When you see a *docker-compose* file, use the following command to run the exercise:

*sudo docker-compose up*

If your machine does not provide *docker-compose*, you can install it by following this guide [[link](https://docs.docker.com/compose/install/)].

**Errors:**

If you receive the following error during the build phase:

failed to solve: php:apache: error getting credentials - err: exit status 1, out: ``

Run the following line:  
  
sudo docker pull php:apache

To solve the exercise, you need first to inspect the app with the browser’s debugger, and then, once you understood what you need to solve it, we suggest you write a Python script.

Some useful Python libraries:

import hashlib

import codecs

import numpy as np

import requests

A request example:

#IP

ip = "127.0.0.1"

port= "8080"

#we first check that our MD5 works by comparing Md5(100) with

#the one in the webpage

control = "f899139df5e1059396431415e770c6dd"

tester = 100

tester\_b = str.encode(str(tester))

tester\_md5 = hashlib.md5(tester\_b).hexdigest()

print(f"tester={tester\_md5 == control}")