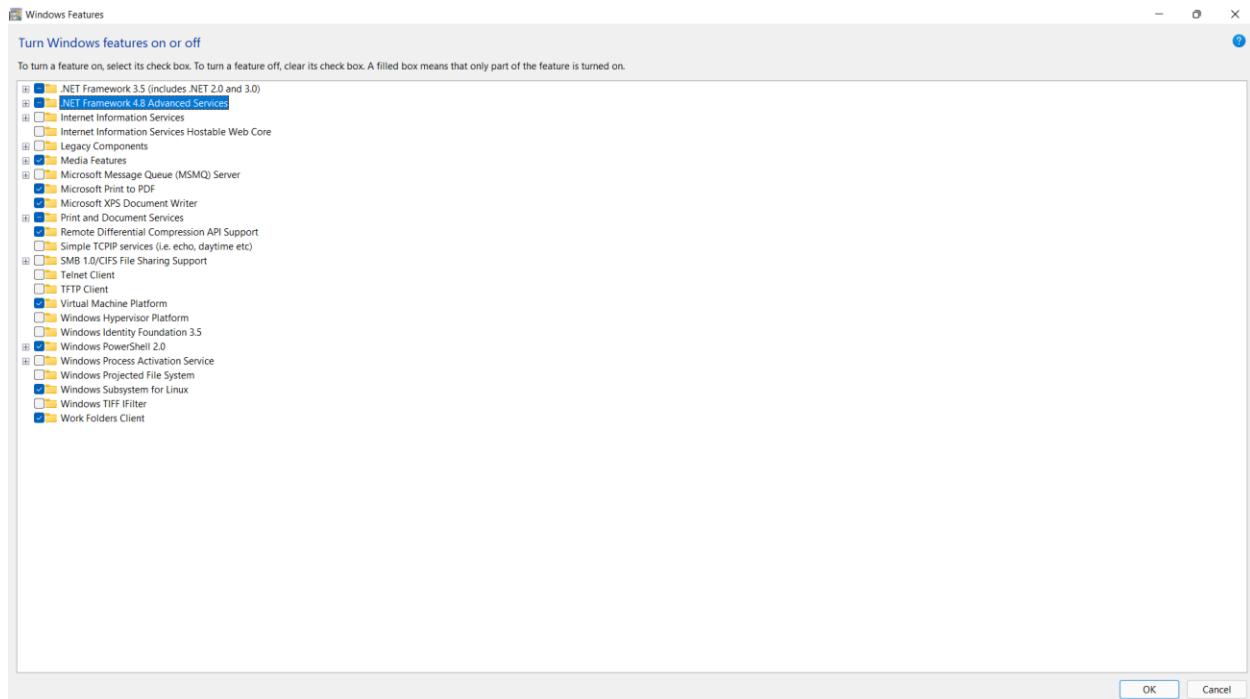


Task 1:

Hyper-v must be enabled to enable hardware virtualization technology. I first tried to enable Hardware Virtualization in the BIOS option. I then tried to enable Hyper-V using Powershell ran as an administrator. Next I tried to enable Hyper-V with CMD and DISM as an administrator. And finally I tried to enable the Hyper-V role through settings and all strategies led to the same response shown below. Hyper_v nowhere to be found. Even as I look on the official docker website and scoured the internet for troubleshooting, it didn't seem to work on my laptop. What I realized later was that if my CPU doesn't support virtualization, there's unfortunately nothing I could have done to run a virtual machine. I needed to upgrade the processor, and perhaps the motherboard.



```
PS Select Administrator: Command Prompt
Microsoft Windows [Version 10.0.22000.613]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>DISM /Online /Enable-Feature /All /FeatureName:Microsoft-Hyper-V

Deployment Image Servicing and Management tool
Version: 10.0.22000.1

Image Version: 10.0.22000.613

Error: 0x800f080c

Feature name Microsoft-Hyper-V is unknown.
A Windows feature name was not recognized.
Use the /Get-Features option to find the name of the feature in the image and try the command again.

The DISM log file can be found at C:\WINDOWS\Logs\DISM\dism.log

C:\WINDOWS\system32>
```

