Experiment: Docker

Docker and Container : Installation & Deployment

Name: ALLEN S PHILIP

Roll No: 20

Batch: RMCA-A

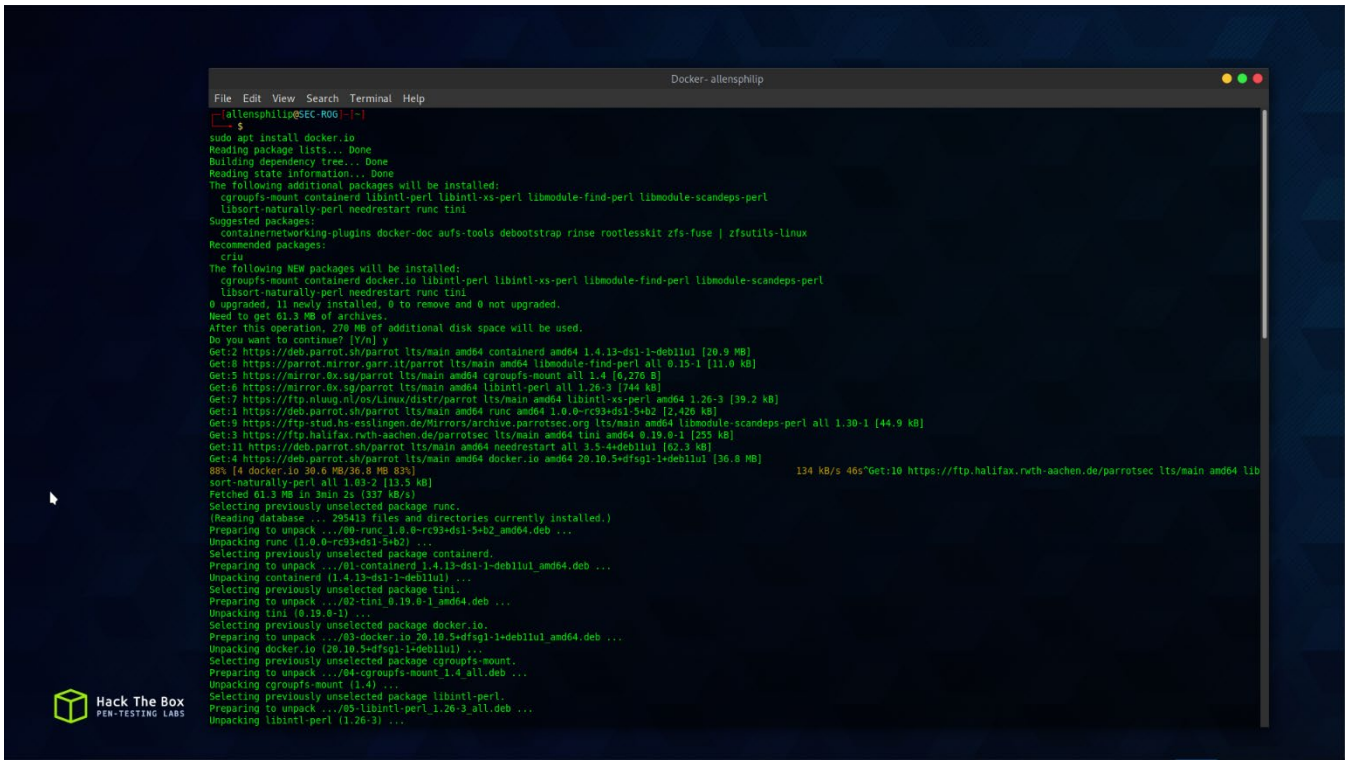
Date: 24/05/2022

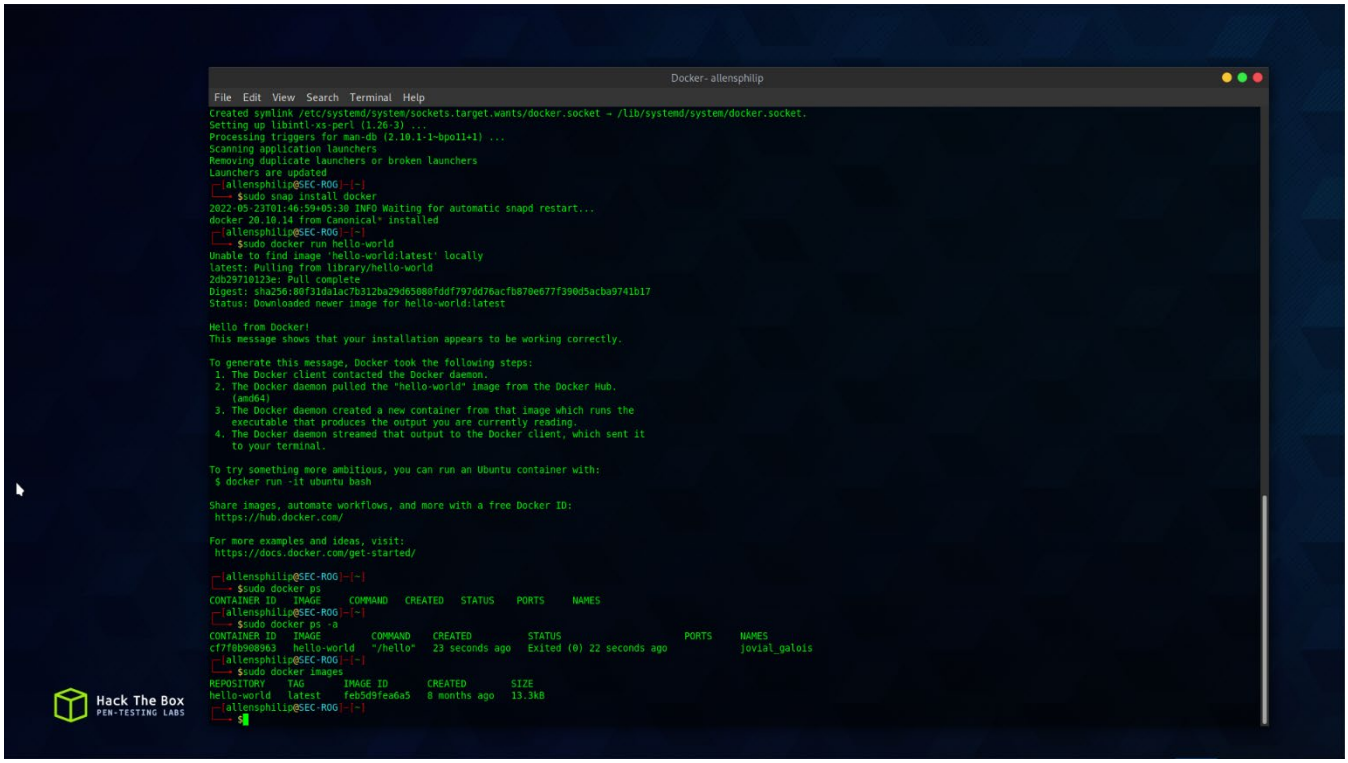
