

# Dockers - Task #2

## Goals

- Use customized Ubuntu 20.04 image with python3
- Use docker cp command to copy resulting file
- Mount an external folder as folder inside container and copy data

**Estimated Time:** 30 minutes

## Prerequisites

All steps below should be performed in your personal Cloud9 environment with the previously built Ubuntu + python3 image.

## Steps

1. Start an interactive instance of “*my-numpy-docker*”
2. Like in previous task, output 20 random numbers to a file destination of your choice
  - a. File would obviously reside inside the container
  - b. Don't exit the container
3. Method 1: docker cp
  - a. Open a new terminal in Cloud9
  - b. Use *docker ps* subcommand to get the container ID of the running container
  - c. Copy the file from the container to your Cloud9 file-system
  - d. Make sure the file contents are valid
  - e. In your Cloud9 file-system, modify the file slightly
  - f. Copy it back to the container
  - g. Make sure the container can now see the new data
4. Method 2: bind mounts
  - a. Repeat steps 1-2, but now start the container with a mount between your Cloud9 fs (use *pwd* to find absolute path) and */mnt* at the container side
  - b. Make sure that the file can be seen instantly at your Cloud9 fs
  - c. Verify that any side that performs a change causes it to propagate to the other side seamlessly