

**Assignment: II**

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**Solution of problem 2.**

Dockerising Apache Web-Server

Create a working directory say q1\_b.

Create an index.html file with the following content in the same directory:

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<title>Hello World!</title>
</head>
<body>
<h1>Learning Docker...</h1>
</body>
</html>
```

Create a Dockerfile file with the following content in the same directory

FROM httpd:latest

WORKDIR /Users/shubham gupta/Desktop

ARG DEBIAN\_FRONTEND=noninteractive

ENV TZ=Indian

RUN apt-get -y update

RUN apt-get install -y apache2

EXPOSE 80

COPY in.html /var/www/html/in.html

CMD [ "/usr/sbin/apache2ctl", "-D", "FOREGROUND" ]

Now run the following commands in the terminal:

docker pull httpd:latest

docker build -t apache webserver .

```
nishitha@LAPTOP-HAQHHHRO:/mnt/f/q1_b$ docker pull httpd:latest
latest: Pulling from library/httpd
Digest: sha256:fddc534b7f6bb6197855be559244adb11907d569aae1283db8e6ce8bb8f6f456
Status: Image is up to date for httpd:latest
docker.io/library/httpd:latest
```

```
nishitha@LAPTOP-HAQHHHRO:/mnt/f/q1_b$ docker build -t apache_webserver .
[+] Building 32.1s (10/10) FINISHED
=> [internal] load build definition from Dockerfile 0.1s
=> => transferring dockerfile: 294B 0.0s
=> [internal] load .dockerignore 0.1s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/httpd:latest 0.0s
=> [1/5] FROM docker.io/library/httpd:latest 0.1s
=> => resolve docker.io/library/httpd:latest 0.0s
=> [internal] load build context 0.2s
=> => transferring context: 199B 0.0s
=> [2/5] WORKDIR /mnt/f/q1_b 0.0s
=> [3/5] RUN apt-get -y update 10.9s
=> [4/5] RUN apt-get install -y apache2 19.9s
=> [5/5] COPY index.html /var/www/html/index.html 0.1s
=> exporting to image 0.8s
=> => exporting layers 0.8s
=> => writing image sha256:21a90ba4ac65e56ef4c4e9642baa95326aea1e795ce652270eb94cefa39917ca 0.0s
=> => naming to docker.io/library/apache_webserver 0.0s
```

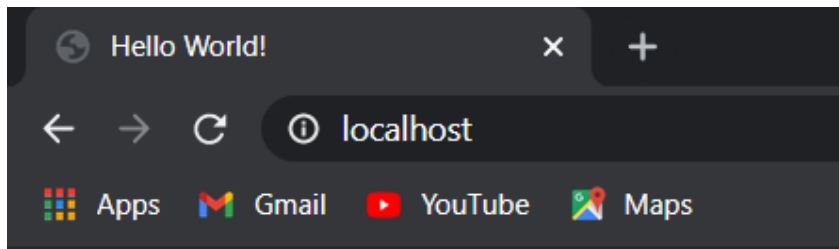
docker run -p 80:80 -dit --name apache\_test apache\_webserver

docker ps

It should be showing that the container is running in the following way:

```
nishitha@LAPTOP-HAQHHHRO:/mnt/f/q1_b$ docker run -p 80:80 -dit --name apache_test apache_webserver
404864f5bf9762a07af9d09bfc02d159b70cf26a022830b82ad58204b2db6e1c
nishitha@LAPTOP-HAQHHHRO:/mnt/f/q1_b$ docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS
404864f5bf97   apache_webserver  "/usr/sbin/apache2ct..." 24 seconds ago Up 24 seconds 0.0.0.0:80->80/tcp
apache_test
```

Now running localhost:80 on the browser we get the following html page running



# Learning Docker...

To push the docker image to the public dockerhub repo created we used the following commands

```
nishitha@LAPTOP-HAQHHHR0:/mnt/f/q1_b$ docker push nishitha77/apache-web-server
The push refers to repository [docker.io/nishitha77/apache-web-server]
106da55a71ee: Pushed
966ed71c6982: Pushed
84e5eb04bd9e: Pushed
a220c9b3ffc7: Pushed
c74375f55aa8: Pushed
211b0be55a20: Mounted from library/httpd
aa0b3edbd3b: Mounted from library/httpd
540171a10c83: Mounted from library/httpd
f5600c6330da: Mounted from library/httpd
latest: digest: sha256:7c65877ad7f71d735096dec705f8e61febd0396cd5863306eca3f94fbb645b24 size: 2204
nishitha@LAPTOP-HAQHHHR0:/mnt/f/q1_b$
```