#### What is the difference between:

- CMD & ENTRYPOINT
- COPY & ADD

### Problem 1:

- Run the container hello-world
- Check the container status
- Start the stopped container
- Remove the container
- Remove the image

### Problem 2:

- Run container centos or ubuntu in an interactive mode
- Run the following command in the container "echo docker"
- Open a bash shell in the container and touch a file named hello-docker
- Stop the container and remove it. Write your comment about the file hello-docker
- Remove all stopped containers

## Problem 3:

Deploy a MySQL database called app-database. Use the mysql latest image, and use the
-e flag to set MYSQL\_ROOT\_PASSWORD to P4sSw0rd0!. The container should run in the
background.

# Problem 4:

- Run the image Nginx
- Add html static files to the container and make sure they are accessible
- Commit the container with image name IMAGE NAME

### Problem 5:

- Create a python simple app
- Create a dockerfile to containerize the python app
- Build the image and test it
- (Bonus)create a dockerfile for the same app in smaller size using multi staging
- Push the created image into your docker hub repo