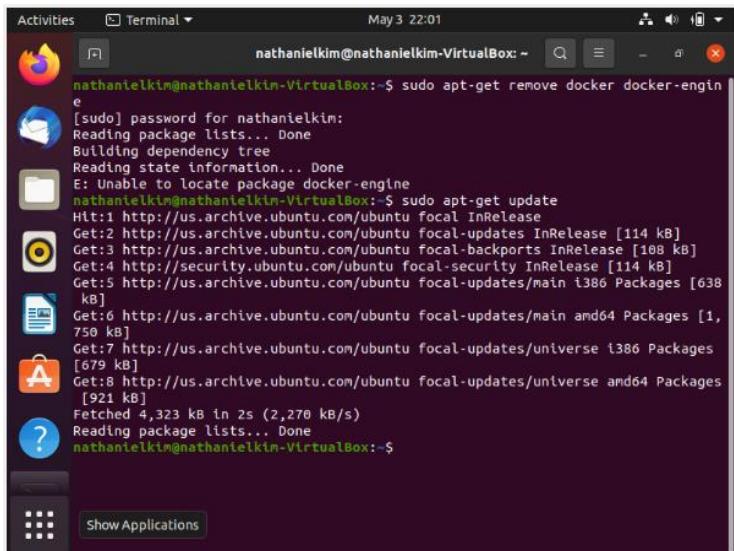
```
PS Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

      Enable-WindowsOptionalFeature : Feature name Microsoft-Hyper-V is unknown.
At line:1 char:1
+ Enable-WindowsOptionalFeature -Online -FeatureName Microsoft-Hyper-V ...
+ ~~~~~
+ CategoryInfo          : NotSpecified: (:) [Enable-WindowsOptionalFeature], COMException
+ FullyQualifiedErrorMessage : Microsoft.Dism.Commands.EnableWindowsOptionalFeatureCommand

PS C:\WINDOWS\system32>
```

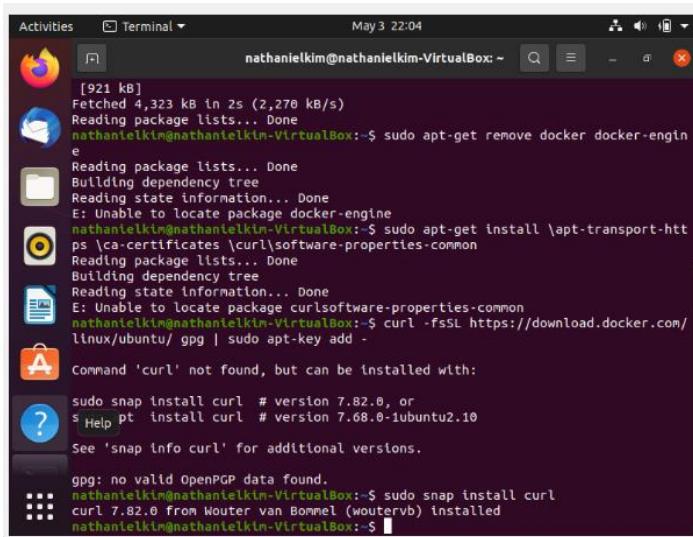
Running sudo apt-get update updates this on your local system. This is the step that retrieves information about what packages can be installed, including what updates to currently installed packages are available, from Internet sources. That was the first step and if the following and proceeding commands directly given in the instruction were followed, Docker was successfully installed with the final two commands, sudo apt-get install snapd and sudo snap install docker completing the “install Docker” portion of the Lab. Then, to check the docker installation, the command sudo docker run hello-world is ran to test the docker installation. Finally, the

commands sudo docker run hello-world should give a message that shows that my installation appears to be working correctly.



A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window titled "Terminal". The terminal window has a dark background and displays command-line text. The text shows the user attempting to remove Docker and Docker Engine via apt-get, which fails because they are not installed. It then proceeds to update the package lists and install Docker Engine from the official repository. The terminal window is part of a desktop interface with a dock at the bottom containing icons for various applications like a browser, file manager, and terminal.

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get remove docker docker-engine
[sudo] password for nathanielkim:
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package docker-engine
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get update
Hit:1 http://us.archive.ubuntu.com/ubuntu focal InRelease
Get:2 http://us.archive.ubuntu.com/ubuntu focal-updates InRelease [114 kB]
Get:3 http://us.archive.ubuntu.com/ubuntu focal-backports InRelease [108 kB]
Get:4 http://security.ubuntu.com/ubuntu focal-security InRelease [114 kB]
Get:5 http://us.archive.ubuntu.com/ubuntu focal-updates/main i386 Packages [638 kB]
Get:6 http://us.archive.ubuntu.com/ubuntu focal-updates/main amd64 Packages [1,750 kB]
Get:7 http://us.archive.ubuntu.com/ubuntu focal-updates/universe i386 Packages [679 kB]
Get:8 http://us.archive.ubuntu.com/ubuntu focal-updates/universe amd64 Packages [921 kB]
Fetched 4,323 kB in 2s (2,270 kB/s)
Reading package lists... Done
nathanielkim@nathanielkim-VirtualBox:~$
```



