ENGR 3410: HW#2 Number Systems & MIPS Assembly

Due: September 28, 2007

The purpose of this homework is to be a diagnostic of your number systems, MIPS assembly, and machine code skills. Please show all work and annotate the people you worked with explicitly.

2.1 Number systems

Textbook problems 2.2, 2.3

2.2 MIPS instruction set

Textbook problem 2.4

2.3 Assembly coding

Textbook problem 2.6

2.4 MIPS assembly

Textbook problems 2.29, 2.59 (off of your CD, and on the wiki).

2.5 Machine code

Using the MIPS program in Exercise 2.34 (bugs and all), determine the instruction format for each instruction and the decimal (base 10) value of each instruction field.