Lab Exercise 3: Working with Docker Volumes

Step 1: Create a Docker Volume

Create a new Docker volume:

```
docker volume create my_data_volume
```

```
C:\Users\OM VATS>docker volume create my_data_volume
my_data_volume
```

```
docker volume ls
```

Step 2: Run a Container with the Volume Mounted

```
docker run -d --name my_nginx -v my_data_volume:/usr/share/nginx/html -p 8008:80 nginx
```

```
C:\Users\OM VATS>docker run -d --name my_nginx -v my_data_volume:/usr/share/nginx/html -p 8008:80 nginx
Unable to find image 'nginx:latest' locally
latest: Pulling from library/nginx
a2318d6c47ec: Pull complete
895d327c79ae: Pull complete
bbfaa25db775: Pull complete
7bb6fb0cfb2b: Pull complete
9723edc10c17: Pull complete
24b3fdc4d1e3: Pull complete
3122471704d5: Pull complete
Digest: sha256:04ba374043ccd2fc5c593885c0eacddebabd5ca375f9323666f28dfd5a9710e3
Status: Downloaded newer image for nginx:latest
1db161031b7b57a05202ffeb6c666b8d07ea66cdc271feb2dbaf78bc393b4086
```

```
C:\Users\OM VATS>docker ps
CONTAINER ID   IMAGE     COMMAND                  CREATED         STATUS         PORTS                   NAMES
1db161031b7b   nginx     "/docker-entrypoint.…"   55 seconds ago   Up 55 seconds   0.0.0.0:8008->80/tcp   my_nginx
```

```
docker ps
```

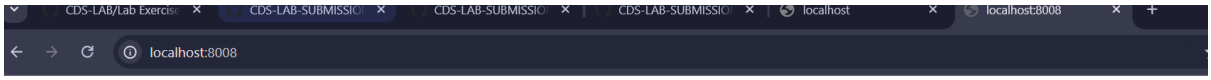
Step 3: Interact with the Volume

```
docker exec -it my_nginx bash
```

```
echo "<h1>Hello, Docker Volume</h1>" > /usr/share/nginx/html/index.html

exit
```

Step 4: Test Data Persistence

```
docker stop my_nginx

docker rm my_nginx

docker run -d -p 8011:80 -v my_data_volume:/usr/share/nginx/html nginx
```



Hello, Docker Volume

Step 5: Clean Up

```
docker stop new_nginx

docker rm new_nginx
```

```
C:\Users\OM VATS>docker stop my_nginx
my_nginx

C:\Users\OM VATS>docker rm my_nginx
my_nginx
```

```
docker volume rm my_data_volume

docker volume ls
```

```
C:\Users\OM VATS>docker volume rm my_data_volume
my_data_volume

C:\Users\OM VATS>docker volume ls
DRIVER    VOLUME NAME
```