

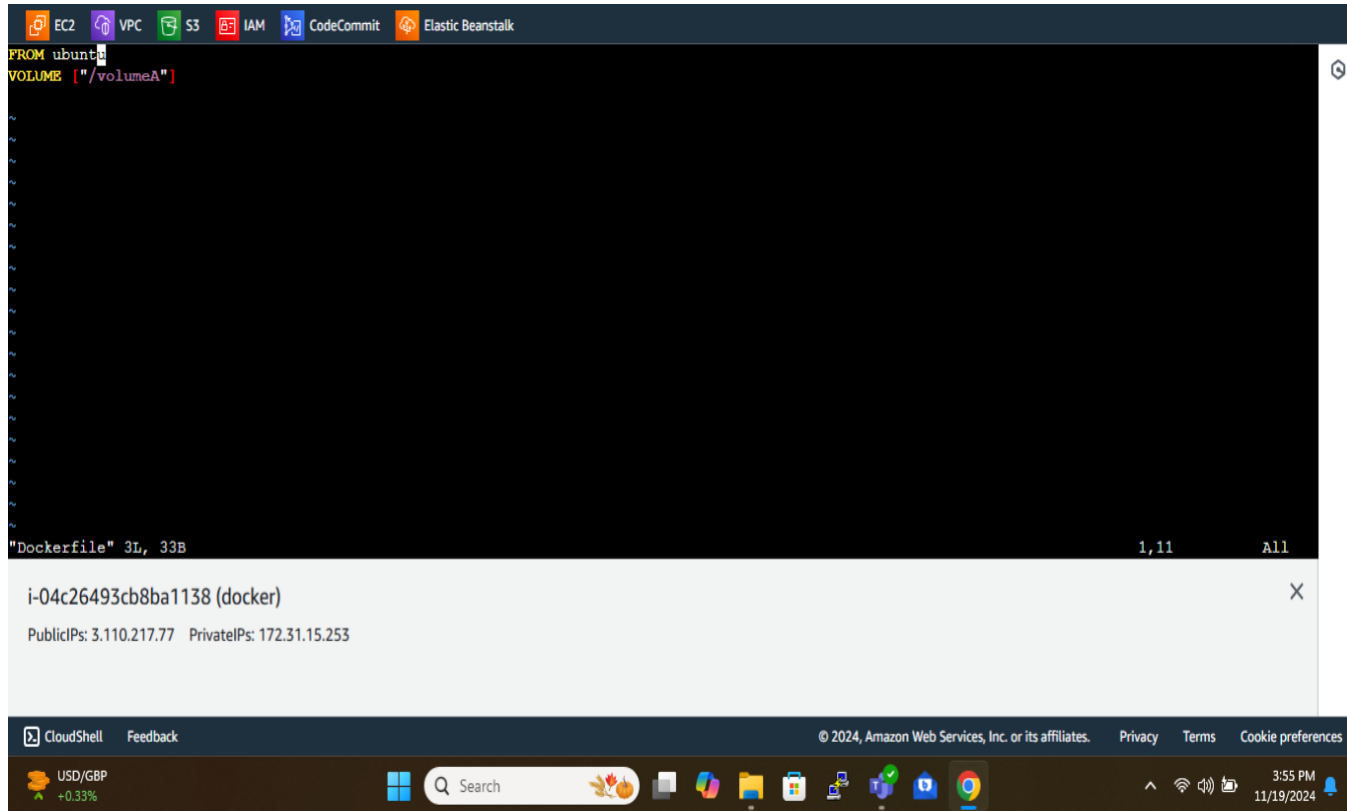
1. Using a Dockerfile

- **Define the volume:**

Dockerfile

```
FROM ubuntu:latest
```

```
VOLUME ["/volumeA"]
```

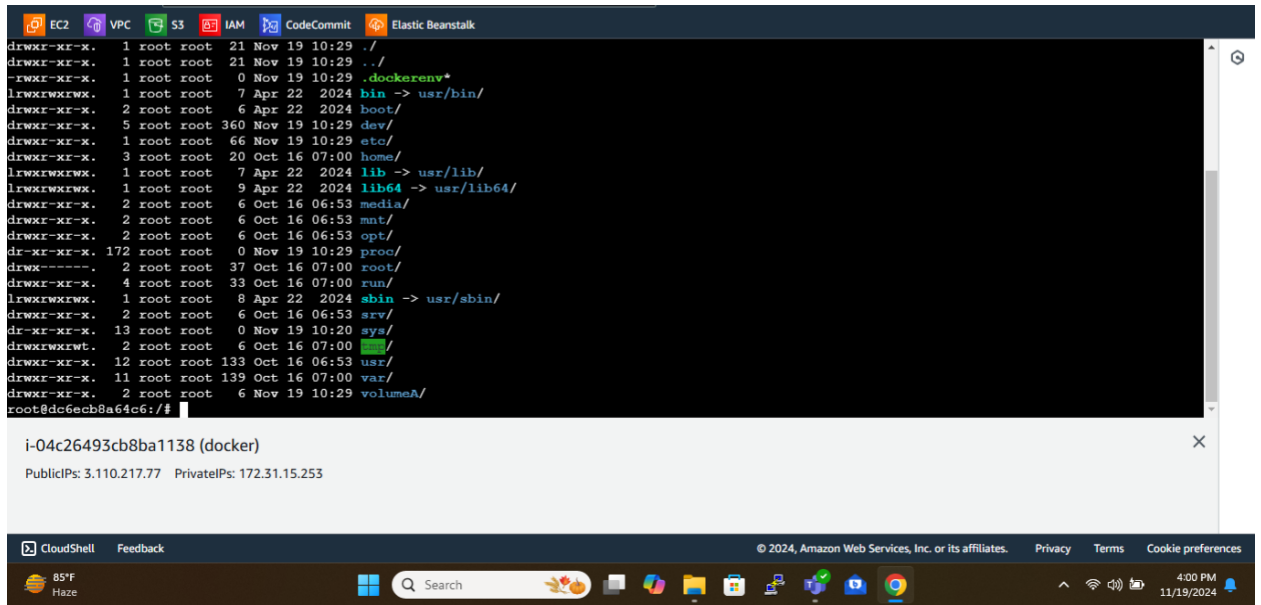


