**Seat no.: 567** 

Name: Chaudhary Juned Ahmad S.

## **Experiment**

Aim: Install and configure Docker

## Theory:

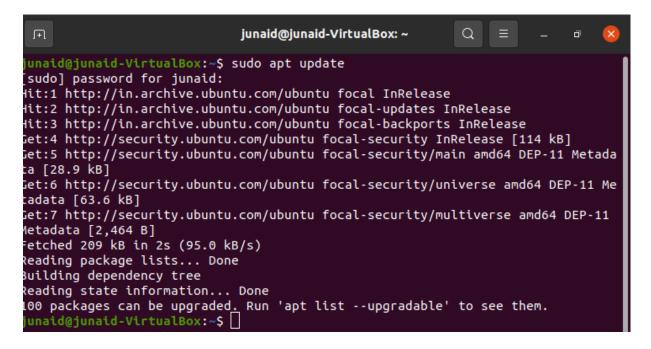
- Software requirements
  - 1. Virtual Box 6.1 or above/VMWARE ESXi 7.0GA
  - 2. Linux Operating system
- Hardware requirements
  - 1. Processor: Intel Core i3 or above
  - 2. RAM: 4GB (4GB + Recommended)
  - 3. HDD: Minimum 50GB (500GB Recommended)
  - 4. Other requirements: Internet Connectivity.

## Steps of Installing Docker

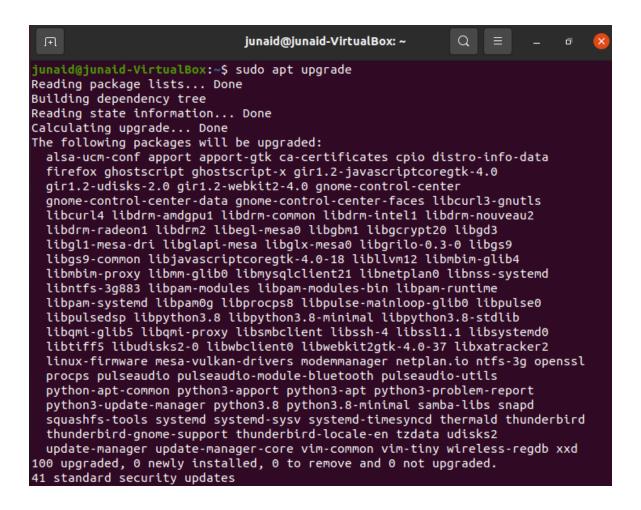
Step 1: Run command : sudo apt install docker.io This will install Docker into the machine

```
junaid@junaid-VirtualBox:~$ sudo apt install docker.io
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
  bridge-utils containerd git git-man liberror-perl pigz runc ubuntu-fan
Suggested packages:
  ifupdown aufs-tools btrfs-progs cgroupfs-mount | cgroup-lite debootstrap
  docker-doc rinse zfs-fuse | zfsutils git-daemon-run | git-daemon-sysvinit
  git-doc git-el git-email git-gui gitk gitweb git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
  bridge-utils containerd docker.io git git-man liberror-perl pigz runc
  ubuntu-fan
0 upgraded, 9 newly installed, 0 to remove and 0 not upgraded.
Need to get 79.4 MB of archives.
After this operation, 397 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://in.archive.ubuntu.com/ubuntu focal/universe amd64 pigz amd64 2.4-1
[57.4 kB]
Get:2 http://in.archive.ubuntu.com/ubuntu focal/main amd64 bridge-utils amd64 1
.6-2ubuntu1 [30.5 kB]
Get:3 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 runc amd64 1
.0.0~rc95-0ubuntu1~20.04.2 [4,087 kB]
Get:4 http://in.archive.ubuntu.com/ubuntu focal-updates/main amd64 containerd a
md64 1.5.2-0ubuntu1~20.04.3 [32.9 MB]
Get:5 http://in.archive.ubuntu.com/ubuntu focal-updates/universe amd64 docker.i
o amd64 20.10.7-0ubuntu1~20.04.2 [36.9 MB]
Get:6 http://in.archive.ubuntu.com/ubuntu focal/main amd64 liberror-perl all 0.
```

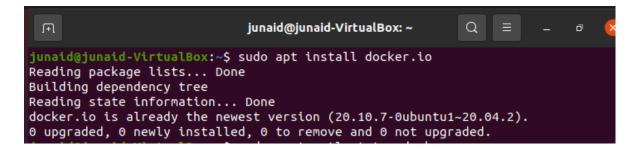
Step 2: Check if there are any updates sudo apt update



Step 3: Upgrade all packages that can be upgraded sudo apt upgrade



Step 4: sudo apt install docker.io



Step 5: Check the status of docker on the system sudo systemctl status docker

```
unaid@junaid-VirtualBox:~$ sudo systemctl status docker
docker.service - Docker Application Container Engine
     Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor prese>
     Active: active (running) since Wed 2021-10-20 19:19:36 IST; 1min 54s ago
TriggeredBy: @docker.socket
       Docs: https://docs.docker.com
  Main PID: 30729 (dockerd)
     Tasks: 8
    Memory: 47.2M
    CGroup: /system.slice/docker.service

-30729 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/co>
Oct 20 19:19:35 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:35.85>
Oct 20 19:19:35 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:35.85
Oct 20 19:19:35 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:35.85
Oct 20 19:19:35 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:35.85
Oct 20 19:19:36 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:36.06>
Oct 20 19:19:36 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:36.50
Oct 20 19:19:36 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:36.77
Oct 20 19:19:36 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:36.77
Oct 20 19:19:36 junaid-VirtualBox systemd[1]: Started Docker Application Conta
Oct 20 19:19:37 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:37.01>
lines 1-21/21 (END)
```

## Step 6: Exit by entering: ctrl + z

```
Oct 20 19:19:36 junaid-VirtualBox dockerd[30729]: time="2021-10-20119:19:36.77"

Oct 20 19:19:36 junaid-VirtualBox dockerd[30729]: time="2021-10-20T19:19:36.77"

Oct 20 19:19:36 junaid-VirtualBox systemd[1]: Started Docker Application Contactor C
```

Conclusion: Thus, we have successfully installed and configured Docker