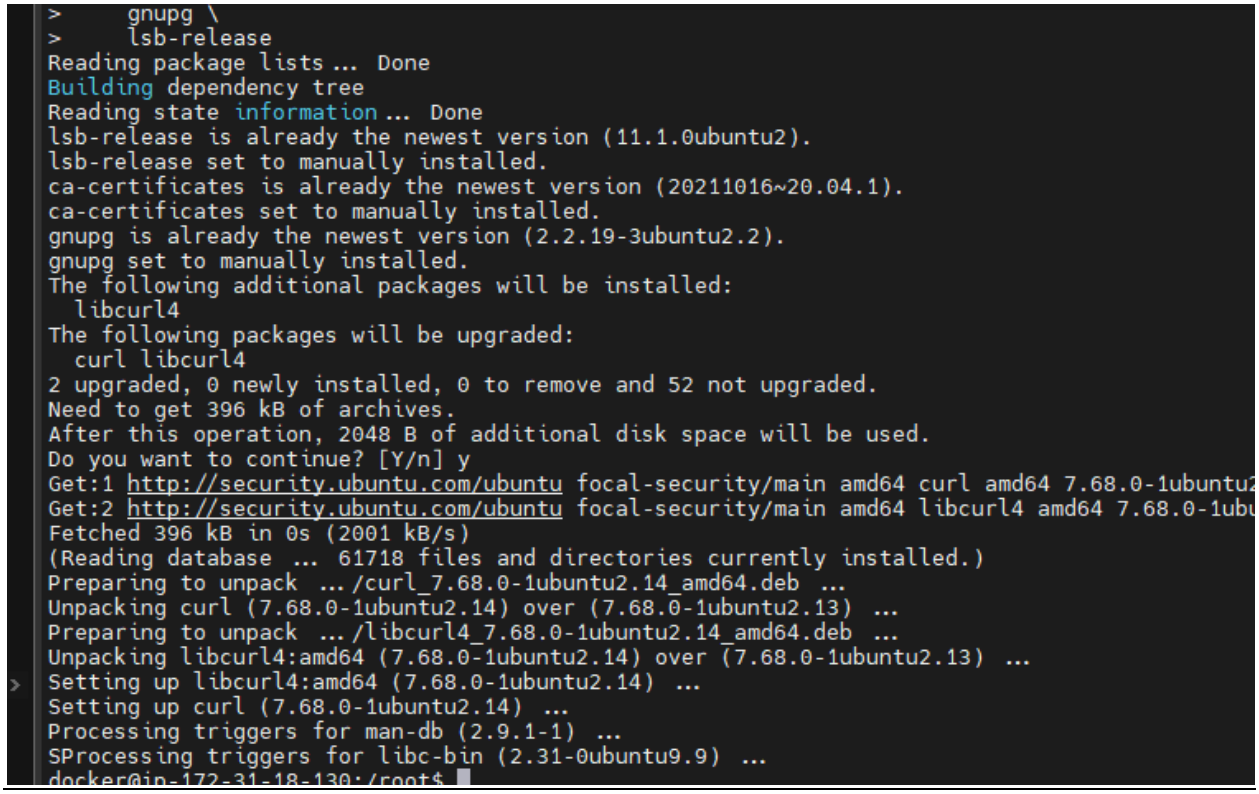
7. Command used fo uninstall old versions" sudo apt-get remove docker docker-engine docker.io containerd runc"



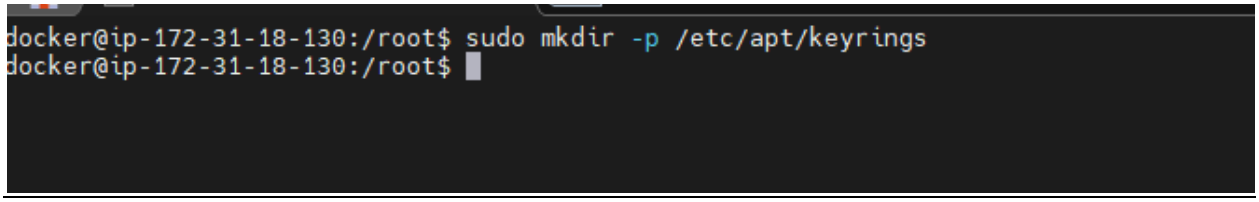
8. This command "`sudo apt-get update` Used for Updating the `apt` package index