- **Build the image:**

```
docker build -t imga .
```

- **Run the container:**

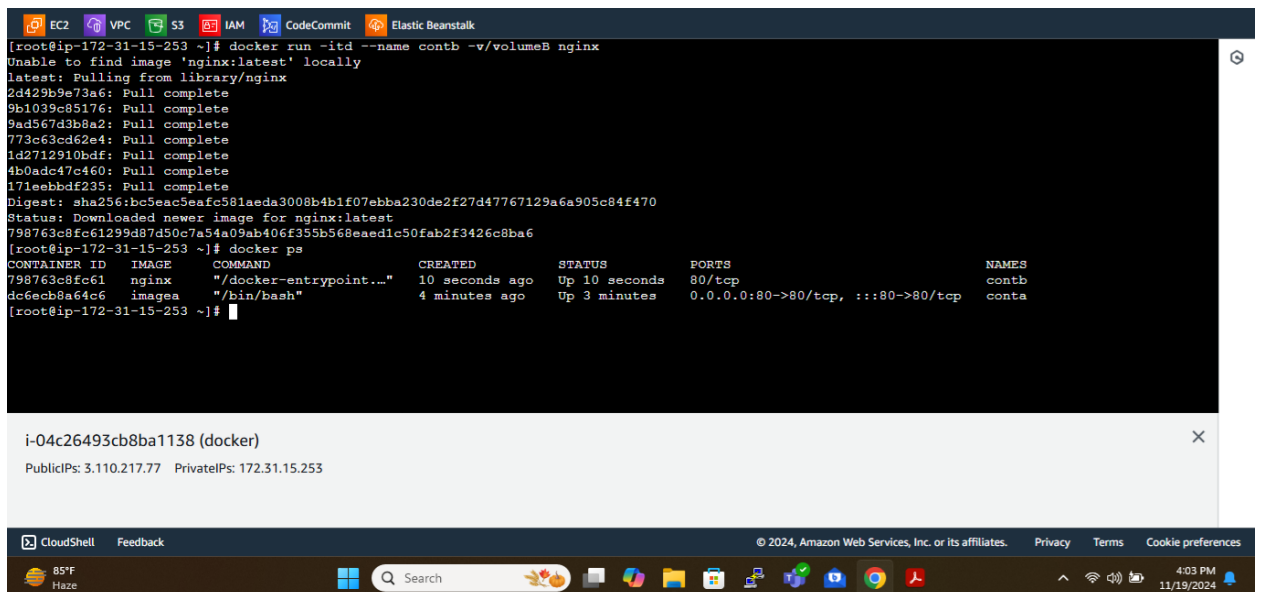
```
docker run -it --name conta -p 8080:80 imga
```