A screenshot of a Linux desktop environment, likely Ubuntu, showing a terminal window titled "Terminal". The terminal window has a dark background and displays command-line text. The text shows the user attempting to remove Docker and Docker Engine via apt-get, which fails because they are not installed. It then proceeds to update the package lists and install Docker Engine from the official repository. The terminal window is part of a desktop interface with a dock at the bottom containing icons for various applications like a browser, file manager, and terminal. This session appears to be from a later time than the first one, as indicated by the date and time.

```
[921 kB]
Fetched 4,323 kB in 2s (2,270 kB/s)
Reading package lists... Done
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get remove docker docker-engine
[sudo] password for nathanielkim:
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package docker-engine
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get install \apt-transport-https \
ps \ca-certificates \curl\software-properties-common
Reading package lists... Done
Building dependency tree
Reading state information... Done
E: Unable to locate package curlsoftware-properties-common
nathanielkim@nathanielkim-VirtualBox:~$ curl -fsSL https://download.docker.com/linux/ubuntu/ gpg | sudo apt-key add -
[...]
Command 'curl' not found, but can be installed with:
[sudo] apt install curl # version 7.82.0, or
[sudo] apt install curl # version 7.68.0-1ubuntu2.10
See 'snap info curl' for additional versions.
gpg: no valid OpenPGP data found.
nathanielkim@nathanielkim-VirtualBox:~$ sudo snap install curl
curl 7.82.0 from Wouter van Bommel (woutervb) installed
nathanielkim@nathanielkim-VirtualBox:~$
```

```
Activities Terminal May 3 22:40
nux/ubuntu/ gpg | sudo apt-key add -
gpg: no valid OpenPGP data found.
nathanielkim@nathanielkim-VirtualBox:~$ curl -fs https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
OK
nathanielkim@nathanielkim-VirtualBox:~$ sudo add-apt-repository "deb [arch=amd64]
4] https://download.docker.com/linux/ubuntu $(lsb_release -cs) stable"
Hit:1 http://us.archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://us.archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://us.archive.ubuntu.com/ubuntu focal-backports InRelease
Hit:4 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:5 https://download.docker.com/linux/ubuntu focal InRelease [57.7 kB]
Get:6 https://download.docker.com/linux/ubuntu focal/stable amd64 Packages [15.5 kB]
Fetched 73.1 kB in 0s (124 kB/s)
Reading package lists... Done
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get update
Hit:1 http://archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://archive.ubuntu.com/ubuntu focal-updates InRelease
Hit:3 http://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
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get install docker-ce
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
bridge-utils ubuntu-fan
```

```
Activities Terminal May 3 22:40
nathanielkim@nathanielkim-VirtualBox:~$ curl -fs https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
OK
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get update
Hit:5 http://security.ubuntu.com/ubuntu focal-security InRelease
Reading package lists... Done
nathanielkim@nathanielkim-VirtualBox:~$ sudo apt-get install docker-ce
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
bridge-utils ubuntu-fan
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
containerd.io docker-ce-cli docker-ce-rootless-extras docker-scan-plugin
slirp4netns
Suggested packages:
aufs-tools cgroups-mount | cgroup-lite
The following packages will be REMOVED:
containerd docker.io runc
The following NEW packages will be installed:
containerd.io docker-ce docker-ce-cli docker-ce-rootless-extras
docker-scan-plugin slirp4netns
0 upgraded, 6 newly installed, 3 to remove and 397 not upgraded.
Need to get 96.3 MB of additional disk space.
A Help this operation, 72.0 MB of additional disk space will be used.
D-,--> Want to continue? [Y/n] y
Get:1 http://us.archive.ubuntu.com/ubuntu focal/universe amd64 slirp4netns amd64 0.4.3-1 [74.3 kB]
Get:2 https://download.docker.com/linux/ubuntu focal/stable amd64 containerd.io amd64 1.5.11-1 [22.9 MB]
Get:3 https://download.docker.com/linux/ubuntu focal/stable amd64 docker-ce-cli amd64 5:20.10.14-3~ubuntu-focal [41.0 MB]
```

