

Do the following steps and compile a written report on how you did that and the outcomes

List (or capture) the docker management commands.

docker create

docker start

docker stop

docker restart

docker pause

docker unpause

docker rename

docker rm

docker ps

docker stats

docker top

docker logs

List (or capture) the commands that belong to docker image and what they do.

docker pull	This command is used to pull an image from a Docker registry.	<code>docker pull ubuntu:latest</code>
docker build	This command is used to build a new Docker image from a Dockerfile.	<code>docker build -t my-image.</code>
docker push	This command is used to push a Docker image to a Docker registry.	<code>docker push my-image</code>
docker tag	This command is used to tag a Docker image with a new name or version.	<code>docker tag my-image my-image:latest</code>
docker rmi	This command is used to remove one or more Docker images.	<code>docker rmi my-image</code>

docker images	This command is used to list the Docker images available on the host.	<code>docker images</code>
docker history	This command is used to display the history of a Docker image.	<code>docker history my-image</code>
docker save	This command is used to save a Docker image to a tar archive.	<code>docker save my-image -o my-image.tar</code>
docker load	This command is used to load a Docker image from a tar archive.	<code>docker load -i my-image.tar</code>

How would you get help on docker image ls command?

Docker help image ls

Give two examples of commands that can be run in two ways in docker?

`docker ps -a` or `docker container ls -a`: Lists all containers, including stopped ones.

`docker run -it [image_name]` or `docker run --interactive --tty [image_name]`: Runs a container in interactive mode.

5. List the docker images you have on your machine? Run the command and capture the results.

```
~\OneDrive - BCIT\Desktop on (us-west-1)
> docker images
REPOSITORY    TAG       IMAGE ID       CREATED        SIZE
ubuntu        latest    e34e831650c1   2 weeks ago    77.9MB
alpine        latest    f8c20f8bbcb6   6 weeks ago    7.38MB
centos        latest    5d0da3dc9764   2 years ago    231MB
```

6. List all the containers on your machine. Run the command and capture the results.

```
~\OneDrive - BCIT\Desktop on (us-west-1)
> docker ps -a
CONTAINER ID   IMAGE     COMMAND                  CREATED        STATUS              PORTS          NAMES
631259b5f502   centos    "/bin/bash"             8 minutes ago   Exited (130) 7 minutes ago           container3
501604c790e0   alpine    "/bin/sh"               8 minutes ago   Exited (130) 8 minutes ago           container2
5f6e9e99feec   ubuntu    "/bin/bash"             9 minutes ago   Exited (0) 8 minutes ago            new_container_name1
4bee15328eac   centos    "/bin/bash"             9 minutes ago   Exited (0) 9 minutes ago           container6
7c8e697e7dde   alpine    "/bin/sh"               10 minutes ago  Exited (0) 10 minutes ago          container5
be937b0d8ea5   ubuntu    "/bin/bash"             10 minutes ago  Exited (0) 10 minutes ago          container4
```

7. Run 3 containers on your machine with 3 different operating systems in detached mode and in interactive mode.

```
~\OneDrive - BCIT\Desktop on ☁ (us-west-1)
8% > docker run -d --name container4 ubuntu
Unable to find image 'ubuntu:latest' locally
latest: Pulling from library/ubuntu
29202e855b20: Pull complete
Digest: sha256:e6173d4dc55e76b87c4af8db8821b1feae4146dd47341e4d431118c7dd060a74
Status: Downloaded newer image for ubuntu:latest
be937b0d8ea50d2b4648749244f47127ce2eac34ee46eb959eaaa89b671e97d5

~\OneDrive - BCIT\Desktop on ☁ (us-west-1) took 6s
8% > docker run -d --name container5 alpine
Unable to find image 'alpine:latest' locally
latest: Pulling from library/alpine
661ff4d9561e: Pull complete
Digest: sha256:51b67269f354137895d43f3b3d810bfacd3945438e94dc5ac55fdac340352f48
Status: Downloaded newer image for alpine:latest
7c8e697e7dded17b9bf2684c5d2adcf3cddb1d80234fcb57d9af945fe7de1376

~\OneDrive - BCIT\Desktop on ☁ (us-west-1) took 3s
8% > docker run -d --name container6 centos
Unable to find image 'centos:latest' locally
latest: Pulling from library/centos
a1d0c7532777: Pull complete
Digest: sha256:a27fd8080b517143cbbbab9dfb7c8571c40d67d534bbdee55bd6c473f432b177
Status: Downloaded newer image for centos:latest
4bee15328eacf53df5bd58f899395afae868c4ff0c883720a3b469b0509e0fd9
```

```
~\OneDrive - BCIT\Desktop on ☁ (us-west-1) took 16s
9% > docker run -it --name container1 ubuntu

root@5f6e9e99feec:/#
root@5f6e9e99feec:/#
```

```
~\OneDrive - BCIT\Desktop on ☁ (us-west-1) took 39s
10% > docker run -it --name container2 alpine
/ #
```

8. Run any Linux command on a container running in the background.

```
markus@Laptop:/mnt/c/Users/Markus/OneDrive - BCIT/Desktop$ docker exec container1 ls
bin
boot
dev
etc
home
lib
lib32
lib64
libx32
media
mnt
opt
proc
root
run
sbin
srv
sys
tmp
usr
var
```

9. Rename one of the containers to another name.

```
~\OneDrive - BCIT\Desktop on (us-west-1)
> docker rename container1 new_container_name1
```

10. Clean up all containers on your system?

```
markus@Laptop:/mnt/c/Users/Markus/OneDrive - BCIT/Desktop$ docker stop $(docker ps -q)
9a374b89d0c0
markus@Laptop:/mnt/c/Users/Markus/OneDrive - BCIT/Desktop$ docker rm $(docker ps -a -q)
9a374b89d0c0
```