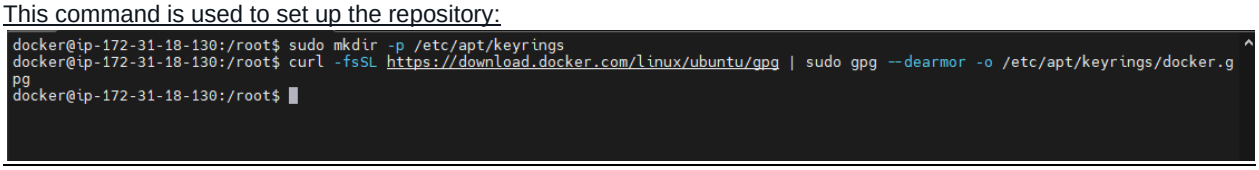
This command is used for install packages to allow `apt` to use a repository over HTTPS



This command is used for Adding Docker's official GPG key:



This command is used to set up the repository:



For Updating the `apt` package index:

```
docker@ip-172-31-18-130:/root$ sudo mkdir -p /etc/apt/keyrings
docker@ip-172-31-18-130:/root$ curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.g
pg
docker@ip-172-31-18-130:/root$ echo \
>   "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu \
>   $(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null
docker@ip-172-31-18-130:/root$
```

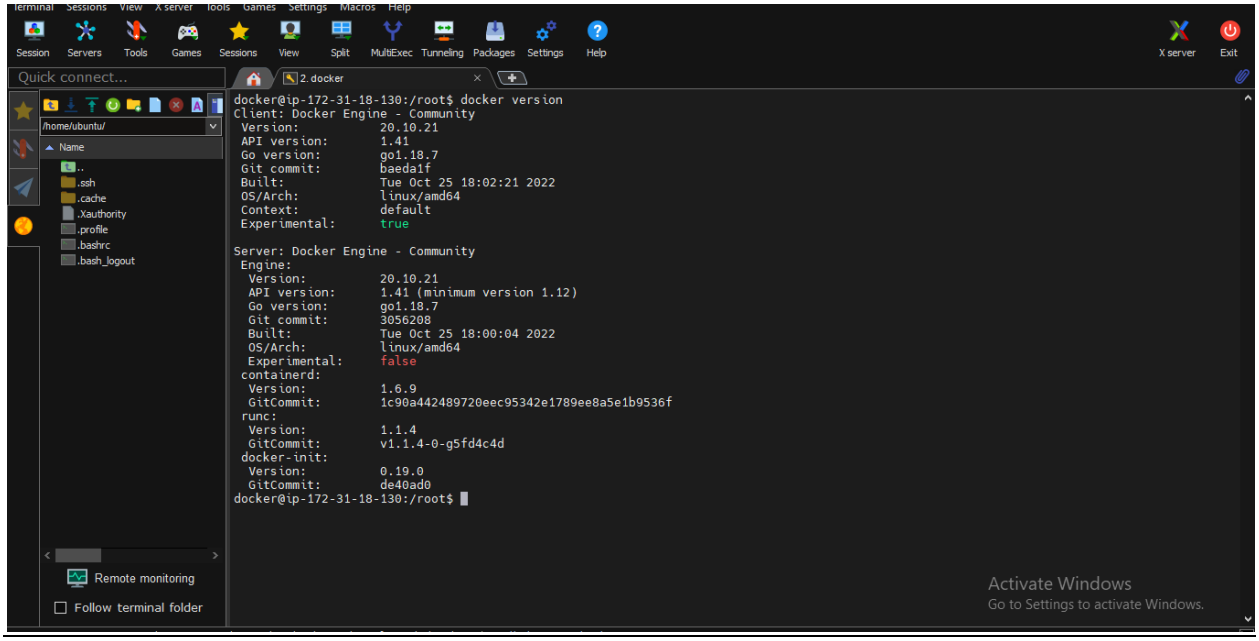
```
2. docker
docker@ip-172-31-18-130:/root$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Get:4 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:6 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [20.8 kB]
Fetched 78.5 kB in 0s (178 kB/s)
Reading package lists ... Done
docker@ip-172-31-18-130:/root$
```

```
docker@ip-172-31-18-130:/root$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Get:4 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:6 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [20.8 kB]
Fetched 78.5 kB in 0s (178 kB/s)
Reading package lists ... Done
docker@ip-172-31-18-130:/root$ sudo chmod a+r /etc/apt/keyrings/docker.gpg
docker@ip-172-31-18-130:/root$ sudo apt-get update
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 https://download.docker.com/linux/ubuntu focal InRelease
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Reading package lists ... Done
docker@ip-172-31-18-130:/root$
```