Activities Terminal May 3 22:42

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:10d758d5eb2a652f4d93fd86d8f265f5318c6a73cc5b6a9798ff6d2b2e67
Status: Downloaded newer image for hello-world:latest

Hello from Docker!
This message shows that your installation appears to be working correctly.

To generate this message, Docker took the following steps:
 1. The Docker client contacted the Docker daemon.
 2. The Docker daemon pulled the "hello-world" image from the Docker Hub.
    (amd64)
 3. The Docker daemon created a new container from that image which runs the
 executable that produces the output you are currently reading.
 4. The Docker daemon streamed that output to the Docker client, which sent it
 to your terminal.

To try something more ambitious, you can run an Ubuntu container with:
$ docker run -it ubuntu bash

Help:
S... images, automate workflows, and more with a free Docker ID:
https://hub.docker.com/

For more examples and ideas, visit:
https://docs.docker.com/get-started/
nathanielkim@nathanielkim-VirtualBox:~$
```

Activities Terminal May 3 22:43

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hello-world latest feb5d9fea6a5 7 months ago 13.3kB
nathanielkim@nathanielkim-VirtualBox:~$ service docker status
● docker.service - Docker Application Container Engine
  Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor preset: enabled)
  Active: active (running) since Tue 2022-05-03 22:41:10 EDT; 1min 57s ago
    TriggeredBy: ● docker.socket
      Docs: https://docs.docker.com
    Main PID: 4654 (dockerd)
      Tasks: 9
        Memory: 57.3M
      CGroup: /system.slice/docker.service
              └─4654 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/con...
```

For more examples and ideas, visit:
<https://docs.docker.com/get-started/>

```
May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Starting Docker Application Container Engine v20.10.16 (4654)"
```

May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Docker daemon" commit="05cda3d" host="VirtualBox" version="20.10.16"

May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="API listen on /var/run/docker.sock"

May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Docker daemon" commit="05cda3d" host="VirtualBox" version="20.10.16"

May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="API listen on /var/run/docker.sock"

May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="Docker daemon" commit="05cda3d" host="VirtualBox" version="20.10.16"

May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="API listen on /var/run/docker.sock"

May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="Docker daemon" commit="05cda3d" host="VirtualBox" version="20.10.16"

May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="API listen on /var/run/docker.sock"

May 03 22:42:43 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:42:43+00:00" level=info msg="Docker daemon" commit="05cda3d" host="VirtualBox" version="20.10.16"

lines 1-21/21 (END)

