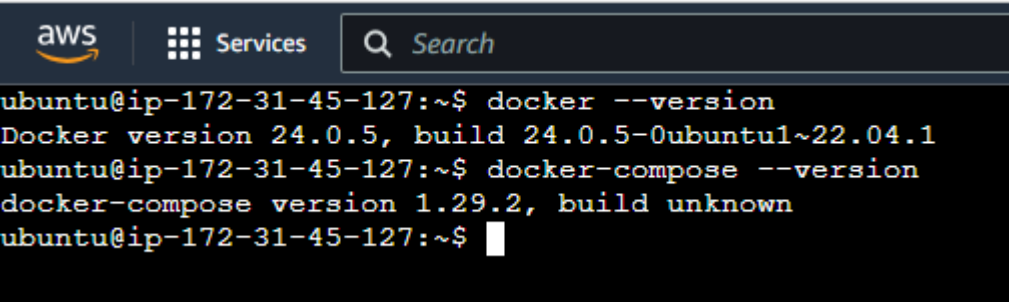


Task 12

Question: Create a custom docker image for nginx and deploy it using docker-compose, where the volume mount should be at /var/opt/nginx location. Push the created custom docker image to your docker hub.

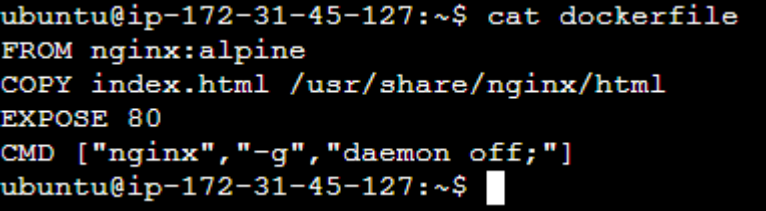
Solution:

1.Installing docker and docker compose:



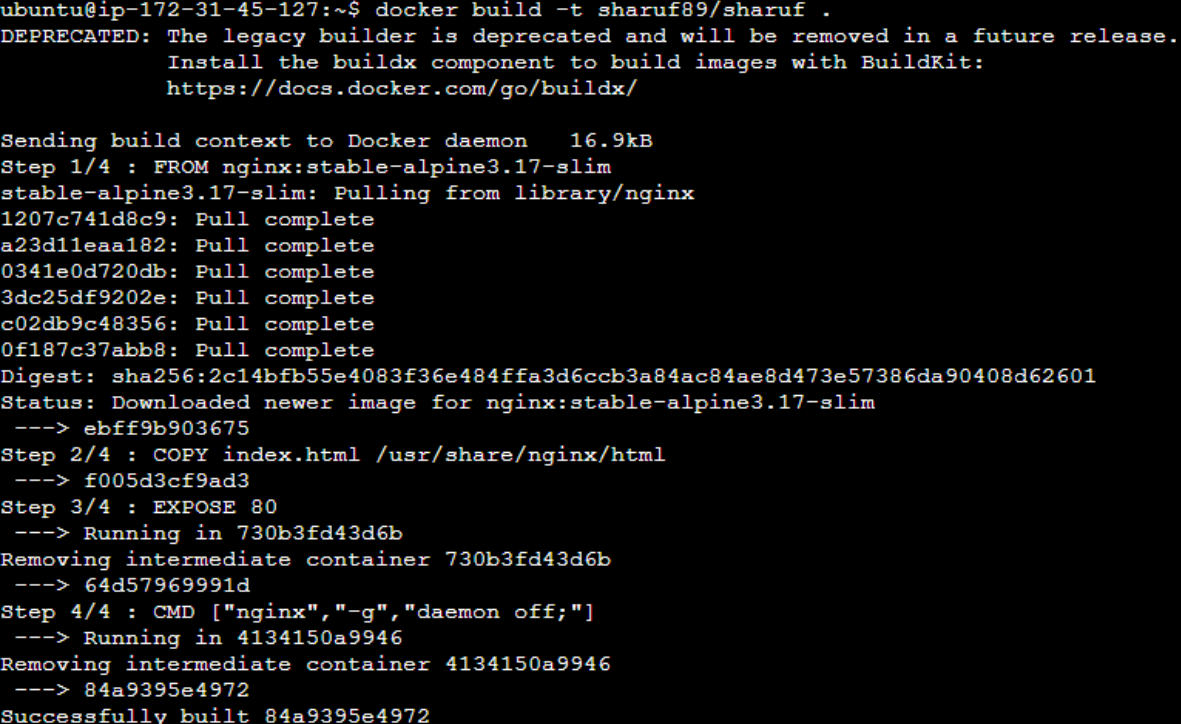
```
aws Services Search
ubuntu@ip-172-31-45-127:~$ docker --version
Docker version 24.0.5, build 24.0.5-0ubuntu1~22.04.1
ubuntu@ip-172-31-45-127:~$ docker-compose --version
docker-compose version 1.29.2, build unknown
ubuntu@ip-172-31-45-127:~$
```