This" sudo apt-get install docker-ce docker-ce-cli containerd.io docker-compose-plugin" is Installed for Docker Engine, containerd, and Docker Compose.

```
ocker@ip-172-31-18-130:/root$ sudo apt-get update
it:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
it:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
it:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
et:4 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
it:5 http://security.ubuntu.com/ubuntu focal-security InRelease
et:6 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [20.8 kB]
etched 78.5 kB in 0s (178 kB/s)
eading package lists ... Done
ocker@ip-172-31-18-130:/root$ sudo chmod a+r /etc/apt/keyrings/docker.gpg
ocker@ip-172-31-18-130:/root$ sudo apt-get update
it:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal InRelease
it:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-updates InRelease
it:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal-backports InRelease
it:4 https://download.docker.com/linux/ubuntu focal InRelease
it:5 http://security.ubuntu.com/ubuntu focal-security InRelease
eading package lists ... Done
ocker@ip-172-31-18-130:/root$ sudo apt-get install docker-ce docker-ce-cli containerd.io docker-compose-plugin
eading package lists ... Done
uilding dependency tree
eading state information ... Done
he following additional packages will be installed:
  docker-ce-rootless-extras docker-scan-plugin pigz slirp4netns
uggested packages:
  aufs-tools cgroupfs-mount | cgroup-lite
he following NEW packages will be installed:
  containerd.io docker-ce docker-ce-cli docker-ce-rootless-extras docker-compose-plugin docker-scan-plugin pigz slirp4netns
 upgraded, 8 newly installed, 0 to remove and 52 not upgraded.
eed to get 111 MB of archives.
fter this operation, 428 MB of additional disk space will be used.
o you want to continue? [Y/n] y
et:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1 [57.4 kB]
et:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu focal/universe amd64 slirp4netns amd64 0.4.3-1 [74.3 kB]
et:3 https://download.docker.com/linux/ubuntu focal/stable amd64 containerd.io amd64 1.6.9-1 [27.7 MB]
et:4 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-cli amd64 5:20.10.21~3-0~ubuntu-focal [41.5 MB]
et:5 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce amd64 5:20.10.21~3-0~ubuntu-focal [20.5 MB]
et:6 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-rootless-extras amd64 5:20.10.21~3-0~ubuntu-focal [8394 kB]
et:7 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-compose-plugin amd64 2.12.2~ubuntu-focal [9567 kB]
```