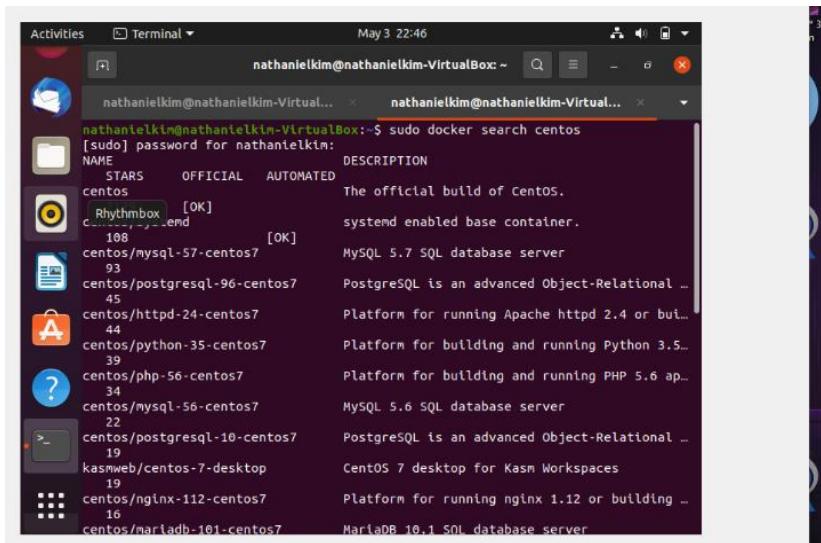
```
Activities Terminal May 3 22:43 nathanielkim@nathanielkim-VirtualBox: ~
May 03 22:41:10 nathanielkim-VirtualBox systemd[1]: Started Docker Application>
May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:>
May 03 22:42:43 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:42:>
...skipping...
● docker.service - Docker Application Container Engine
  Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor prese>
  Active: active (running) since Tue 2022-05-03 22:41:10 EDT; 1min 57s ago
TriggeredBy: ● docker.socket
  Docs: https://docs.docker.com
  Main PID: 4654 (dockerd)
    Tasks: 9
      Memory: 57.3M
      CGroup: /system.slice/docker.service
              └─4654 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/con>
May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:>
May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:>
May 03 22:42:43 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:42:>
```

```
Activities Terminal May 3 22:43
nathanielkim@nathanielkim-VirtualBox: ~
set mark: ...skipping...
● docker.service - Docker Application Container Engine
  Loaded: loaded (/lib/systemd/system/docker.service; enabled; vendor presen
  Active: active (running) since Tue 2022-05-03 22:41:10 EDT; 1min 57s ago
TriggeredBy: ● docker.socket
    Docs: https://docs.docker.com
      Main PID: 4654 (dockerd)
        Tasks: 9
       Memory: 57.3M
         CGroup: /system.slice/docker.service
                   └─4654 /usr/bin/dockerd -H fd:// --containerd=/run/containerd/con

May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Docker daemon is running"
May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Starting containerd"
May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Containerd version: v1.5.0-0ubuntu1~22.04.1"
May 03 22:41:09 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:09+00:00" level=info msg="Starting containerd containerd[4654]"
May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="Containerd has started"
May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="Docker daemon is up to date"
May 03 22:41:10 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:10+00:00" level=info msg="Starting Docker daemon dockerd[4654]"
May 03 22:41:43 nathanielkim-VirtualBox dockerd[4654]: time="2022-05-03T22:41:43+00:00" level=info msg="Docker daemon has started"
```

Task 2:

First, the command sudo docker search centos was used to download an official image of centos for docker. Then, because I needed a container for the images, the docker container was created with the command sudo docker pull centos, sudo docker ps -a, sudo docker images, sudo docker run centos cat /etc/issue, and sudo docker run centos cat /etc/shadow. When the commands sudo docker run -it centos bash and sudo docker ps -l will allocate a terminal to created container by '-it'. Finally, to check and test the running containers in the system the commands sudo docker ps and curl <https://localhost:B1> were executed.



A screenshot of a Linux desktop environment showing a terminal window. The terminal window is titled 'Terminal' and has the command 'nathanielkim@nathanielkim-VirtualBox:~\$ sudo docker search centos' entered. The output of the command is displayed, showing various Docker images related to CentOS. The desktop background shows icons for a file manager, terminal, and other applications.

