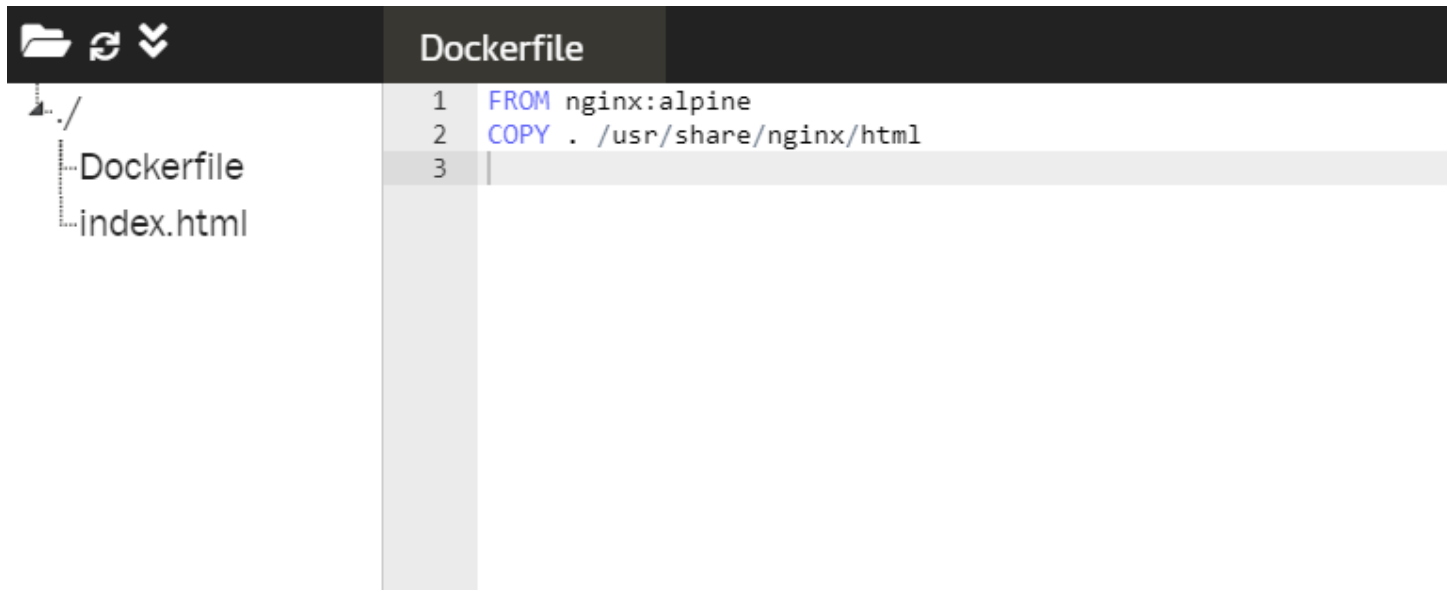# Experiment 14

Roll no: R171218009

Dockerfile, docker push, docker pull

Create Dockerfile to create new image from ngnix:alpine and copy html page in it, with a hello message:


```
Dockerfile
1   FROM nginx:alpine
2   COPY . /usr/share/nginx/html
3
```

Build the docker image with this Dockerfile:

```
$ docker build -t webserver-image:v1 .
Sending build context to Docker daemon  3.072kB
Step 1/2 : FROM nginx:alpine
 ---> 98ab35023fd6
Step 2/2 : COPY . /usr/share/nginx/html
 ---> 72062964a690
Successfully built 72062964a690
Successfully tagged webserver-image:v1
$
```

List docker image:

```
$ docker images
REPOSITORY          TAG          IMAGE ID          CREATED          SIZE
webserver-image     v1           72062964a690      39 seconds ago   22.3MB
nginx               alpine       98ab35023fd6      6 days ago       22.3MB
ubuntu              latest       16508e5c265d      2 years ago      84.1MB
redis               latest       4e8db158f18d      2 years ago      83.4MB
weaveworks/scope    1.9.1        4b07159e407b      2 years ago      68MB
alpine              latest       11cd0b38bc3c      2 years ago      4.41MB
$
```

Run docker container of the newly created docker image:

```
$ docker run -d -p 80:80 webserver-image:v1
bf45f496083372391b794af0624e4045bc8fa32f3f6bcf983725feee6e48e23d
```