Aim:

1. Installation of Docker and Container
2. Deployment of Apache and MySQL in the container.
3. Research & find out how can host your own simple website with it.

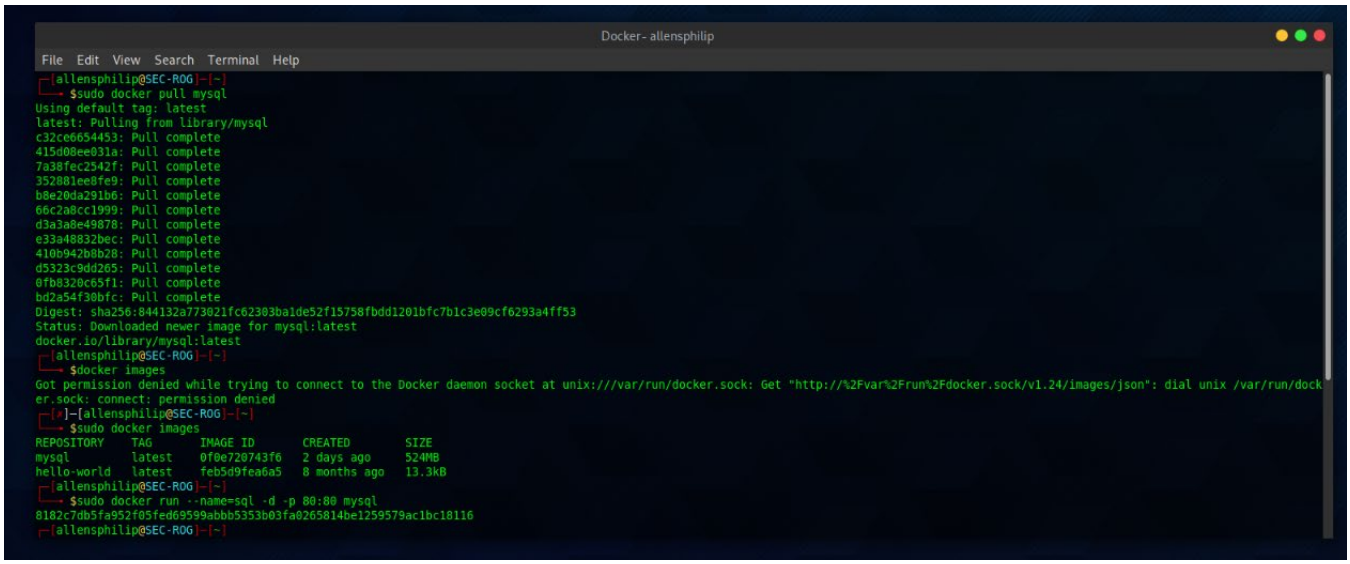
PROCEDURE:

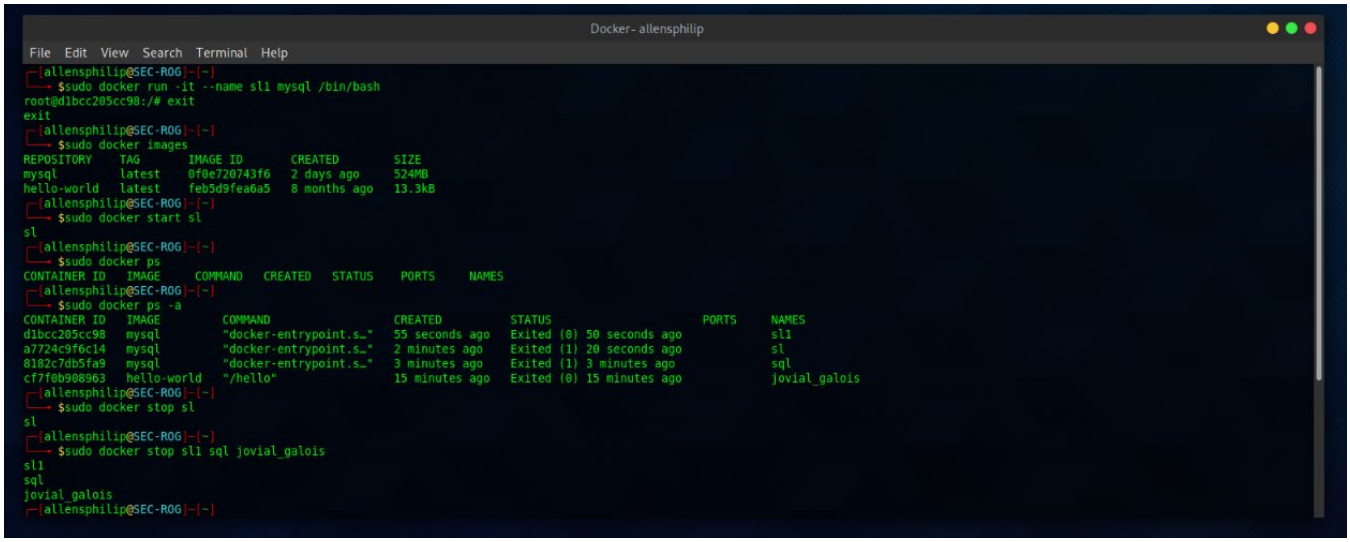
1. Installation of Docker and Container

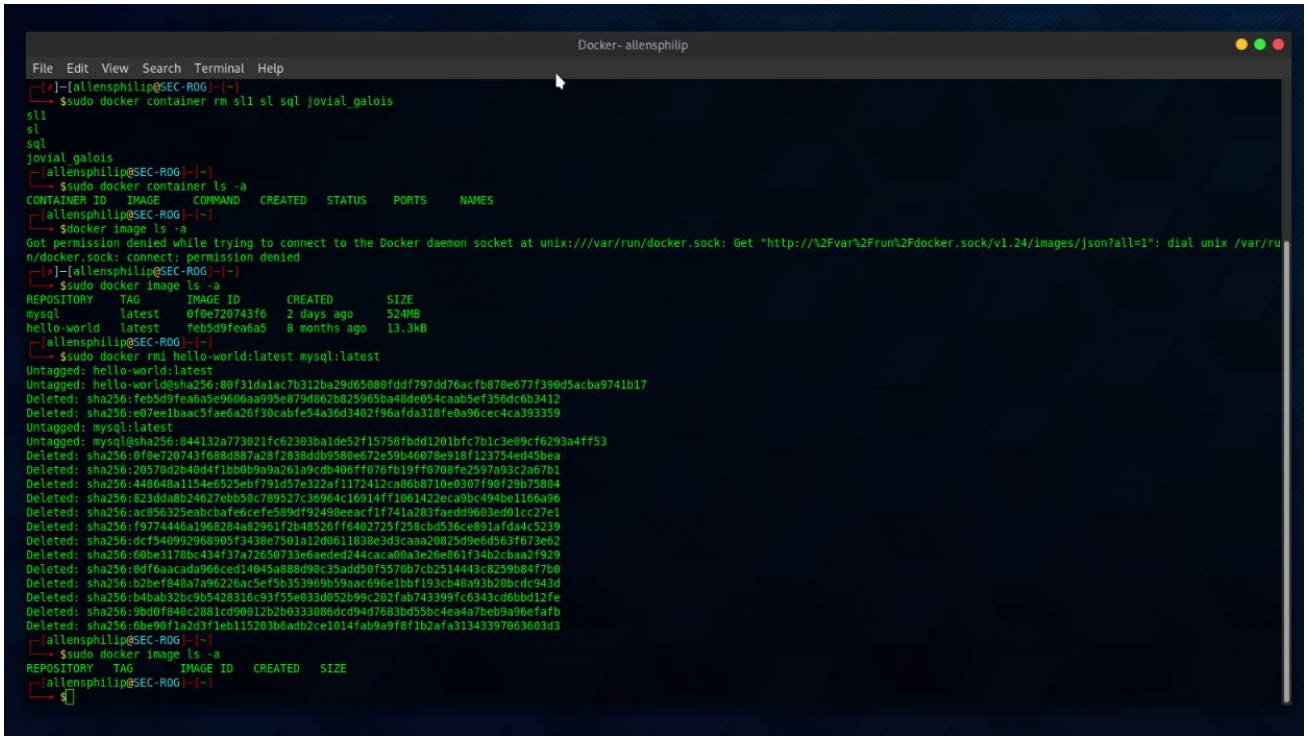


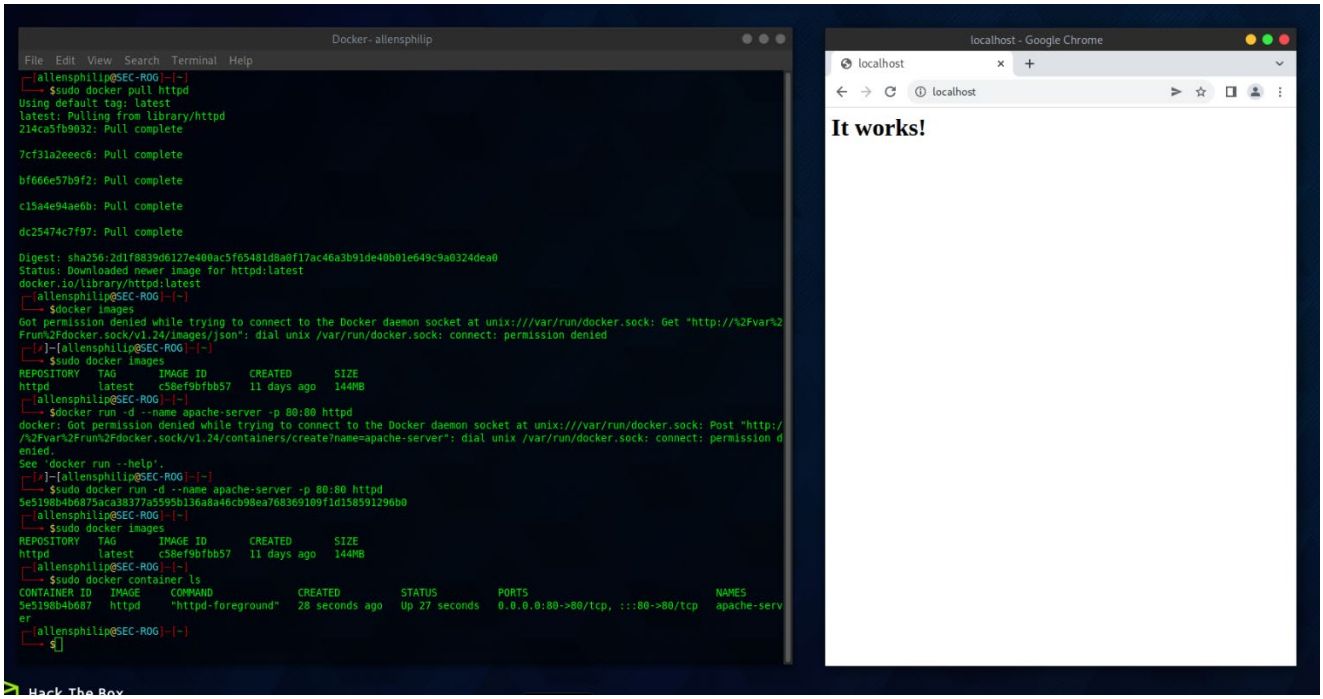

Docker- allensphilip
File Edit View Search Terminal Help
Created symlink /etc/systemd/system/sockets.target.wants/docker.socket → /lib/systemd/system/docker.socket.
Setting up libintl-xs-perl (1.26-3) ...
Processing triggers for man-db (2.10.1-1~bpo11+1) ...
Scanning application launchers
Removing duplicate launchers or broken launchers
Launchers are updated
[allensphilip@SEC-ROG]-[~]
