COMP 8551
Fall 2016 – Instructor: Borna Noureddin
Assignment #2

All work should be done in pairs.

Total marks: 100

Write a program that implements an algorithm that benefits from parallel programming. Examples might include path finding algorithm, physics simulation or image processing.

First implement the program serially, and show that the algorithm works.

Then implement it in OpenCL, and show that it works.

Show timings for the following:

1. Running the program serially

2. Running the OpenCL version using just the CPU

3. Running the OpenCL version using just the GPU

4. Running the OpenCL version using both the CPU and GPU

The program should run on Mac OSX, Windows or Linux, as long as it uses only standard libraries. The OpenCL code must be original, and not copied from another source.

All files required to build and deploy the program must be provided. Submit all your project files and any documentation to the D2L dropbox folder as a single ZIP file with the filename A00ABC_XYZ_Asst2.zip, where ABC and XYZ are your A00 numbers. All required documentation (README file, code comments, etc.) must be included.