EXPERIMENT 6

AIM: Working with Docker Compose File to Control Multiple Containers

Steps to Complete:

Creating compose files

- Create a directory named nginx in your root.

```
mkdir nginx
```

- Switch to that directory and create a file named docker-compose.yaml

```
cd nginx
```

```
vi docker-compose.yml
```

- Use docker-compose version 2 to create docker-compose.yaml file.
  Create a service named "databases". Use image named "mysql"

  Map container 3306 port to host machine 3306 port.

  Add environment variables named "MYSQL_ROOT_PASSWORD", "MYSQL_DATABASE", "MYSQL_USER" and "MYSQL_PASSWORD" along with corresponding values for all.

```
cat evs.env
```

evs.evs

```
1  MYSQL_ROOT_PASSWORD=redhat08
2  MYSQL_DATABASE=nginxdb
3  MYSQL_USER=root
```

docker-compose.yml > { } services > { } web > [ ] depends_on

docker-compose.yml - The Compose specification establishes a standard for the definition o

```yaml
version: '3'
services:
  databases:
    image: mysql
    ports:
      - "3307:3306"
    env_file:
      - evs.env
  web:
    image: nginx
    ports:
      - "80:80"
    depends_on:
      - databases
```

Running images using docker-compose

- Save docker-compose.yaml file and do docker-compose up.

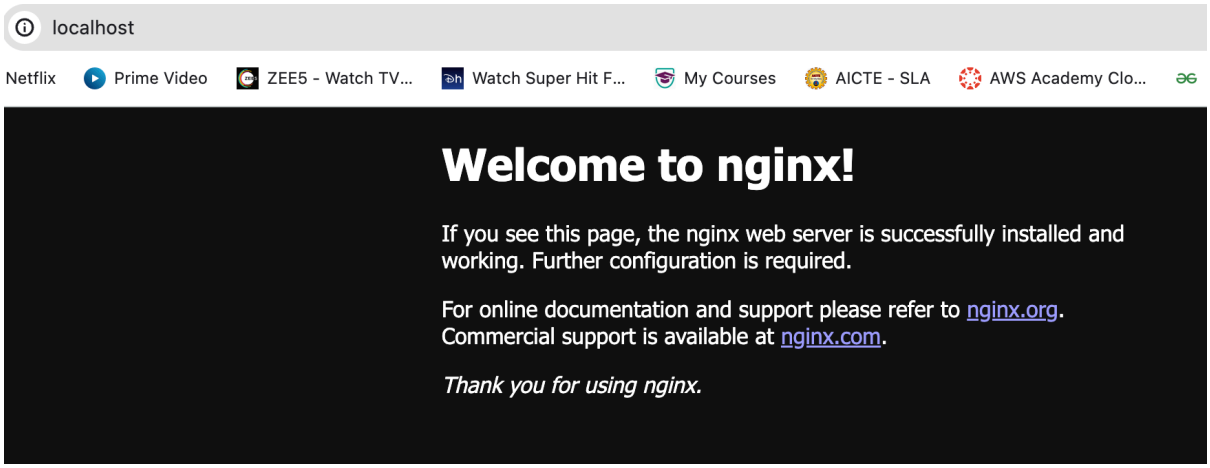
```
(base) vanshika@VANSHIKAs-MacBook-Air nginx % docker-compose up -d

[+] Running 11/11
 ✔ databases 10 layers [⣿⣿⣿⣿⣿⣿⣿⣿⣿⣿]      0B/0B      Pulled
   ✔ e39ec8f010eb Pull complete
   ✔ e2b7fadc33ec Pull complete
   ✔ 9d193449aafd Pull complete
   ✔ 6ea497c74b15 Pull complete
   ✔ 7778acbf55f3 Pull complete
   ✔ a633e58f9669 Pull complete
   ✔ edd3047f9b4b Pull complete
   ✔ 70ae0c334fe1 Pull complete
   ✔ b139fc79e81c Pull complete
   ✔ 6956b492354c Pull complete
[+] Running 3/3
 ✔ Network nginx_default        Created
 ✔ Container nginx-databases-1  Started
 ✔ Container nginx-web-1        Started
```

```
docker-compose up -d
```

- Verify nginx service is up and is accessible on machine.

```
curl localhost:80
```



Stop and remove your docker container using docker-compose.

```
docker-compose down
```