Docker

Basic commands

List containers

`docker ps`
 Exited containers:
 `docker ps -a -f status=exited`
 Copy files: docker cp (from stopped containers also)

List images

`docker images`
 `docker images -f dangling=true`
 (to remove dangling: `docker images purge`)

Remove

Remove image `docker rmi`
 Remove container `docker rm`
 (remove all exited containers: `docker rm $(docker ps -a -f status=exited -q)`

Run

Run an image in a new container in interactive mode
 `docker run -name $NAME -it $IMAGE`
 (rm previous container with docker rm if name not available)
 Option: –rm remove the container on exit
 Environment variables: –env MYVAR2=foo
 Restart an exited container
 `docker start $ID`
 Attach to it
 `docker attach $ID`
 Bind volumes -v HOST:CONTAINER $\rightarrow$ can not reverse mount? (access files in container form outside)

Duplicate image

Tag an image with a new name
 `docker tage source:tag target:tag`

Commit

Commit changes in a container to an image
```
sudo docker commit -m $MESSAGE $CONTAINER $IMAGE:$TAG
```

Push changes to repository
(dockerhub: docker.io)
```
docker login $HOST
docker push $IMAGE:$TAG
```

Save

Save an image to a compressed archive
```
docker save $IMAGE:$TAG | gzip > $FILE.tgz
```

Clean

Remove image: docker rmi
```
docker images prune
```
Clean everything: docker system prune