

## **Assignment 1**

This assignment has four parts. Please submit the answers for the assignment in a single pdf file called Assignment1.pdf.

### **Part A) 20 Points**

Explain the use of the following docker commands.

A1) build

A2) run

### **Part B) 30 Points**

Write a Dockerfile that will create a docker image (tagged my/python) using the most recent python image on "docker hub". Please make sure that port 8080 is exposed and that a command line is available upon starting the image in a container.

### **Part C) 20 Points**

Write the docker command that will start a container named python1 using the image tagged my/python (from part b). Ensure that the container has access to port 8080 and a folder on the host's file system (you are free to select any folder you wish, e.g. demo/python).

### **Part D) 30 Points**

Explain how a developer can use the container named python1 to develop and run a simple "hello world" python program.