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker search centos
[sudo] password for nathanielkim:
NAME          STARS      OFFICIAL   AUTOMATED
centos        108        [OK]
centos/mysql-57-centos7 93
centos/postgresql-96-centos7 45
centos/httpd-24-centos7 44
centos/python-35-centos7 39
centos/php-56-centos7 34
centos/mysql-56-centos7 22
centos/postgresql-10-centos7 19
kasmweb/centos-7-desktop 19
centos/nginx-112-centos7 16
centos/mariadb-101-centos7 16

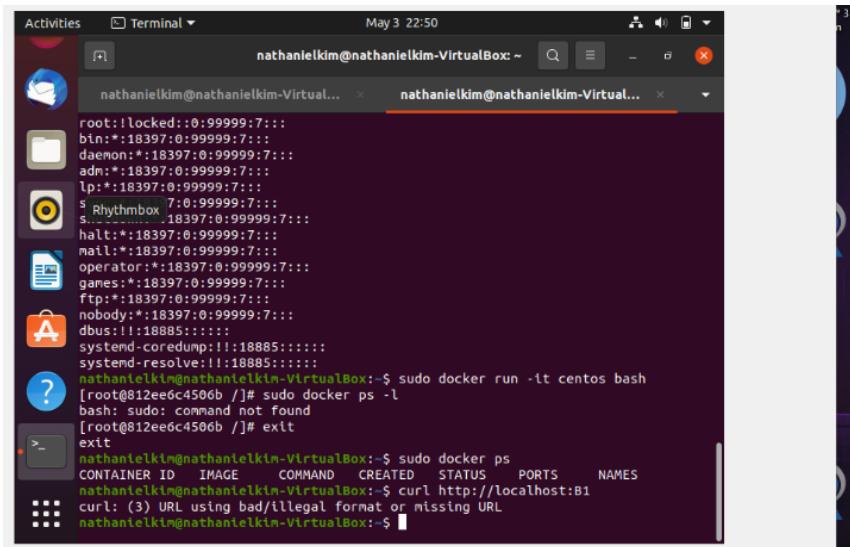
The official build of CentOS.
systemd enabled base container.
MySQL 5.7 SQL database server
PostgreSQL is an advanced Object-Relational ...
Platform for running Apache httpd 2.4 or bui...
Platform for building and running Python 3.5...
Platform for building and running PHP 5.6 ap...
MySQL 5.6 SQL database server
PostgreSQL is an advanced Object-Relational ...
CentOS 7 desktop for Kasm Workspaces
Platform for running nginx 1.12 or building ...
MariaDB 10.1 SQL database server
```

Activities Terminal May 3 22:47

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker pull centos
Using default tag: latest
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbb9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker ps -a
CONTAINER ID        IMAGE               COMMAND      CREATED     STATUS
PORTS NAMES
20c8f0f68818        hello-world        "/hello"    4 minutes ago   Exited (0) 4 minutes ago
o intelligent_nobel
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker images
REPOSITORY          TAG      IMAGE ID      CREATED       SIZE
hello-world         latest   feb5d0fea6a5  7 months ago  13.3kB
c Show Applications nathanielkim@nathanielkim-VirtualBox:~$
```

Activities Terminal May 3 22:48

```
nathanielkim@nathanielkim-VirtualBox:~$ docker run centos cat /etc/issue
docker: Got permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Post "http://127.0.0.1:2375/containers/create": dial unix /var/run/docker.sock: connect: permission denied.
See 'docker run --help'.
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run centos cat /etc/issue
\S
Kernel \r on an \m
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run centos cat /etc/shadow
root::locked:0:99999:7:::
bin::*:18397:0:99999:7:::
daemon::18397:0:99999:7:::
adm::18397:0:99999:7:::
l:::::18397:0:99999:7:::
l:::::18397:0:99999:7:::
s::Help::18397:0:99999:7:::
shutdown::18397:0:99999:7:::
halt:::18397:0:99999:7:::
mail:::18397:0:99999:7:::
operator:::18397:0:99999:7:::
games:::18397:0:99999:7:::
ftp:::18397:0:99999:7:::
nobody:::18397:0:99999:7:::
dbus:::::18885::::::
svntd::coredump:::18885::::::
```



A screenshot of an Ubuntu desktop environment. In the top left, there's a dock with icons for Dash, Home, Activities, and Terminal. A terminal window titled 'Terminal' is open, showing a command-line session. The session starts with a list of processes from the ps aux command, followed by the execution of 'sudo docker run -it centos bash'. Inside the Docker container, it attempts to run 'sudo docker ps', which fails because 'sudo' is not found. It then exits. Finally, it runs 'curl http://localhost:80', which fails with a message about a bad URL. The terminal window has a dark background with light-colored text.

