Registration id - SIRSS1200
Name - Harsh Shah
College name - Gandhinagar Institute Of Technology

Assignment: 9

Master Class On Docker

TASK 2.1

a. Container name must be php_web.

b. Use image php with any apache tag. Check here for more details https://hub.docker.com/_/php?tab=tags.

c. Map php_web container's port 80 with host port 6000

d. Map php_web container's /var/www/html volume with host volume /var/www/html.

For DB service:
a. Container name must be mysql_web.

b. Use image mariadb with any tag (preferably latest). Check here for more details https://hub.docker.com/_/mariadb?tab=tags.

c. Map mysql_web container's port 3306 with host port 3306

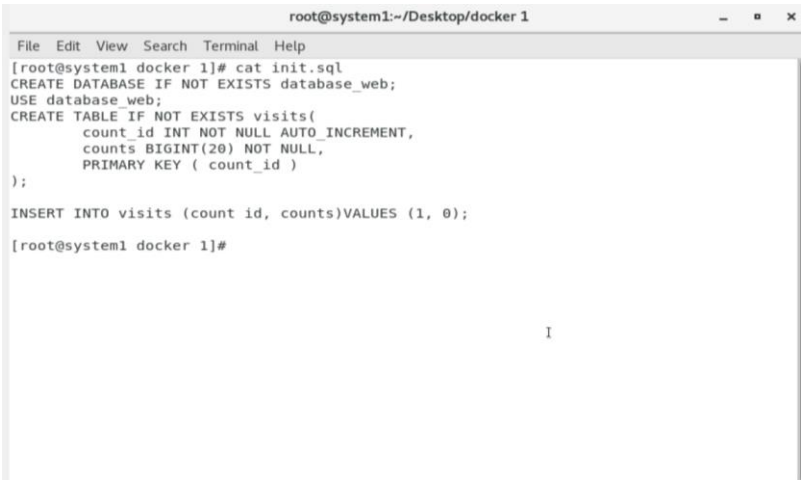
d. Map mysql_web container's /var/lib/mysql volume with host volume /var/lib/mysql.

e. Set MYSQL_DATABASE=database_web and use any custom user (except root) with some complex password for DB connections. After running docker-compose up you can access the app with curl command curl :6000/

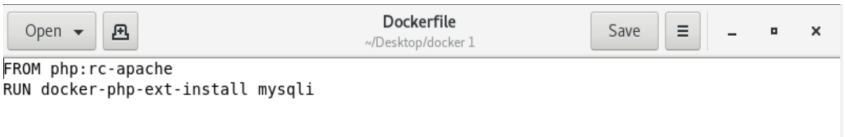
Number of steps:

Step 1 :

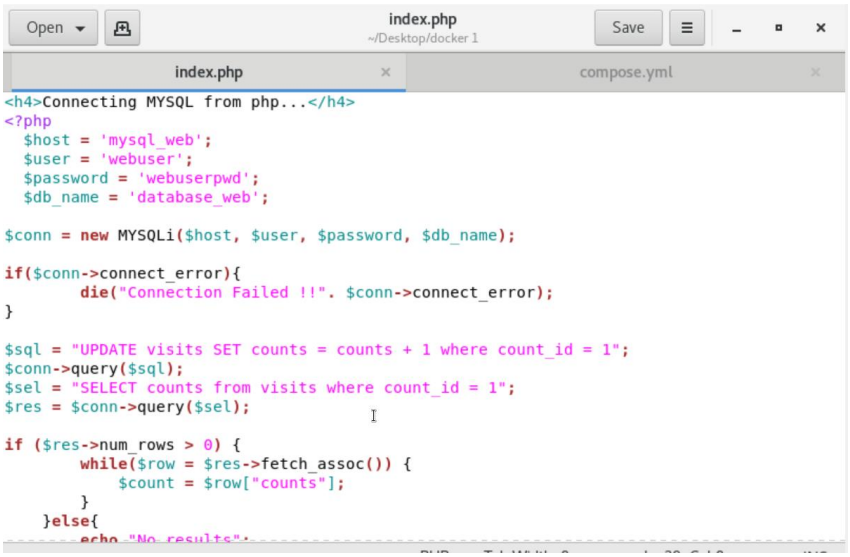
1. **Create an init.sql file in init folder**



2. **Create a Dockerfile for the php web app**



3. **Create index.php**



4. **Create docker-compose.yml**

Open ▾ compose.yml ~/Desktop/docker 1 Save

```
version: "3.7"
services:
 database:
  image: mariadb:latest
  container_name: mysql_web
  volumes:
    - "/var/lib/mysql:/var/lib/mysql"
    - ".init:/docker-entrypoint-initdb.d"
  environment:
     MYSQL_DATABASE: database_web
     MYSQL_ROOT_PASSWORD : root
     MYSQL_USER : webuser
     MYSQL_PASSWORD : hello12
  ports:
    - "3306:3306"
 webapp:
  build: .
  container_name: php_web
  environment:
     MYSQL_HOST  : mysql_web
     MYSQL_USER  : webuser
     MYSQL_PASSWORD : hello12
     MYSQL_DB : database_web
  volumes:
    - "/var/www/html:/var/www/html"
```

