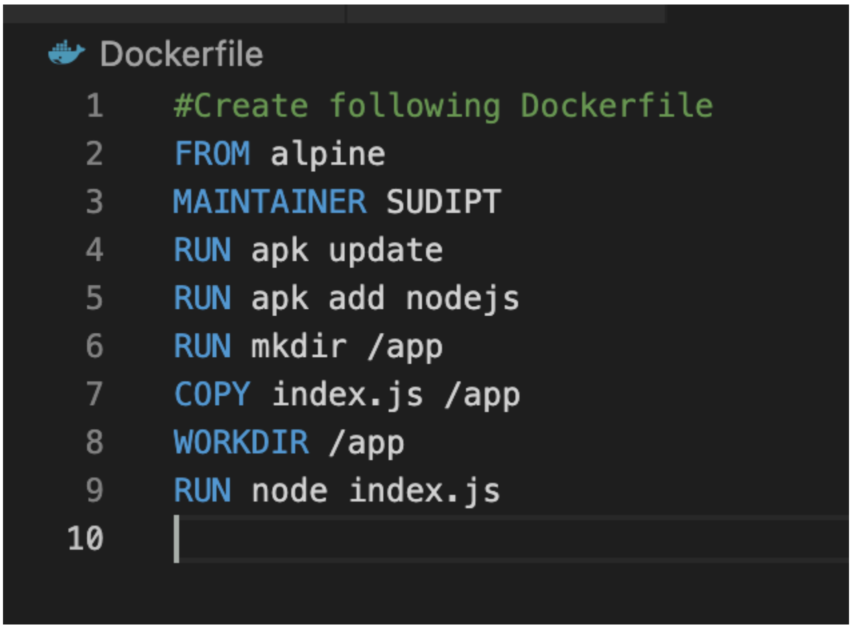
EXPERIMENT 5

AIM: Working with Dockerfile to Build and Push Docker Image

Steps to Complete:

1. Create following Dockerfile

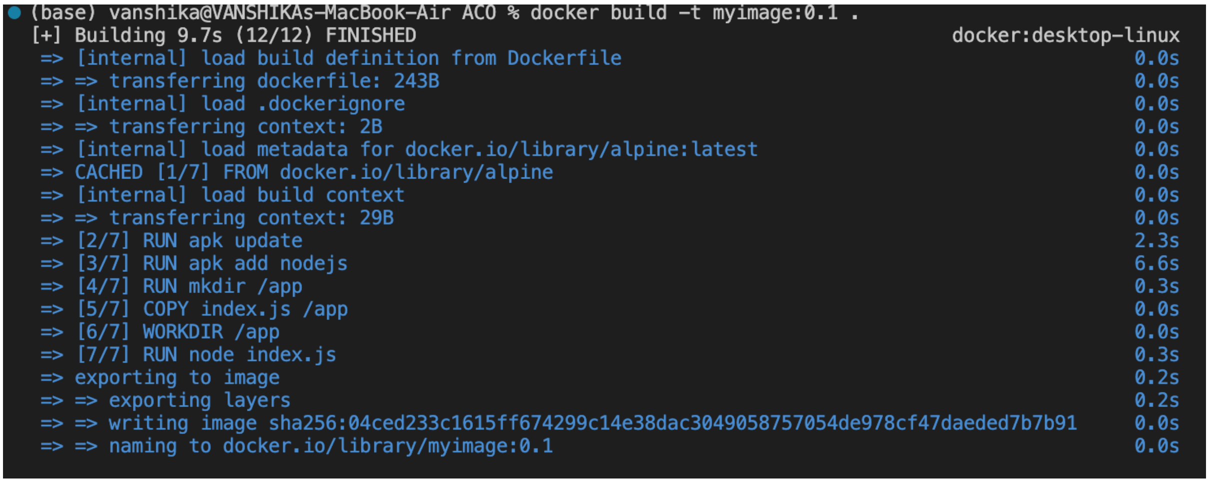


```
#Create following Dockerfile
FROM alpine
MAINTAINER SUDIPT
RUN apk update
RUN apk add nodejs
RUN mkdir /app
COPY index.js /app
WORKDIR /app
RUN node index.js

