EXPERIMENT 6

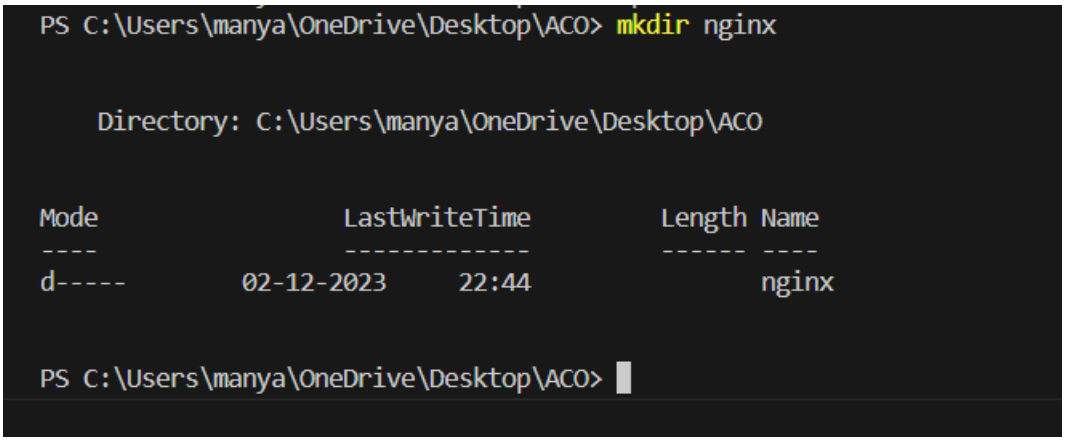
AIM: Working with Docker Compose File to Control Multiple Containers

Steps to Complete:

Creating compose files

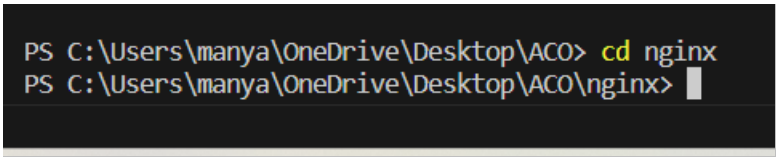
- Create a directory named nginx in your root.

```
mkdir nginx
```

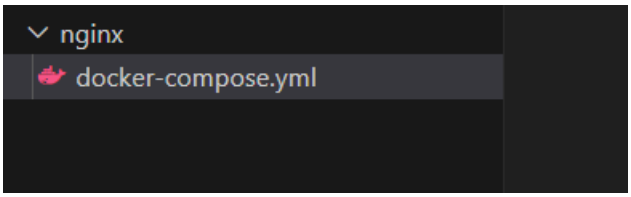


- Switch to that directory and create a file named docker-compose.yaml

```
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
```

```
MYSQL_ROOT_PASSWORD=redhat08
MYSQL_DATABASE=nginxdb
MYSQL_USER=root
```

Add another service named "web"
Use image "nginx"

```
cat docker-compose.yml
```

```
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.

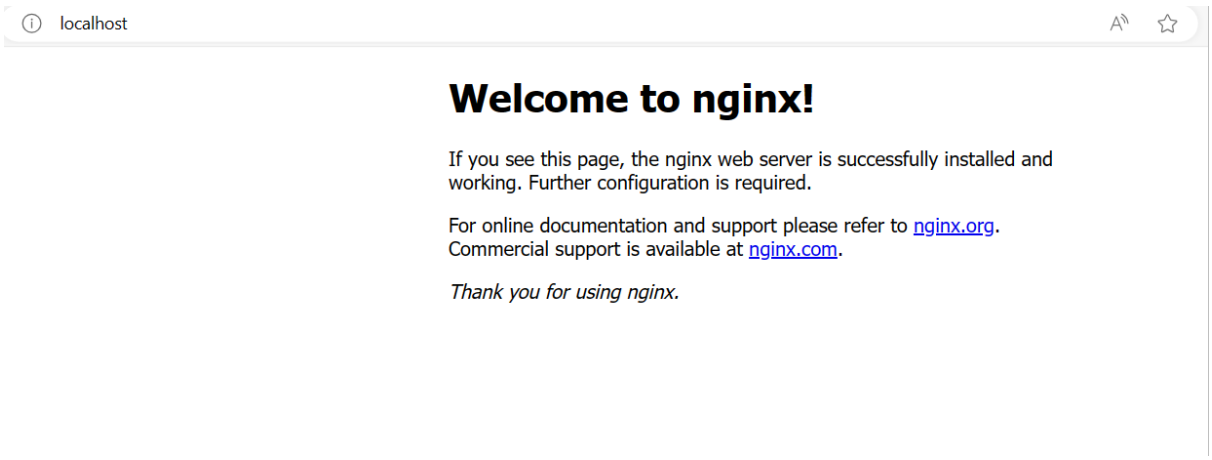
```
docker-compose up -d
```

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

```
curl localhost:80
```

```
PS C:\Users\manya\OneDrive\Desktop\ACO\nginx> curl 127.0.0.1:80


StatusCode        : 200
StatusDescription : OK
Content           : <!DOCTYPE html>
                    <html>
                    <head>
                    <title>Welcome to nginx!</title>
                    <style>
                    html { color-scheme: light dark; }
                    body { width: 35em; margin: 0 auto;
                    font-family: Tahoma, Verdana, Arial, sans-serif; }
                    </style...
RawContent        : HTTP/1.1 200 OK
                    Connection: keep-alive
                    Accept-Ranges: bytes
                    Content-Length: 615
                    Content-Type: text/html
                    Date: Sat, 02 Dec 2023 17:52:10 GMT
```



Stop and remove your docker container using docker-compose.

```
docker-compose down
```

```
PS C:\Users\manya\OneDrive\Desktop\ACO\nginx> docker-compose down
[+] Running 3/3
 ✓ Container nginx-web-1        Removed
 ✓ Container nginx-databases-1  Removed
 ✓ Network nginx_default        Removed
PS C:\Users\manya\OneDrive\Desktop\ACO\nginx>
```