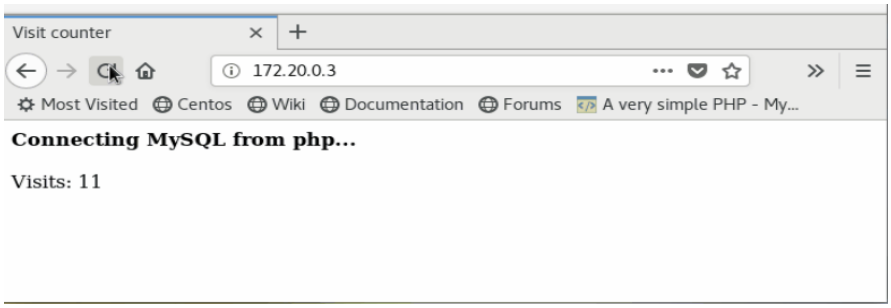
5. **Execute the command docker-compose up to execute the docker compose yaml file**

root@system1:~/Desktop/docker 1

File Edit View Search Terminal Help

```
[root@system1 docker 1]# docker-compose up
Creating network "docker1_default" with the default driver
Pulling database (mariadb:latest)...
Trying to pull repository docker.io/library/mariadb ...
latest: Pulling from docker.io/library/mariadb
a31c7b29f4ad: Pulling fs layer
4f7579f0f5a5: Downloading [==================>                                ]    658
4f7579f0f5a5: Downloading [==================================================>] 1.744 k
4f7579f0f5a5: Download complete
a31c7b29f4ad: Downloading [>                                                  ] 294.1 k
B/28.57 MBcc: Downloading [==>                                                ] 228.6 k
B/5.489 MB09: Waiting
b053ac8beecc: Downloading [===>                                               ] 359.7 k
a31c7b29f4ad: Downloading [=>                                                 ]   589 k
B/28.57 MBcc: Downloading [======>                                            ] 621.8 k
a31c7b29f4ad: Pull complete
4f7579f0f5a5: Pull complete
b053ac8beecc: Pull complete
76ca9dedd400: Pull complete
daa935b0083f: Pull complete
54214fc6446b: Pull complete
82046f626e09: Pull complete
2f67396c6908: Pull complete
5d09818ae9aa: Pull complete
75a8d2dc6608: Pull complete
Digest: sha256:6e177005751b9055a5af897a57f8433a54b1c219c08a8433efa53cd4c7206ddd
```

