COMP124 Individual Coursework

Assignment 1

**NOTE:** This is the first COMP124 practical exercise that is to be formally assessed.

It will contribute up to 10% to the overall mark of the module.

**Description**

Implement an assembly language program that does the following:

Firstly, ask the user how many integer values they would like to enter. Read that in, then use it to set up a loop in which you read the sequence of values. As you do so, keep count of how many integers are zero, how many are strictly positive (i.e. > 0), and how many are negative. At the end of the loop, print out a summary of the three counts.

You may find it helpful to code a solution in a high-level language first, and then rewrite in assembly code according to the explanations and examples given in lectures.

**What to submit**

Your submission should consist of two things:

1. The program code file. Note that this is the .cpp file in Visual Studio. **No other files from the project should be submitted**. In the comments at the head of your program, include your name, student ID and University email address.

2. A **short** report in .pdf format. The report should contain the following elements:

(a) As above – your name, student ID and University email address.

(b) Requirements. A brief description of the problem to be solved.

(c) Approach. Explain briefly how your program code solves the problem.

(d) Testing. Describe the test data you have used, and provide evidence of the program working (e.g. screen dumps of the output window).

**How to submit**

The work must be submitted electronically by using the Department’s e-submission system.

This must be done by

**16.00 on** **Friday March 6**

at the latest.

**Marking**

Your submission will be marked according to the following criteria:

Report: 15%

Programming (correctness, usability, efficiency, input validation, etc.): 60%

Testing: 10%

Style (comments, identifiers, layout, etc.): 15%

Students submitting on time and including the correct email address in their work will receive detailed feedback within three working weeks of the deadline given above.