

# Docker labs

In this folder are a lot of exercises. They are numbered in the way we think makes sense to introduce the concepts.

Below is a cheatsheet for many of the commands we will touch upon in the lab.

```
docker build -t friendlyname .           # Create image using this directory's
Dockerfile

docker container run -p 4000:80 friendlyname # Run "friendlyname" mapping port
4000 to 80

docker container run -d -p 4000:80 friendlyname # Same thing, but in
detached mode

docker container run -ti friendlyname        # Run "friendlyname" in
interactive mode

docker container ls                        # List all running
containers

docker container ls -a                    # List all containers, even those
not running

docker container exec -it <hash> bash      # Interacts with container and
executes bash

docker container stop <hash>              # Gracefully stop the specified
container

docker container kill <hash>              # Force shutdown of the specified
container

docker container rm <hash>                # Remove specified container from
this machine

docker container prune                     # Remove all stopped
containers

docker volume create <name>                # Creates a named volume with the
default driver

docker volume inspect <name>              # prints out details about the given
volume entity

docker volume rm <name>                   # removes the given volume from
the system

docker image ls -a                        # List all images on
this machine

docker image rm <image id>                 # Remove specified image from
this machine
```

```
docker image prune                                # Remove all 'dangling' images from
this machine

docker image prune -a    # Remove all images without at least one container
associated to them

docker system prune # delete all unused data; containers, volumes and images w.o.
containers

docker system df -v      # presents a summary of the space used by different
docker objects

docker login              # Log in this CLI session using your Docker
credentials

docker tag <image> username/repository:tag        # Tag <image> for upload to
registry

docker push username/repository:tag                # Upload tagged image to
registry

docker run username/repository:tag                 # Run image from a
registry

Ctrl + P, Ctrl + Q      # Detach from container you're in, but keep
it running

Ctrl + D                 # Detach from container you're in, and stop it,
same as exit
```