6. **checking the work of visit counter**

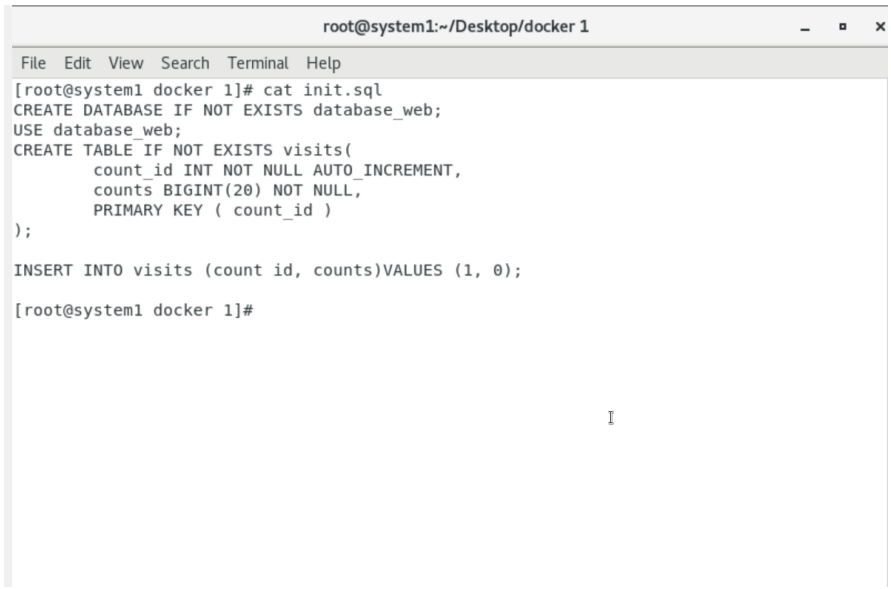


TASK 2.2

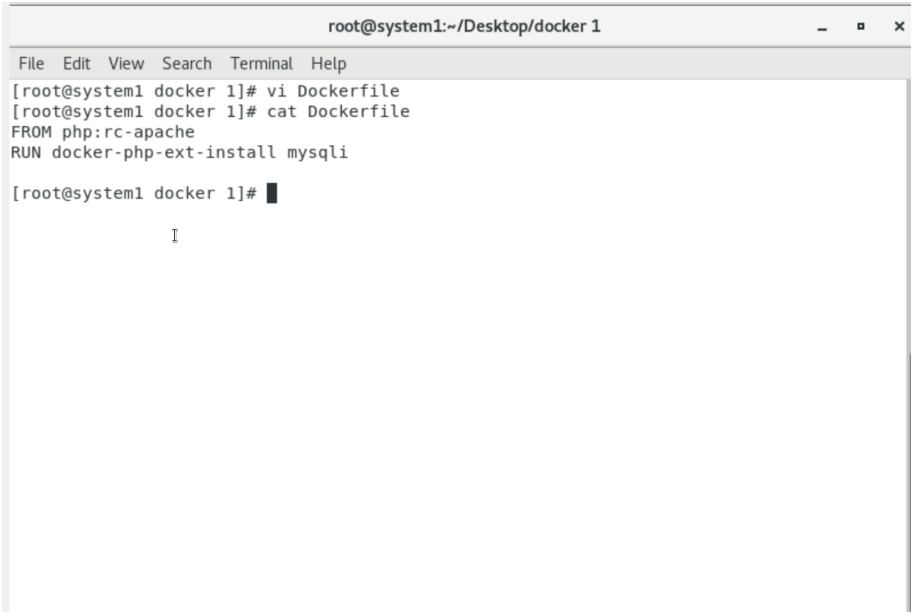
Create a web server on Centos base image and display the content This is coming from docker

Steps to follow:

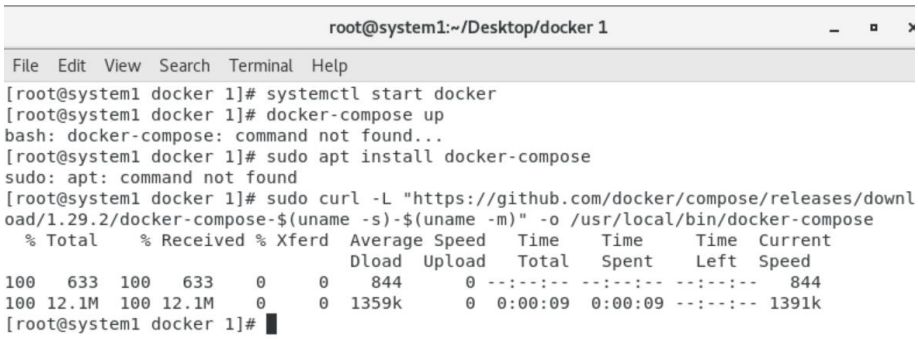
1. **Create a Docker File - $vi Dockerfile**



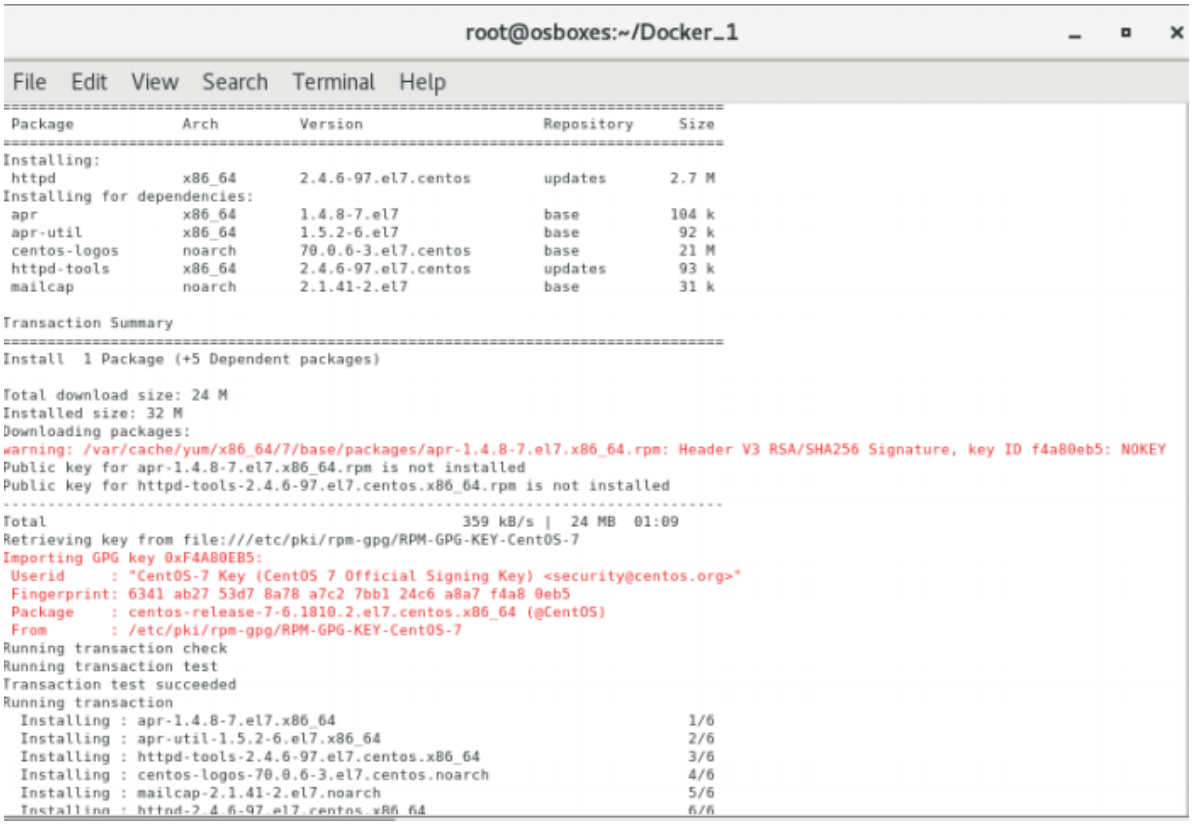
2. **Create the html file - $vi index.html**