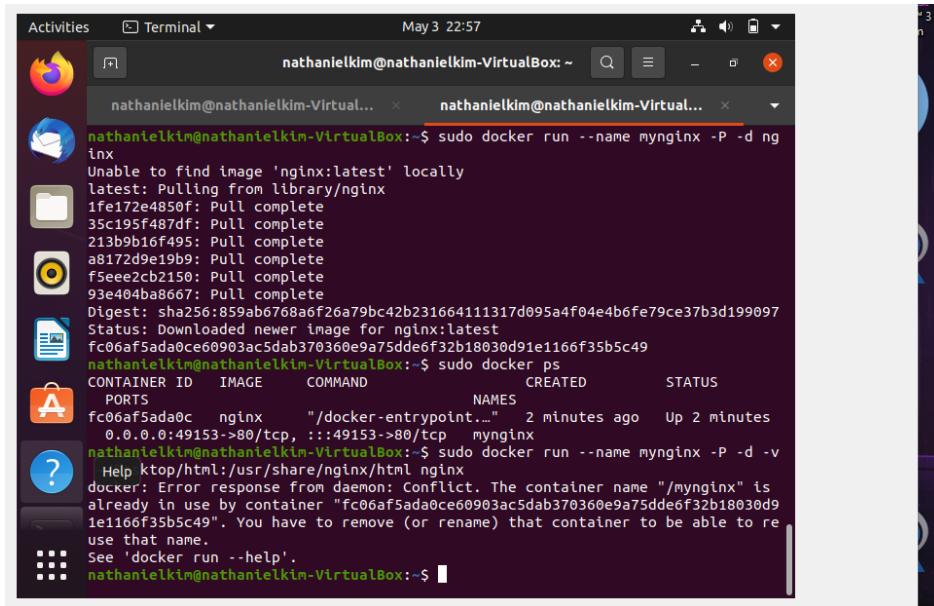
```
root:locked::0:99999:7:::  
bin:*:18397:0:99999:7:::  
daemon:*:18397:0:99999:7:::  
adm:*:18397:0:99999:7:::  
lp:*:18397:0:99999:7:::  
s_Rhythmbox 7:0:99999:7:::  
s_Rhythmbox 18397:0:99999:7:::  
halt:*:18397:0:99999:7:::  
mail:*:18397:0:99999:7:::  
operator:*:18397:0:99999:7:::  
games:*:18397:0:99999:7:::  
ftp:*:18397:0:99999:7:::  
nobody:*:18397:0:99999:7:::  
dbus:!:18885:::::  
systemd-coredump:!:18885:::::  
systemd-resolve:!:18885:::::  
exit  
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run -it centos bash  
[root@012ee6c4506b /]# sudo docker ps  
bash: sudo: command not found  
[root@012ee6c4506b /]# exit  
exit  
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker ps  
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES  
nathanielkim@nathanielkim-VirtualBox:~$ curl http://localhost:80  
curl: (3) URL using bad/illegal format or missing URL  
nathanielkim@nathanielkim-VirtualBox:~$
```

Task 3:

In task 3 we needed to install nginx on ubuntu using docker by first executing the command