2. Creating a Volume and Container Simultaneously

- Create a volume and container:

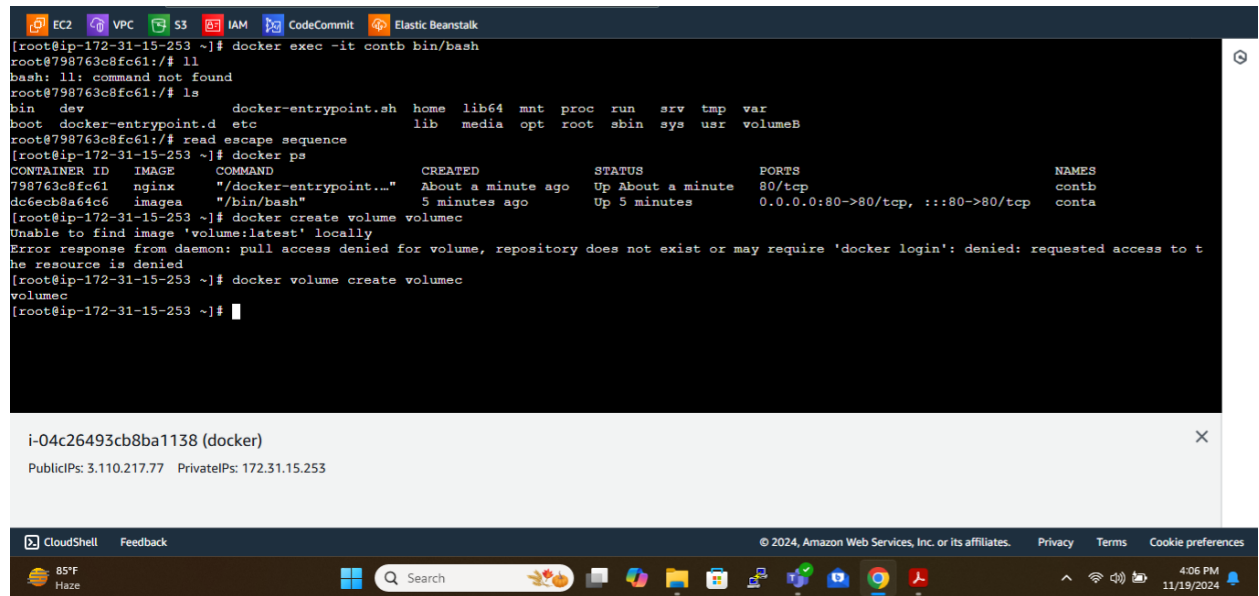
```
docker run -it --name contb -v/volumeB nginx
```



