# Assignment 2

## Part A

1. What is parallel processing?

It’s processing an instruction from a program over multiple processors. This is so we can reduce the amount of time it would normally take to complete the task.

1. What is CUDA?

Compute Unified Device Architecture is a platform designed to use the GPU’s power for general purposes of the computer’s software, firmware and hardware.

1. What is GPU?

A Graphics Processing Unit is designed to generate graphics and image processing at an accelerated rate.

1. Give a brief description about CUDA processing flow

Firstly, it’s copies the input data from the CPU to the GPU memory.

Secondly, it loads the GPU program and executes it. Caches the data on the chip for maximum performance.

Thirdly, it transfers the results from the GPU to the CPU.

1. Use of an example of CUDA code (e.g. to calculate two arrays’ elements) to indicate which statement is to copy data from main memory to GPU memory and which is to copy the results from GPU memory to main memory.