

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 program that does the following.

Firstly, it should ask the user to enter marks for six modules, e.g.

Enter the mark for module 1: . . .

Enter the mark for module 2: . . .

. . .

Enter the mark for module 6: . . .

These marks are to be entered into an array.

After all marks have been entered, your program should count up the number of passes and fails, and then print them out. A pass is considered to be a mark of 40% or above; e.g.

Number of passes = 4

Number of fails = 2

Other requirements

- The marks are assumed to be integers in the range 0-100. If a mark is outside the range, it should not be accepted and the request should be repeated.
- The marks *must* be stored in an array, and the counting of passes and fails should not be performed until this stage is complete (i.e. do not keep track of them as you read in the values).

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

10.00 AM on Monday March 12

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: 15%

Style (comments, identifiers, layout, etc.): 10%

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.