CMPS 351: Spring 2013 Program #2

Date assigned: Thursday, January 24, 2013 Due: Thursday, January 31, 2013

This assignment asks you to write two MIPS assembly programs to perform some simple computation. For the first program, your program should ask the user to input a number, calculate the square of that number and display the result. For the second program, your program should ask the user for three numbers: a, b and c and display the result of the calculation b^2 -4ac.

Your program should include appropriate comments indicating what the code should be doing and which registers are being used. Your program should exit cleanly. Please include your name and CLID in the program headers and include your CLID in the file names. Your programs should be turned in through Moodle before class starts on the due date. You should test your programs using the SPIM simulator before submitting them.

Sample output (square):

Enter a number: 25 25 squared is 625.

Sample output (b²-4ac):

Enter a: 4
Enter b: 2
Enter c: 3

The result is -44.

Objectives:

- 1. To introduce and practice with the MIPS assembly language.
- 2. To introduce and practice with SPIM I/O operations.
- 3. To introduce and practice with MIPS arithmetic operations.

Point Values:

Total. 100pts