

CS1021 Lab 1

Evaluating Expressions

Assuming x is in R1, y in R2, z in R3 and the result in R0, write and test an ARM assembly language program to evaluate the following expressions:

(a) $3x^2 + 5x$

(b) $2x^2 + 6xy + 3y^2$

(c) $x^3 - 4x^2 + 3x + 8$

(d) $3x^4 - 5x - 16y^4z^4$

Using the [lab1.zip](#) project as a starting point, modify lab1.s to include code that solves all four problems (one after another in the code). Test your code by setting x = 5, y = 6 and z = 2.

The CS1021 web site includes a link to [instructions](#) on how to get started with uVision.

This lab will count towards your final CS1021 coursework mark. Submit your solution lab1.s and evidence that your program works (eg. screen shots of the Keil IDE showing the results of running your program) via Blackboard no later than **9am on Fri 5-Oct-2018**.