```

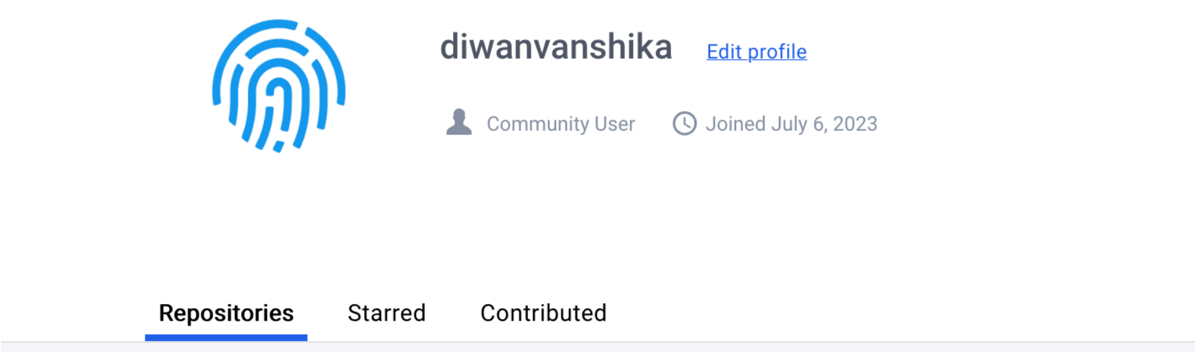
2. Now we have dockerized the app, we will Build image from Dockerfile.

```
docker build -t myimage:0.1 .
```

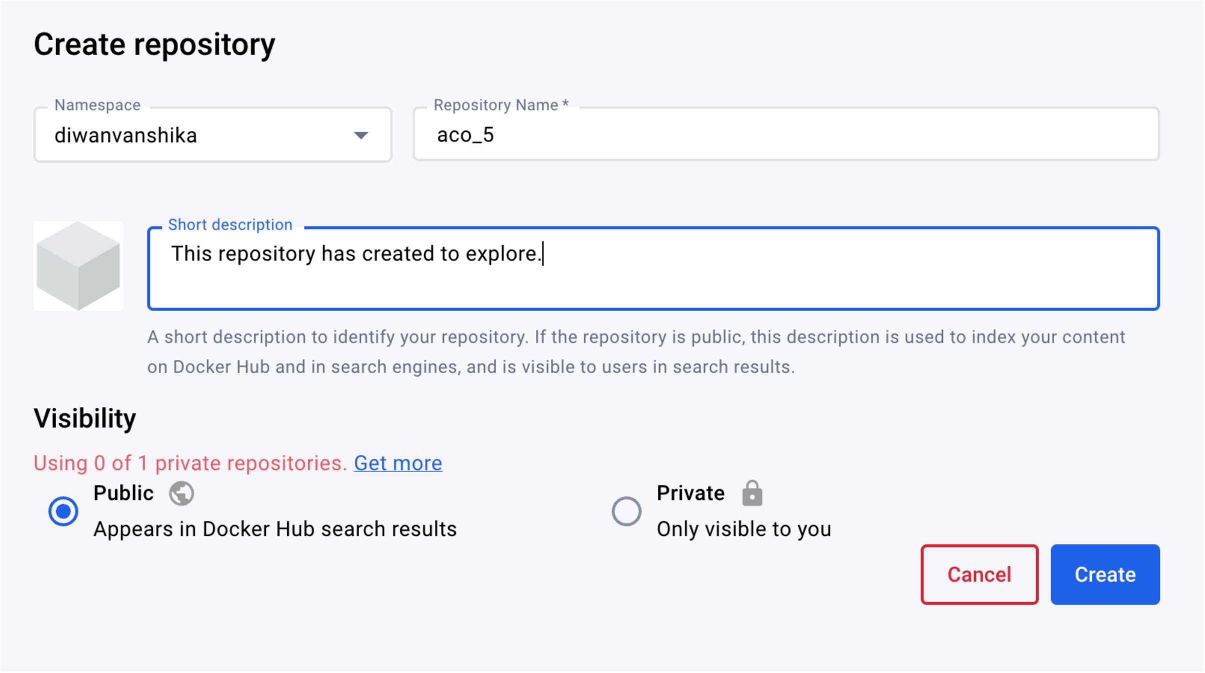


```
● (base) vanshika@VANSHIKAs-MacBook-Air ACO % docker build -t myimage:0.1 .
  [+] Building 9.7s (12/12) FINISHED                                                  docker:desktop-linux
   => [internal] load build definition from Dockerfile                                                0.0s
   => => transferring dockerfile: 243B                                                                0.0s
   => [internal] load .dockerignore                                                                   0.0s
   => => transferring context: 2B                                                                     0.0s
   => [internal] load metadata for docker.io/library/alpine:latest                                    0.0s
   => CACHED [1/7] FROM docker.io/library/alpine                                                      0.0s
   => [internal] load build context                                                                   0.0s
   => => transferring context: 29B                                                                    0.0s
   => [2/7] RUN apk update                                                                            2.3s
   => [3/7] RUN apk add nodejs                                                                        6.6s
   => [4/7] RUN mkdir /app                                                                            0.3s
   => [5/7] COPY index.js /app                                                                        0.0s
   => [6/7] WORKDIR /app                                                                              0.0s
   => [7/7] RUN node index.js                                                                         0.3s
   => exporting to image                                                                              0.2s
   => => exporting layers                                                                             0.2s
   => => writing image sha256:04ced233c1615ff674299c14e38dac3049058757054de978cf47daeded7b7b91       0.0s
   => => naming to docker.io/library/myimage:0.1                                                      0.0s
```

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



diwanvanshika



Create repository

Namespace: diwanvanshika

Repository Name *: aco_5

Short description: This repository has created to explore.