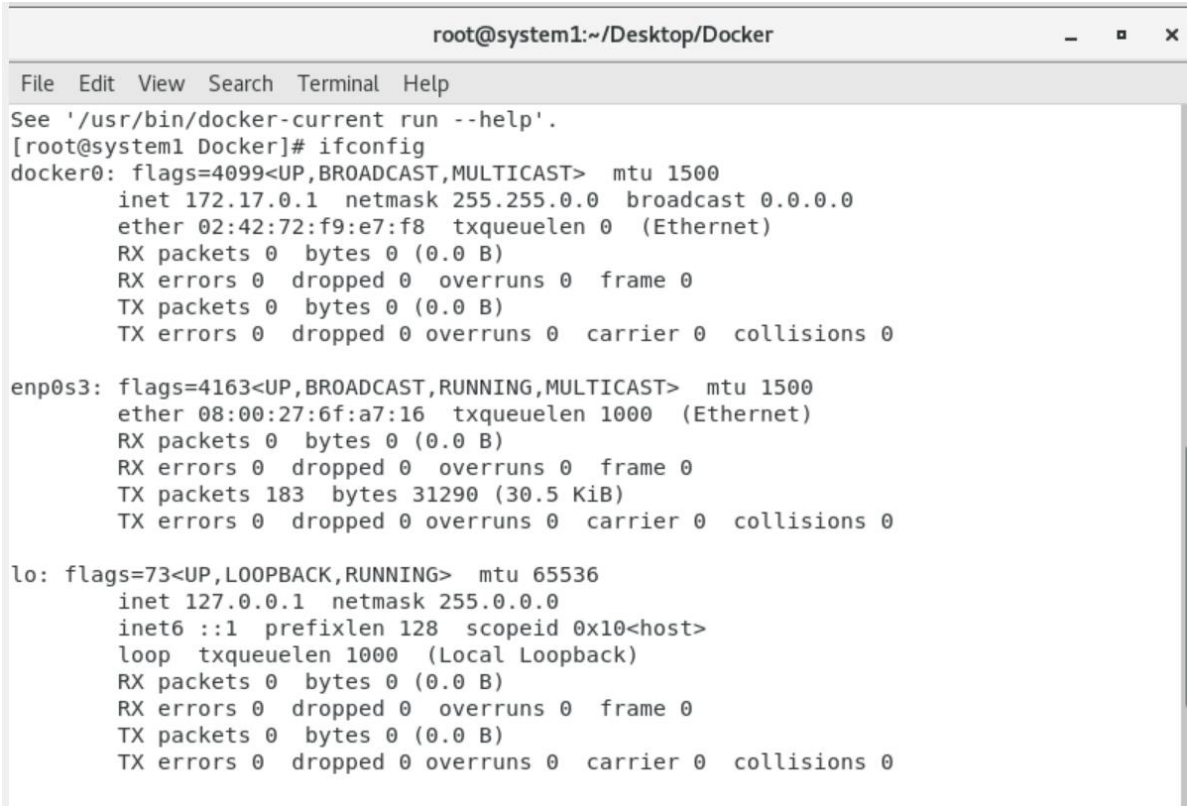
3. **First start Docker - systemctl start docker**



4. **Build the docker file - $ docker build .**



5. **$ docker run –dit p 8000:80 and Check the ip: $ ifconfig**



6. **Run - $ curl 172.17.0.1:80**