UNIVERSITY OF PETROLEUM & ENERGY STUDIES

Dehradun

ACO LAB

NAME- YADRISHI DIXIT

BRANCH- COMPUTER SCIENCE ENGINEERING

BATCH- B-4 DEVOPS

SAP ID- 500097959

ROLL NO- R2142211468

SUBMITTED TO- Dr. Hitesh Kumar Sharma

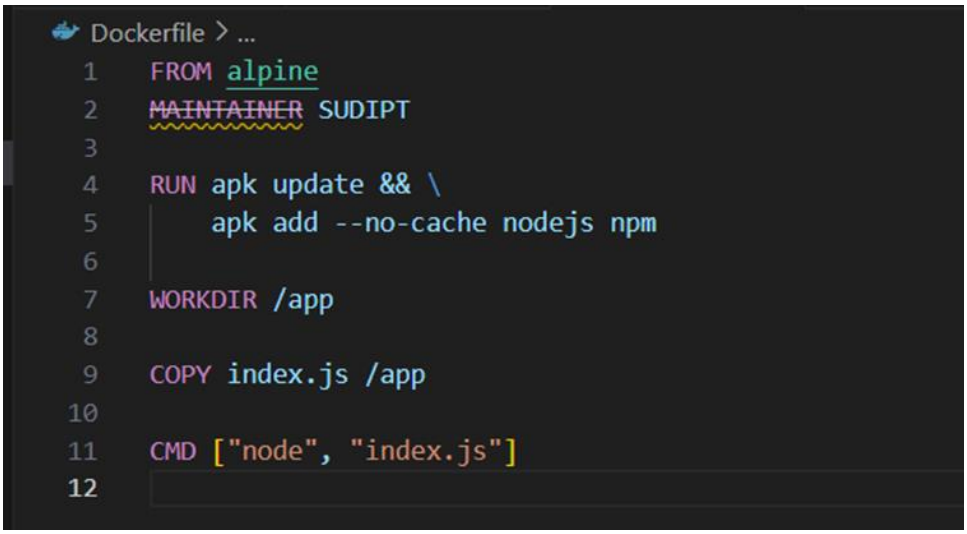
EXPERIMENT-5

AIM : Working with Dockerfile to Build and Push Docker Image

Steps to Complete:

1. Create following Dockerfile

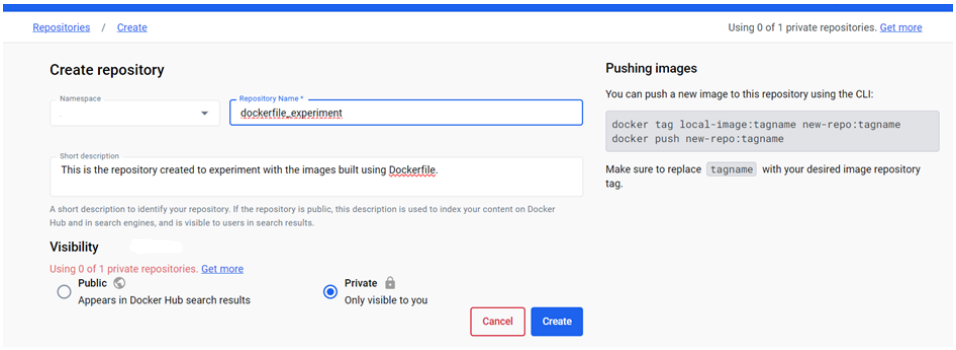
```
FROM alpine

MAINTAINER SUDIPT

RUN apk update

RUN apk add nodejs

RUN mkdir /app

COPY index.js /app

WORKDIR /app

RUN node index.js
```



2. Now we have dockerized the app, we will Build image from Dockerfile.
“ docker build -t myimage:1.0.0 . ”

```
91983@DELL MINGW64 ~/OneDrive/Desktop/SEM5/ACO-LAB-2021-25(Local)/my-web-app (main)
$ docker build -t myimage:1.0.0 .
[+] Building 65.6s (9/9) FINISHED                                                    docker:default
 => [internal] load build definition from Dockerfile                                         0.0s
 => => transferring dockerfile: 195B                                                         0.0s
 => [internal] load .dockerignore                                                            0.0s
 => => transferring context: 125B                                                            0.0s
 => [internal] load metadata for docker.io/library/alpine:latest                             2.5s
 => CACHED [1/4] FROM docker.io/library/alpine@sha256:eece025e432126ce23f223450a0326fbebde39cdf496a85d8c016293fc851978   0.0s
 => [internal] load build context                                                            0.0s
 => => transferring context: 29B                                                             0.0s
 => [2/4] RUN apk update &&     apk add --no-cache nodejs npm                               62.5s
 => [3/4] WORKDIR /app                                                                       0.0s
 => [4/4] COPY index.js /app                                                                 0.0s
 => exporting to image                                                                       0.5s
 => => exporting layers                                                                      0.5s
 => => writing image sha256:f7f74f83583bee05f18b14c410ffce181180833039f324df89940bb7f6957957 0.0s
 => => naming to docker.io/library/myimage:1.0.0                                             0.0s

What's Next?
  View a summary of image vulnerabilities and recommendations → docker scout quickview
```

3. Create account on Dockerhub and create a repository in it.



4. Tag the recently created image using following command.
“ docker tag imageID Repositoryname ”

```
91983@DELL MINGW64 ~/OneDrive/Desktop/SEM5/ACO-LAB-2021-25(Local)/my-web-app (main)
$ docker tag f7f74f83583b dockerfile_experiment
```

5. Login to Dockerhub from console using following command.
“ docker login ”

```
91983@DELL MINGW64 ~/OneDrive/Desktop/SEM5/ACO-LAB-2021-25(Local)/my-web-app (main)
$ docker login
Authenticating with existing credentials...
Login Succeeded
```

6. Now push the image on Dockerhub using following command.
“ docker push RepositoryName ”

```
91983@DELL MINGW64 ~/OneDrive/Desktop/SEM5/ACO-LAB-2021-25(Local)/my-web-app (main)
$ docker push swati1010/dockerfile_experiment
Using default tag: latest
The push refers to repository [docker.io/swati1010/dockerfile_experiment]
ef299d924bbd: Preparing
7ede2d9ff365: Preparing
a48b037fba41: Preparing
cc2447e1835a: Preparing
denied: requested access to the resource is denied
```