ELEC 385: Computer System Design
Homework #8
Due: March 11, 2015

1. Write a MIPS assembly language program to count the number of 1s in a 32-bit word. Use assembly directives to initialize meaningful test data, make room for the result and use variable names within the code. Also, include a list of registers used with an explanation of how each is used. Submit a hard copy of your commented source file (.asm), a screen shot of the data and result in memory and an explanation of the results. In short, convince me that your program works! In addition, email your source file (.asm) to me at Barbara.Marino@lmu.edu before noon on the due date.

2. Exercise 6.17a. Submit your typed, commented code. No screenshots of the results are required here, but you should assemble and test the three conditions (g>h, g<h and g=h).

3. Exercise 6.21b.

***For problems 1 and 2, do not use any pseudo-instructions in your code. Use only valid MIPS assembly language instructions ***

As always, homework is to be single-sided and stapled.