Experiment No. 1.4

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Branch: MCA–CCD   **Section/Group:** MCD-1/A
Semester: III   **Date of Performance:** 15th Oct 23
Subject Name: CONTAINERIZATION   **Subject Code:** 22CAH-742
           WITH DOCKER

1. **Aim/Overview of the practical:**
   a) Managing Containers with the Docker CLI.

2. **Code for practical: (a)** →

   Creating a container through CLI

   Step 1 : Pull an image from the default registry using **"Sudo docker pull image:tag"** command.

   Step 2 : Run an image inoder to make a container using the command **"docker run -d imagename"**.

```
 kg @  kg-Nitro in  docker
 sudo docker pull nginx:latest
[sudo] password for kg:
latest: Pulling from library/nginx
a378f10b3218: Pull complete
4dfff0708538: Pull complete
2135e49ace4b: Pull complete
c843f6b280ce: Pull complete
6f35ab6f1400: Pull complete
6c538b49fa4a: Pull complete
d57731fb9008: Pull complete
Digest: sha256:b4af4f8b6470febf45dc10f564551af682a802eda1743055a7dfc8332dffa595
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest
```

```
 kg @  kg-Nitro in  docker
 sudo docker run  -d -p 80:80 nginx
146ee9745467848fcee48e6c3c44249f7e44fc084ed140f4419eb07f08704876
```

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Stop the Running Container using CLI

Step 1 : In order to stop a running container use command **"docker stop contID"**.

```
   kg @ ▪ kg-Nitro in 📁 docker
  > sudo docker ps
CONTAINER ID    IMAGE      COMMAND                      CREATED          STATUS
 PORTS                                NAMES
146ee9745467    nginx      "/docker-entrypoint.…"    2 minutes ago    Up 2 minutes
 0.0.0.0:80->80/tcp, :::80->80/tcp    heuristic_goldberg
```

```
   kg @ ▪ kg-Nitro in 📁 docker
  > sudo docker stop 146ee
146ee
```

Restart the container using CLI

Step 1 : In order to restart a container use command **"docker restart contID"**.

```
   kg @ ▪ kg-Nitro in 📁 docker
  > sudo docker restart 146ee
146ee

   kg @ ▪ kg-Nitro in 📁 docker
  > sudo docker ps
CONTAINER ID    IMAGE      COMMAND                      CREATED          STATUS
 PORTS                                NAMES
146ee9745467    nginx      "/docker-entrypoint.…"    5 minutes ago    Up 4 seconds
 0.0.0.0:80->80/tcp, :::80->80/tcp    heuristic_goldberg
```

Remove the container using CLI

Step 1 : In order to remove a container first we have to stop the running container.
Step 2 : Then use command **"docker rm contID"**.

```
   kg @ ▪ kg-Nitro in 📁 docker
  > sudo docker stop 146ee
146ee

   kg @ ▪ kg-Nitro in 📁 docker
  > sudo docker rm 146ee
146ee
```