A short description to identify your repository. If the repository is public, this description is used to index your content on Docker Hub and in search engines, and is visible to users in search results.

Visibility

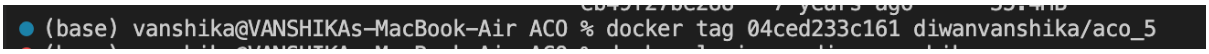
Using 0 of 1 private repositories. Get more

● Public
Appears in Docker Hub search results

○ Private
Only visible to you

4. Tag the recently created image using following command.

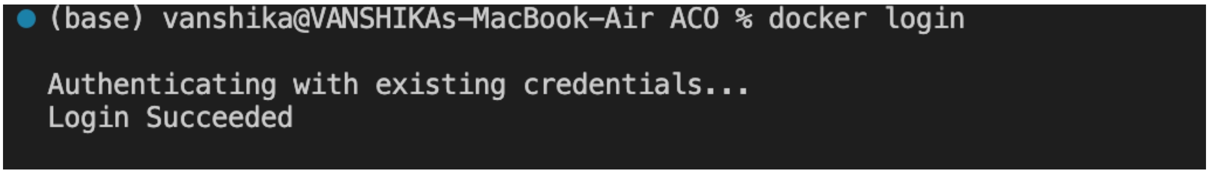
```
docker tag imageID Repositoryname
```



```
(base) vanshika@VANSHIKAs-MacBook-Air ACO % docker tag 04ced233c161 diwanvanshika/aco_5
```

5. Login to Dockerhub from console using following command.

docker Login

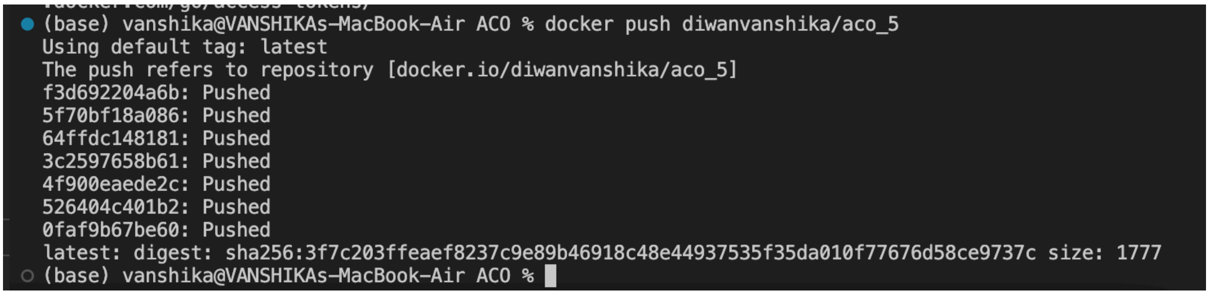


```
(base) vanshika@VANSHIKAs-MacBook-Air ACO % docker login

Authenticating with existing credentials...
Login Succeeded
```

6. Now push the image on Dockerhub using following command.

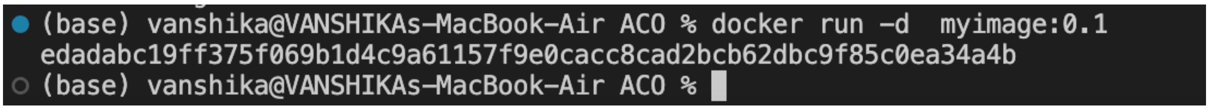
```
docker push Repositoryname
```



```
(base) vanshika@VANSHIKAs-MacBook-Air ACO % docker push diwanvanshika/aco_5
Using default tag: latest
The push refers to repository [docker.io/diwanvanshika/aco_5]
f3d692204a6b: Pushed
5f70bf18a086: Pushed
64ffdc148181: Pushed
3c2597658b61: Pushed
4f900eaede2c: Pushed
526404c401b2: Pushed
0faf9b67be60: Pushed
latest: digest: sha256:3f7c203ffeaef8237c9e89b46918c48e44937535f35da010f77676d58ce9737c size: 1777
(base) vanshika@VANSHIKAs-MacBook-Air ACO %
```

7. Pull and Run the container of your deployed image on docker hub.

```
Docker run -d image_name
```



```
(base) vanshika@VANSHIKAs-MacBook-Air ACO % docker run -d  myimage:0.1
edadabc19ff375f069b1d4c9a61157f9e0cacc8cad2bcb62dbc9f85c0ea34a4b
(base) vanshika@VANSHIKAs-MacBook-Air ACO %
```