This command is used for checking the version used in docker

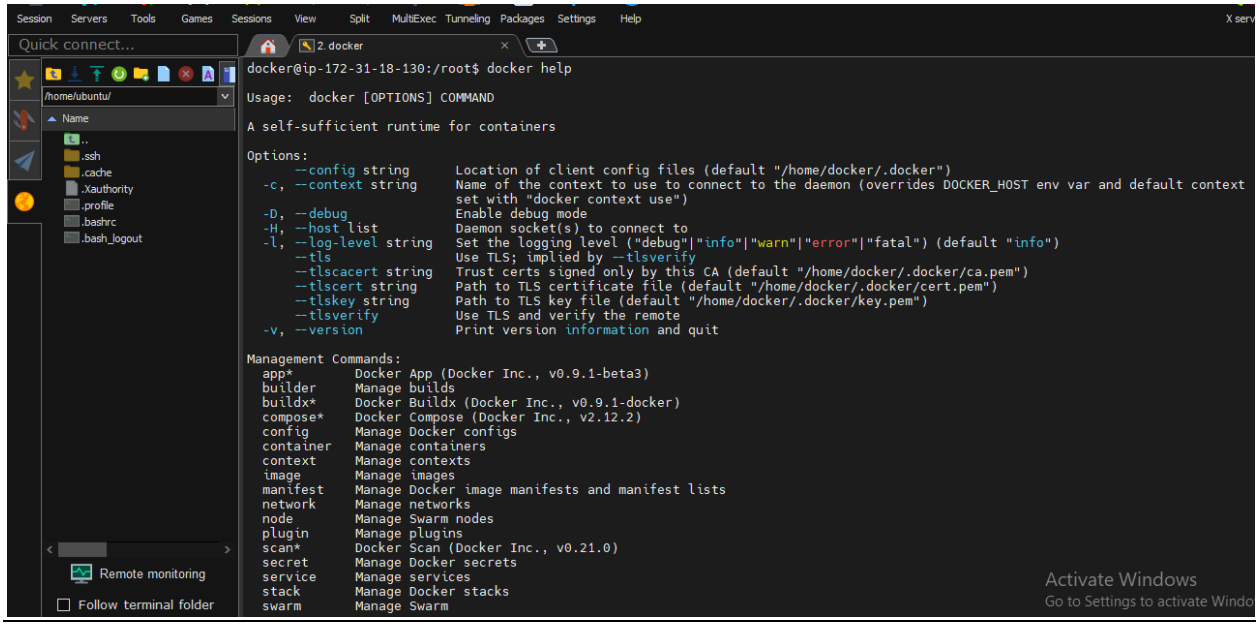


"docker info" command is used for checking the info

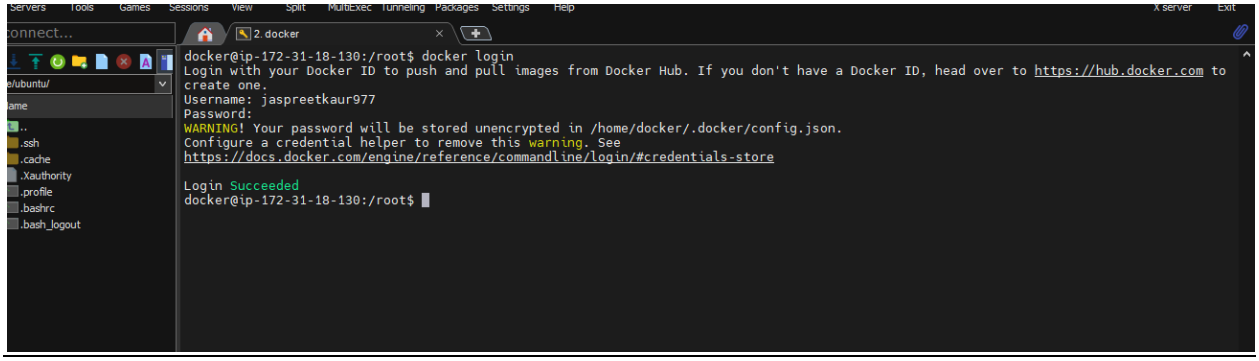
```
  GitCommit:        de40ad0
docker@ip-172-31-18-130:/root$ docker info
Client:
 Context:    default
 Debug Mode: false
 Plugins:
  app: Docker App (Docker Inc., v0.9.1-beta3)
  buildx: Docker Buildx (Docker Inc., v0.9.1-docker)
  compose: Docker Compose (Docker Inc., v2.12.2)
  scan: Docker Scan (Docker Inc., v0.21.0)

Server:
 Containers: 0
  Running: 0
  Paused: 0
  Stopped: 0
 Images: 0
 Server Version: 20.10.21
 Storage Driver: overlay2
  Backing Filesystem: extfs
  Supports d_type: true
  Native Overlay Diff: true
  userxattr: false
 Logging Driver: json-file
 Cgroup Driver: cgroupfs
 Cgroup Version: 1
 Plugins:
  Volume: local
  Network: bridge host ipvlan macvlan null overlay
  Log: awslogs fluentd gcplogs gelf journald json-file local logentries splunk syslog
 Swarm: inactive
```

This”docker help” command is used for takin help from docker



“docker login “command is used for login in the docker hub account



```
docker@ip-172-31-18-130:/root$ docker run mysql
Unable to find image 'mysql:latest' locally
latest: Pulling from library/mysql
50cbc88660a5: Pull complete
92ca853f7184: Pull complete
9a2047696230: Pull complete
fe3fea56f9fb: Pull complete
b058249d3104: Pull complete
9d5014a20163: Pull complete
906aa7388ee2: Pull complete
86b5e2150967: Pull complete
7c6b15dcdf4e: Pull complete
21de4337b977: Pull complete
35dab154f2ae: Pull complete
Digest: sha256:06314a7a220f6043436cfd72fd9c7f174fd58ef69fe4b788625fa53be4ab66aa
Status: Downloaded newer image for mysql:latest
2022-10-26 19:10:55+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 8.0.31-1.el8 started.
2022-10-26 19:10:55+00:00 [Note] [Entrypoint]: Switching to dedicated user 'mysql'
2022-10-26 19:10:55+00:00 [Note] [Entrypoint]: Entrypoint script for MySQL Server 8.0.31-1.el8 started.
```

To know about the image of our machine we use docker images