22C:060: Computer Organization
Homework 1

Total points = 50
Assigned January 28, 2010, due Feb 4, 2010, 11:59: 59 PM

1. Carefully read the handout on the course webpage about MIPS assembly language programming and the SPIM simulator. Read Appendix B of the textbook to review assembly language programming tips, as well as the various system calls for performing various input and output operations. Also, check out the sample program.

2. Be generous about using comments to improve readability. Insufficient comments will lead to loss of grade. Include a comment at the beginning specifying the purpose of the program.

To submit the program, *zip* (or *tar*) them into a single file. Submit your solution through ICON dropbox.

Problem 1. (10 points)
Print the line "Hello World" appended with your name on the screen using a system call.

Problem 2. (40 points)
This problem will be concerned with array access. To start, allocate space for an array of integers with length 10 in the **.data** portion of your assembly code. You should then fill this array with the Fibonacci sequence up to n = 9. Use the iterative formulation of the Fibonacci sequence: F_array[n] = F_array[n-1] + F_array[n-2] where F_array[0] = 1 and F_array[1] = 1.

Now, loop through the array elements and display each entry with the ***print_int*** system call.