$sudo snap install docker
2022-05-23T01:46:59+05:30 INFO Waiting for automatic snapd restart...
docker 20.10.14 from Canonical* installed
[allensphilip@SEC-ROG]-[~]
$sudo docker run hello-world
Unable to find image 'hello-world:latest' locally
latest: Pulling from library/hello-world
2db29710123e: Pull complete
Digest: sha256:80f31da1ac7b312ba29d65080fddf797dd76acfb870e677f390d5acba9741b17
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
Share 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/
[allensphilip@SEC-ROG]-[~]
$sudo docker ps
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
[allensphilip@SEC-ROG]-[~]
$sudo docker ps -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
cf7f0b908963 hello-world "/hello" 23 seconds ago Exited (0) 22 seconds ago jovial_galois
[allensphilip@SEC-ROG]-[~]
$sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
hello-world latest feb5d9fea6a5 8 months ago 13.3kB
[allensphilip@SEC-ROG]-[~]
$
Hack The Box
PEN-TESTING LABS

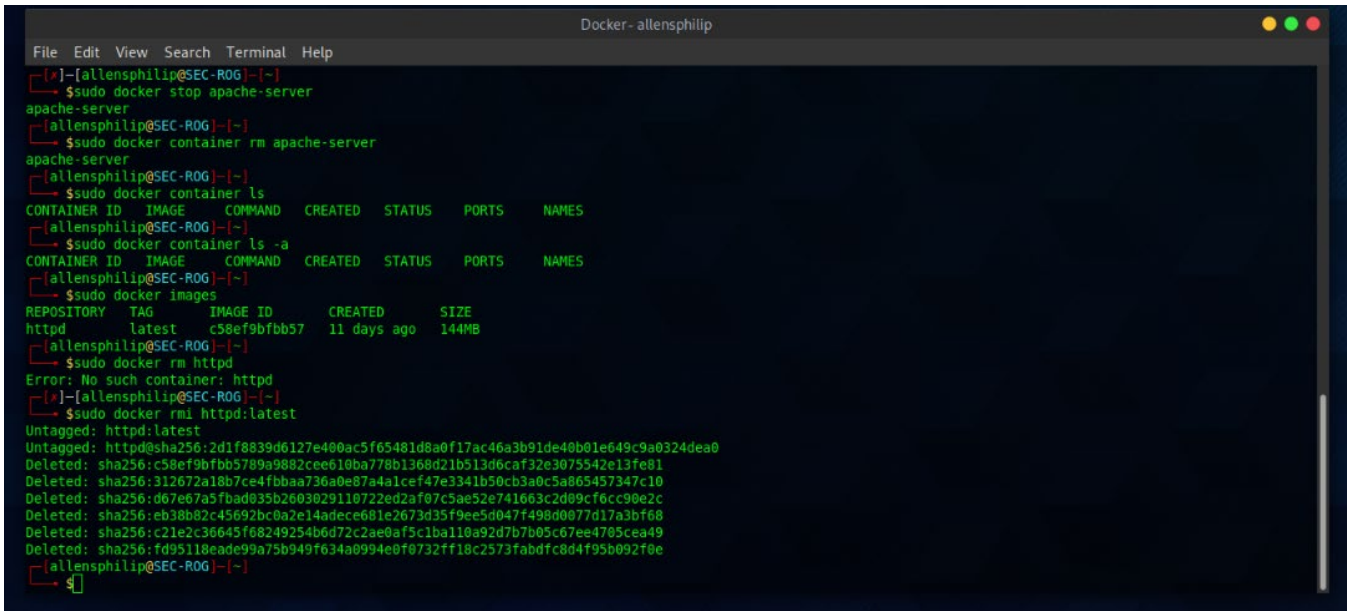
2. Deployment of Apache and MySQL in the container