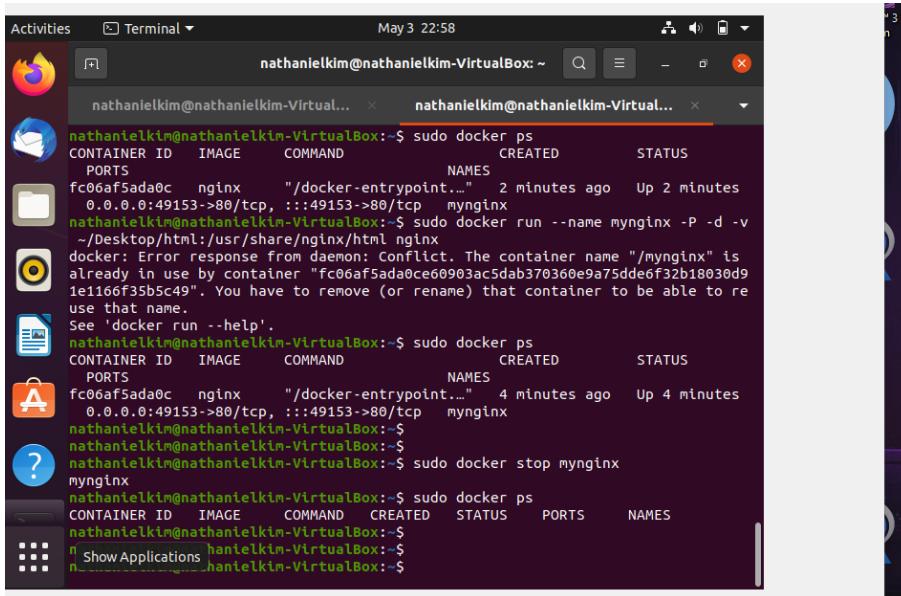
`sudo docker run --name mynginx -P -d nginx`. Then, to create a webpage using nginx and

docker, I need to create an index.html file for my webpage with the command sudo docker run –name mynginx -P -d -v and sudo docker ps again twice followed by sudo docker stop nynginx.



A screenshot of a Linux desktop environment showing a terminal window. The terminal window title is "nathanielkim@nathanielkim-VirtualBox: ~". The terminal content shows the following sequence of commands:

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run --name mynginx -P -d nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
1fe172e48450f: Pull complete
35c195f487df: Pull complete
213b9b16f495: Pull complete
a8172d9e19b9: Pull complete
f5eee2cb2150: Pull complete
93e404ba8667: Pull complete
Digest: sha256:859ab6768a6f26a79bc42b231664111317d095a4f04e4b6fe79ce37b3d199097
Status: Downloaded newer image for nginx:latest
fc06af5ada0ce60903ac5dab370360e9a75dde6f32b18030d91e1166f35b5c49
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
fc06af5ada0c nginx "/docker-entrypoint..." 2 minutes ago Up 2 minutes
0.0.0.0:49153->80/tcp, :::49153->80/tcp mynginx
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run --name mynginx -P -d -v
Help ktop/html:/usr/share/nginx/html nginx
docker: Error response from daemon: Conflict. The container name "/mynginx" is
already in use by container "fc06af5ada0ce60903ac5dab370360e9a75dde6f32b18030d9
1e1166f35b5c49". You have to remove (or rename) that container to be able to re
use that name.
See 'docker run --help'.
nathanielkim@nathanielkim-VirtualBox:~$
```



A screenshot of a Linux desktop environment showing a terminal window. The terminal window title is "nathanielkim@nathanielkim-VirtualBox: ~". The terminal content shows the following sequence of commands:

```
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
fc06af5ada0c nginx "/docker-entrypoint..." 2 minutes ago Up 2 minutes
0.0.0.0:49153->80/tcp, :::49153->80/tcp mynginx
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker run --name mynginx -P -d -v
Help ktop/html:/usr/share/nginx/html nginx
docker: Error response from daemon: Conflict. The container name "/mynginx" is
already in use by container "fc06af5ada0ce60903ac5dab370360e9a75dde6f32b18030d9
1e1166f35b5c49". You have to remove (or rename) that container to be able to re
use that name.
See 'docker run --help'.
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS
PORTS NAMES
fc06af5ada0c nginx "/docker-entrypoint..." 4 minutes ago Up 4 minutes
0.0.0.0:49153->80/tcp, :::49153->80/tcp mynginx
nathanielkim@nathanielkim-VirtualBox:~$ nathanielkim@nathanielkim-VirtualBox:~$ nathanielkim@nathanielkim-VirtualBox:~$ sudo docker stop mynginx
mynginx
nathanielkim@nathanielkim-VirtualBox:~$ sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
nathanielkim@nathanielkim-VirtualBox:~$
```