

Practical-4

Aim: Introduction of Docker set-up and study of basic docker commands

Task 1: Install the Docker Command Line Interface Tool from:

<https://docs.docker.com/desktop/>

Task 2: Hands-on on docker commands:

- Execute the different docker commands to work pull the image from the docker hub and run the image in your local system.

```
C:\Users\Nakul\Downloads\MLOPs\Practicals>docker pull nginx:latest
latest: Pulling from library/nginx
1f7ce2fa46ab: Pull complete
9b16c94bb686: Pull complete
9a59d19f9c5b: Pull complete
9ea27b074f71: Pull complete
c6edf33e2524: Pull complete
84b1ff10387b: Pull complete
517357831967: Pull complete
Digest: sha256:10d1f5b58f74683ad34eb29287e07dab1e90f10af243f151bb50aa5dbb4d62ee
Status: Downloaded newer image for nginx:latest
docker.io/library/nginx:latest

What's Next?
View a summary of image vulnerabilities and recommendations → docker scout quickview nginx:latest
```

- Commands to run the container with the name of your choice

```
PS C:\Users\Nakul\Downloads\MLOPs\Practicals> docker run --name my_nginx -d -p 80:80 nginx:latest
8c4d7c03e6935dd96ad98c088ad4f27b104bc333bc4908c8c33f453839ff64c2
```

- Command to detach and attach the container

Attach to Running Container: `docker attach my_nginx`

Detach from Running Container: Press Ctrl + P followed by Ctrl + Q.

- Command to list all the images and containers

```
PS C:\Users\Nakul\Downloads\MLOPs\Practicals> docker images
```

REPOSITORY	IMAGE ID	CREATED	SIZE	TAG
pr7	24a84f04ed1e	13 hours ago	653MB	latest
pr6	229eeb557389	13 hours ago	372MB	latest
nginx	a6bd71f48f68	10 days ago	187MB	latest


```
PS C:\Users\Nakul\Downloads\MLOPs\Practicals> docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
8c4d7c03e693	nginx:latest	"/docker-entrypoint..."	13 minutes ago	Up About a minute	0.0.0.0:80->80/tcp	my_nginx

- Command to delete the specified image and containers

```
PS C:\Users\Nakul\Downloads\MLOPs\Practicals> docker stop my_nginx
my_nginx
PS C:\Users\Nakul\Downloads\MLOPs\Practicals> docker rm my_nginx
my_nginx
PS C:\Users\Nakul\Downloads\MLOPs\Practicals> docker rmi nginx:latest
Untagged: nginx:latest
Untagged: nginx@sha256:10d1f5b58f74683ad34eb29287e07dab1e90f10af243f151bb50aa5dbb4d62ee
Deleted: sha256:a6bd71f48f6839d9faae1f29d3babef831e76bc213107682c5cc80f0cbb30866
Deleted: sha256:fe7723b2df19ccf75328cb1f39c90c2332679144231501f3d4d00f51b16c2867
Deleted: sha256:c0f3f17b019abbcfef0c162054786ea8087ca792a2191a79f03040a8cd98f41d
Deleted: sha256:32cfe66e62a5f36abf128703007285e1a3b9078f5b33a367df1534399065cc70
Deleted: sha256:8713bfa322a66040e882b7822dc0c110a68cfafd3bb37332fdbb9426171d7ec9
Deleted: sha256:253c039db964b57be02d9bb0f3d6916b7948687b4f6f4fc681644a419a47979d
Deleted: sha256:2c235ef4cca1fbb74e3a7aa47e654fe943bc0c2becbdd4d6af7cbf9e375fe08a
```

- Delete all the containers

```
docker rm $(docker ps -aq)
```