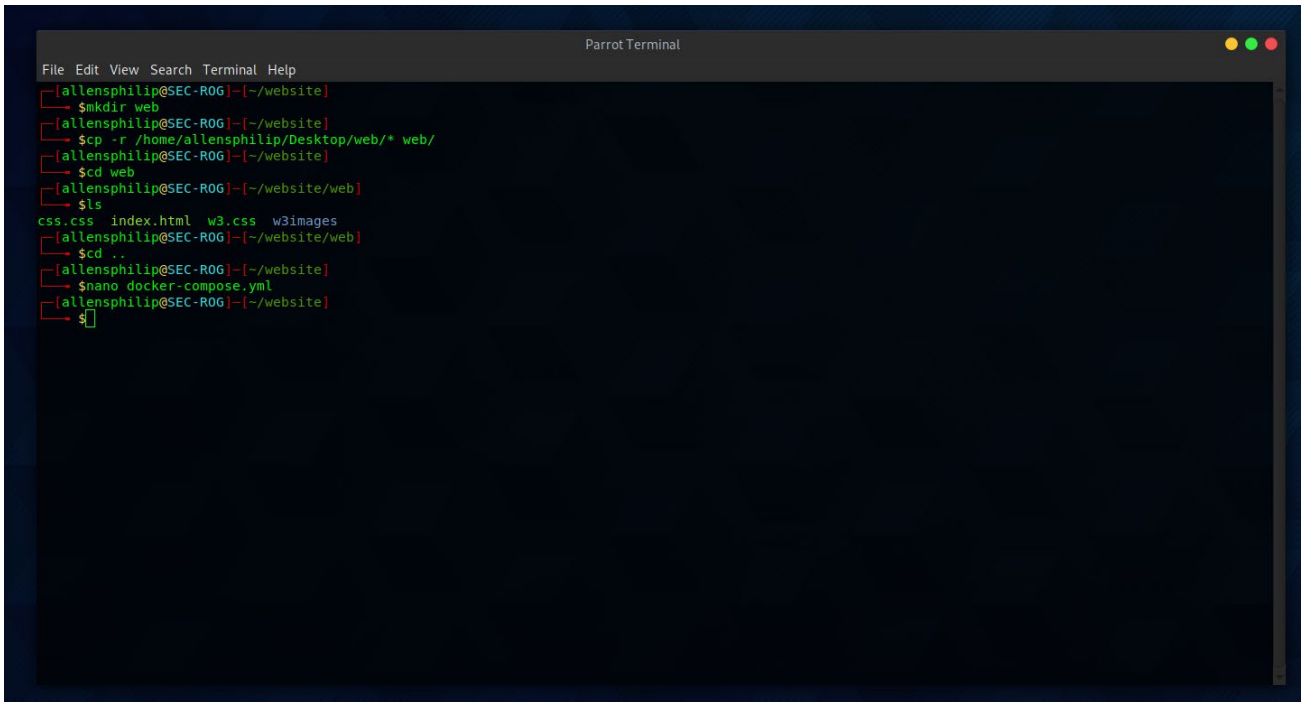


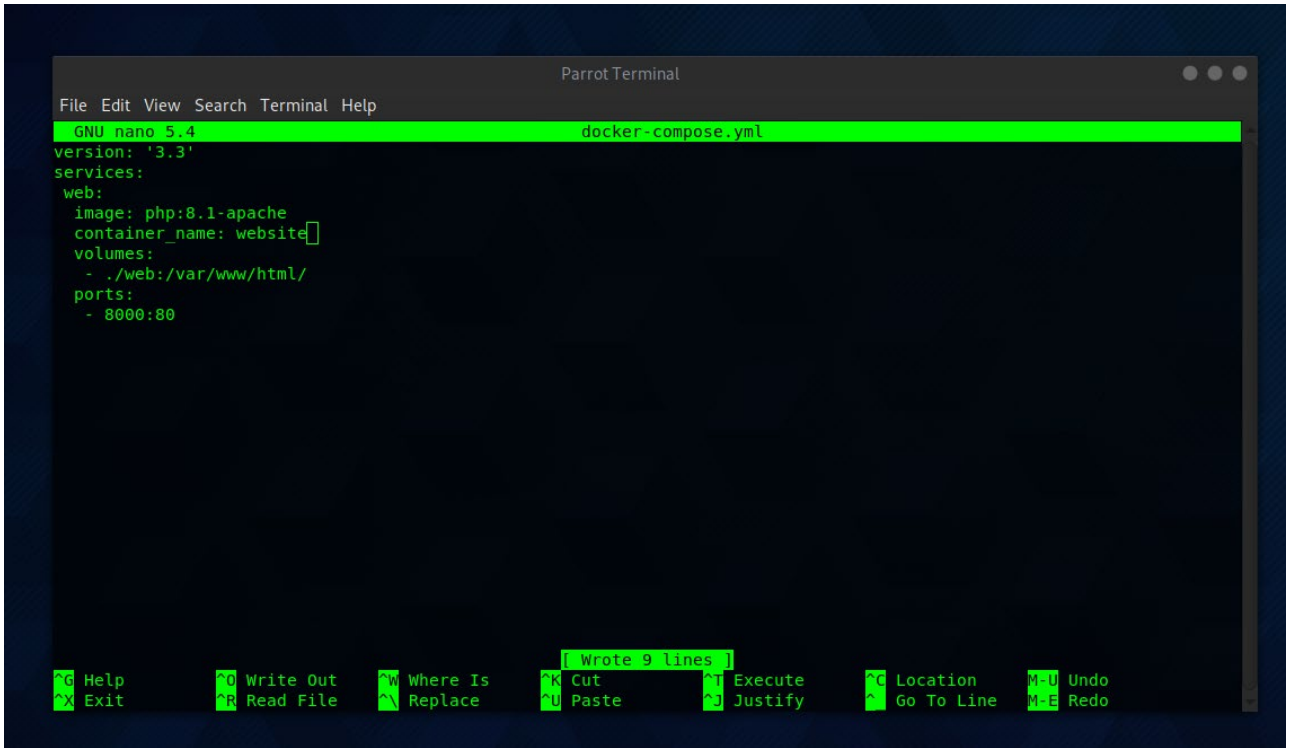


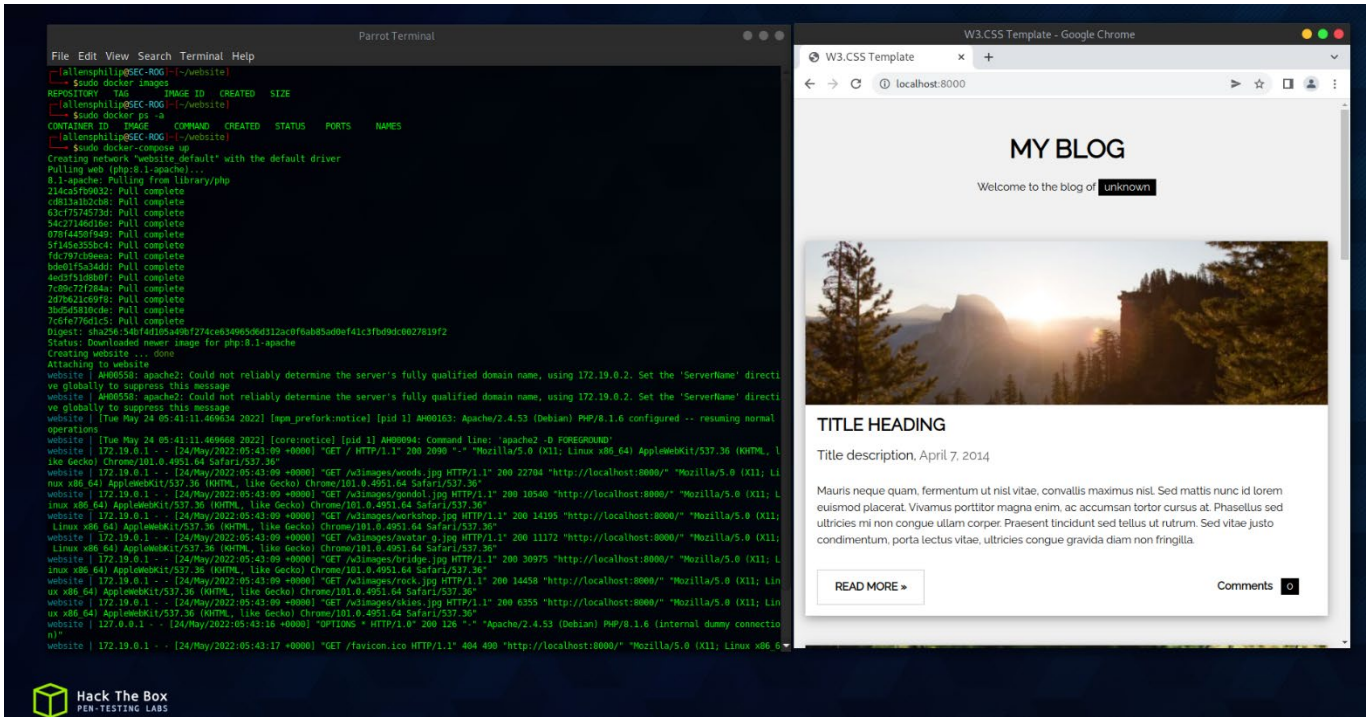

Docker- allensphilip
File Edit View Search Terminal Help
$sudo docker pull httpd
Using default tag: latest
latest: Pulling from library/httpd
214ca5fb9032: Pull complete
7cf31a2eeec6: Pull complete
bf666e57b9f2: Pull complete
c15a4e94ae6b: Pull complete
dc25474c7f97: Pull complete
Digest: sha256:2d1f8839d6127e400ac5f65481d8a0f17ac46a3b91de40b01e649c9a0324dea0
Status: Downloaded newer image for httpd:latest
docker.io/library/httpd:latest
$docker images
Got permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Get "http://%2Fvar%2Frun%2Fdocker.sock/v1.24/images/json": dial unix /var/run/docker.sock: connect: permission denied
$sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
httpd latest c58ef9bfbb57 11 days ago 144MB
$docker run -d --name apache-server -p 80:80 httpd
docker: Got permission denied while trying to connect to the Docker daemon socket at unix:///var/run/docker.sock: Post "http://%2Fvar%2Frun%2Fdocker.sock/v1.24/containers/create?name=apache-server": dial unix /var/run/docker.sock: connect: permission denied.