3. Mounting a Local Volume

- **Create a local volume:**

```
docker volume create volume
```

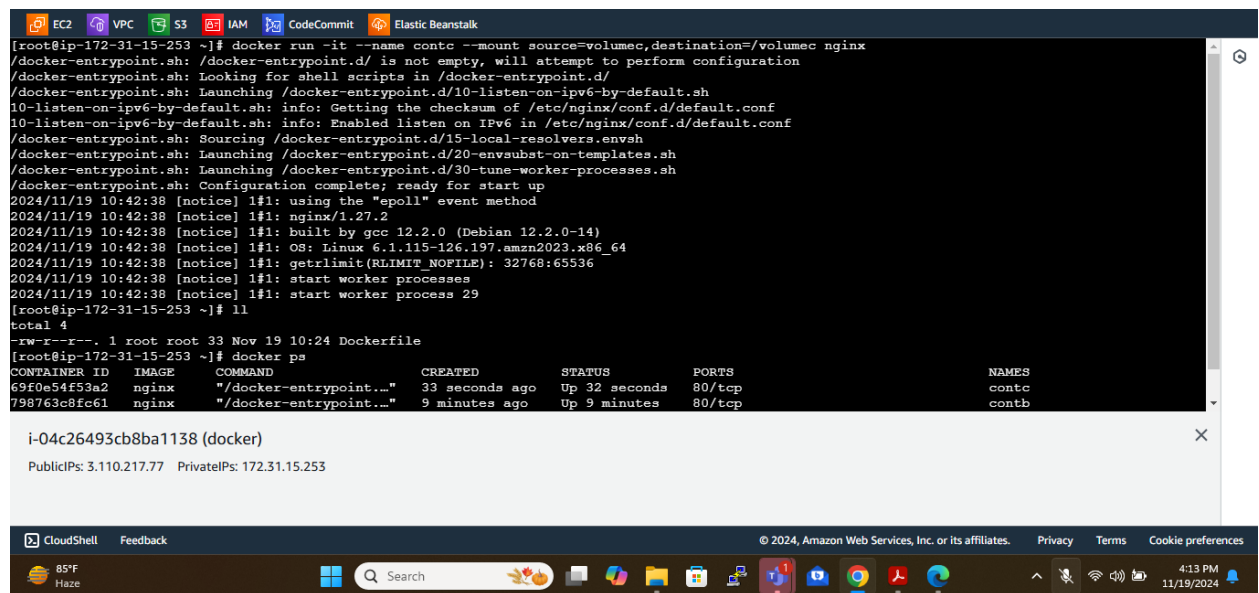


The screenshot shows a terminal window in AWS CloudShell. The user runs `docker exec -it contb bin/bash` to enter a container. Inside the container, they run `ls` and see a directory structure including `bin`, `dev`, `home`, `lib64`, `mnt`, `proc`, `run`, `srv`, `tmp`, and `var`. They then run `docker ps` and see a table of running containers. Next, they run `docker create volume` and receive an error: "Unable to find image 'volume:latest' locally". Finally, they run `docker volume create volumec` successfully, creating a new volume named `volumec`.

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
798763c8fc61	nginx	"/docker-entrypoint..."	About a minute ago	Up About a minute	80/tcp	contb
dc6ech8a64c6	imagea	"/bin/bash"	5 minutes ago	Up 5 minutes	0.0.0.0:80->80/tcp, :::80->80/tcp	conta

- **Run the container with the mounted volume:**

```
docker run -it --name contc --mount source=volumec,target=/volumec nginx
```



The screenshot shows a terminal window in AWS CloudShell. The user runs `docker run -it --name contc --mount source=volumec,destination=/volumec nginx`. The output shows the container starting up, including logs for nginx configuration and startup. They then run `ls` and see a directory structure including `bin`, `dev`, `home`, `lib64`, `mnt`, `proc`, `run`, `srv`, `tmp`, and `var`. They then run `docker ps` and see a table of running containers.

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
69f0e54f53a2	nginx	"/docker-entrypoint..."	33 seconds ago	Up 32 seconds	80/tcp	contc
798763c8fc61	nginx	"/docker-entrypoint..."	9 minutes ago	Up 9 minutes	80/tcp	contb

The below image is the mount of local volume to container