2.dockerfile for custom nginx image



```
ubuntu@ip-172-31-45-127:~$ cat dockerfile
FROM nginx:alpine
COPY index.html /usr/share/nginx/html
EXPOSE 80
CMD ["nginx","-g","daemon off;"]
ubuntu@ip-172-31-45-127:~$
```

3.building a docker image from dockerfile:



```
ubuntu@ip-172-31-45-127:~$ docker build -t sharuf89/sharuf .
DEPRECATED: The legacy builder is deprecated and will be removed in a future release.
Install the buildx component to build images with BuildKit:
https://docs.docker.com/go/buildx/

Sending build context to Docker daemon 16.9kB
Step 1/4 : FROM nginx:stable-alpine3.17-slim
stable-alpine3.17-slim: Pulling from library/nginx
1207c741d8c9: Pull complete
a23d11eaa182: Pull complete
0341e0d720db: Pull complete
3dc25df9202e: Pull complete
c02db9c48356: Pull complete
0f187c37abb8: Pull complete
Digest: sha256:2c14bfb55e4083f36e484ffa3d6ccb3a84ac84ae8d473e57386da90408d62601
Status: Downloaded newer image for nginx:stable-alpine3.17-slim
--> ebff9b903675
Step 2/4 : COPY index.html /usr/share/nginx/html
--> f005d3cf9ad3
Step 3/4 : EXPOSE 80
--> Running in 730b3fd43d6b
Removing intermediate container 730b3fd43d6b
--> 64d57969991d
Step 4/4 : CMD ["nginx","-g","daemon off;"]
--> Running in 4134150a9946
Removing intermediate container 4134150a9946
--> 84a9395e4972
Successfully built 84a9395e4972
```

4. Running a container from newly created docker image:

```
ubuntu@ip-172-31-45-127:~$ docker run -d -p 80:80 sharuf89/sharuf
686641e8825686e66189d9cbd9b699797ae5008966b4812a0afea58eacb5889
ubuntu@ip-172-31-45-127:~$ docker ps
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
686641e8825	sharuf89/sharuf	"/docker-entrypoint..."	6 seconds ago	Up 5 seconds	0.0.0.0:80->80/tcp, :::80->80/tcp	heuristic_haslett

5. browser output for port 80:



A screenshot of a web browser's address bar. It shows navigation icons (back, forward, refresh) on the left, followed by a warning icon and the text 'Not secure | 3.110.170.182'.

welcome to universe

6. Creating a nginx directory under /var/opt:

In that nginx directory creating an index.html:

```
ubuntu@ip-172-31-45-127:~$ ls /var/opt/nginx
index.html
ubuntu@ip-172-31-45-127:~$
```

7. Creating a Docker-compose file:

```
ubuntu@ip-172-31-45-127:~$ cat docker-compose.yml
version: "3"
services:
  sharuf:
    image: sharuf89/sharuf
    ports:
      - "8000:80"
    volumes:
      - /var/opt/nginx:/usr/share/nginx/html
ubuntu@ip-172-31-45-127:~$
```

8. Running a Docker-compose file:

Docker-compose up -d

```
ubuntu@ip-172-31-45-127:~$ docker-compose up -d
Creating network "ubuntu_default" with the default driver
Creating ubuntu_sharuf_1 ... done
```

9. Checking the output of docker-compose deployment:

← → ↻ ⚠ Not secure | 3.110.170.182:8000

hi all!!!

10. Checking whether the Volume is mount to Docker-compose application:

Command: `docker inspect [container ID]`

```
    },
    "Mounts": [
      {
        "Type": "bind",
        "Source": "/var/opt/nginx",
        "Destination": "/usr/share/nginx/html",
        "Mode": "rw",
        "RW": true,
        "Propagation": "rprivate"
      }
    ]
  }
}
```

11. Pushing Docker image to Docker hub:

Command: `Docker push [image name]`

```
ubuntu@ip-172-31-45-127:~$ docker push sharuf89/sharuf
Using default tag: latest
The push refers to repository [docker.io/sharuf89/sharuf]
ec28beb05ec0: Layer already exists
a34b395c0ca3: Layer already exists
5e728486380e: Layer already exists
b968c967e155: Layer already exists
92ef9174e989: Layer already exists
28c7b3c0b176: Layer already exists
fbed1f6990ee: Layer already exists
dd731ddf52be: Layer already exists
9fe9a137fd00: Layer already exists
latest: digest: sha256:6f3159f840ca9dc57ab736da012926b066bff460d5ffb6a48bb75433a54719ed size: 2196
```

12. Docker hub output:

General

Tags

Builds

Collaborators

Webhooks

Settings




Add a short description for this repository

The short description is used to index your content on Docker Hub and in search engines. It's visible to users in search results.



sharuf89 / sharuf

Description

This repository does not have a description 



Last pushed: a few seconds ago