See 'docker run --help'.
$sudo docker run -d --name apache-server -p 80:80 httpd
5e5198b4b6875aca38377a5595b136a8a46cb98ea768369109f1d158591296b0
$sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
httpd latest c58ef9bfbb57 11 days ago 144MB
$sudo docker container ls
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
5e5198b4b687 httpd "httpd-foreground" 28 seconds ago Up 27 seconds 0.0.0.0:80->80/tcp, :::80->80/tcp apache-server
localhost - Google Chrome
localhost
It works!


Docker- allensphilip
File Edit View Search Terminal Help
$sudo docker stop apache-server
apache-server
$sudo docker container rm apache-server
apache-server
$sudo docker container ls
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
$sudo docker container ls -a
CONTAINER ID IMAGE COMMAND CREATED STATUS PORTS NAMES
$sudo docker images
REPOSITORY TAG IMAGE ID CREATED SIZE
httpd latest c58ef9bfbb57 11 days ago 144MB
$sudo docker rm httpd
Error: No such container: httpd
$sudo docker rmi httpd:latest
Untagged: httpd:latest
Untagged: httpd@sha256:2d1f8839d6127e400ac5f65481d8a0f17ac46a3b91de40b01e649c9a0324dea0
Deleted: sha256:c58ef9bfbb5789a9882cee610ba778b1368d21b513d6caf32e3075542e13fe81
Deleted: sha256:312672a18b7ce4fbbaa736a0e87a4a1cef47e3341b50cb3a0c5a865457347c10
Deleted: sha256:d67e67a5fbad035b2603029110722ed2af07c5ae52e741663c2d09cf6cc90e2c
Deleted: sha256:eb38b82c45692bc0a2e14adece681e2673d35f9ee5d047f498d0077d17a3bf68
Deleted: sha256:c21e2c36645f68249254b6d72c2ae0af5c1ba110a92d7b7b05c67ee4705cea49
Deleted: sha256:fd95118eade99a75b949f634a0994e0f0732ff18c2573fabdfc8d4f95b092f0e

3. host your own simple website






Parrot Terminal
File Edit View Search Terminal Help
W3.CSS Template - Google Chrome
W3.CSS Template
localhost:8000
MY BLOG
Welcome to the blog of unknown
TITLE HEADING
Title description, April 7, 2014
Mauris neque quam, fermentum ut nisl vitae, convallis maximus nisl. Sed mattis nunc id lorem euismod placerat. Vivamus porttitor magna enim, ac accumsan tortor cursus at. Phasellus sed ultricies mi non congue ullam corper. Praesent tincidunt sed tellus ut rutrum. Sed vitae justo condimentum, porta lectus vitae, ultricies congue gravida diam non fringilla.
READ MORE »
Comments 0
Hack The Box
PEN-TESTING LABS