Run "docker ps" command to list running containers:

```
$ docker ps
CONTAINER ID       IMAGE              COMMAND               CREATED          STATUS         PORTS
        NAMES
bf45f4960833       webserver-image:v1  "/docker-entrypoint..."  11 seconds ago  Up 9 seconds   0.0.0.0:80->8
0/tcp   practical_proskuriakova
```
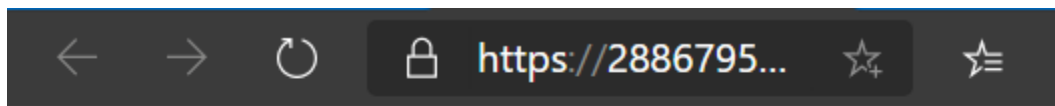
Curl the html webpage:

```
$ curl docker
<h1>Hello World</h1>
```

Open the created webpage in browser to confirm the webserver is running:

← → ○ 🔒 https://2886795... ☆ ☆≡

Hello World

Login to ducker hub account:

```
$ docker login
Login with your Docker ID to push and pull images from Docker Hub. If you don't have a Docker ID, head over to https://
hub.docker.com to create one.
Username: akanshab
Password:
Login Succeeded
$
```
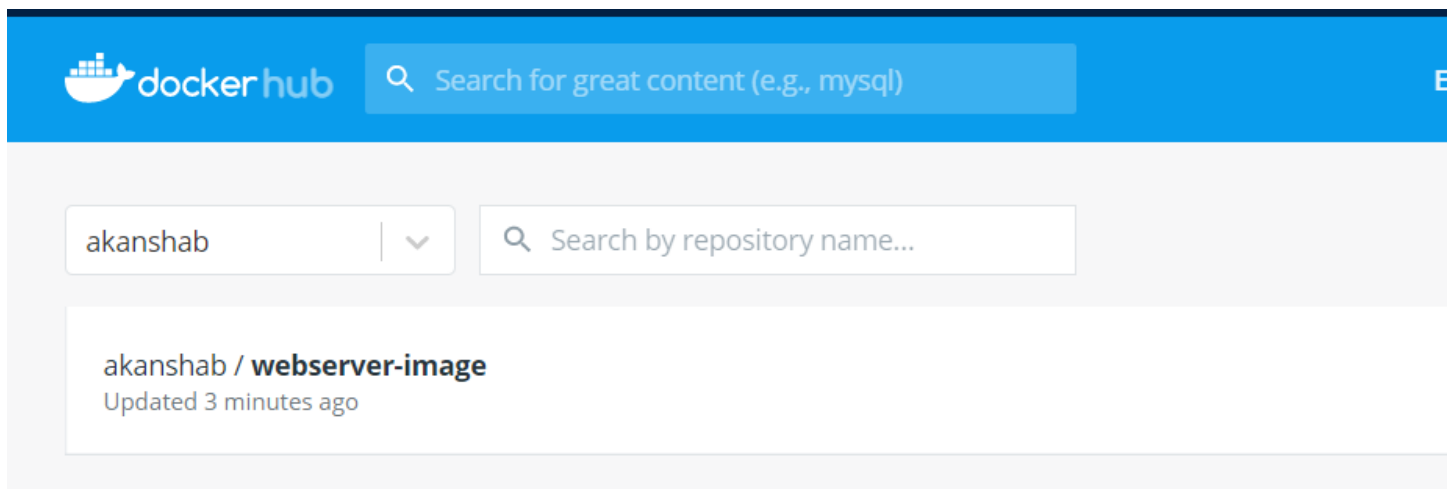
Tag the new image to associate it with account:

```
$ docker tag webserver-image:v1 akanshab/webserver-image
```

Push the image to docker hub using given tag:

```
$ docker push akanshab/webserver-image
The push refers to repository [docker.io/akanshab/webserver-image]
ba2bb7e1fdb5: Pushed
468af79aab10: Pushed
fbf82c12d86e: Pushed
4dc20fbc0e8d: Pushed
b831cc3ae47e: Pushed
ace0eda3e3be: Pushed
latest: digest: sha256:3ab057c71cecd4a2441c44acca4a8707cf09931be53d583dc3eaed0e47eb47a9 size: 1567
```

Image is pushed to docker hub:

docker hub   Q Search for great content (e.g., mysql)

akanshab | v   Q Search by repository name...

akanshab / **webserver-image**
Updated 3 minutes ago

Try pulling image from using given tag:

```
$ docker pull akanshab/webserver-image
Using default tag: latest
latest: Pulling from akanshab/webserver-image
Digest: sha256:3ab057c71cecd4a2441c44acca4a8707cf09931be53d583dc3eaed0e47eb47a9
Status: Image is up to date for akanshab/webserver-image:latest
$
```