### EE334 Computer Architecture

# Homework assignment 2

# <sup>o</sup>C / <sup>o</sup>F and Km/Miles Conversions

The purpose of this homework is for you to get familiar with MIPS assembly language. You are going to write a program in assembly.

Please write a program that converts temperature from C to F and from F to C. In your program please use only integer instructions (mul, div, add,...). To convert from Celsius to Fahrenheit, you can use the equation given below.

$$F = (9/5) C + 32$$

A program that could help you to get inputs/outputs from/to the console is in the following page (as well as at: http://www.eecs.wsu.edu/~jdelgado/EE334). It is necessary to have system calls in order to use the console.

After getting the temperature conversion program you are to modify this program to have conversion from Km to Miles and vice versa.

#### REPORT

Please include the following items in your report (you will be email this report in either MS word or pdf format).

- 1. Explain how your program works. You may use a flow chart, pseudo C program, or other way to explain the program.
- 2. Show a couple of examples.
- 3. Conclusion section. Explain what you learned here and what was difficult about this homework.
- 4. Include in a separated file your program. # Include comments in your program.

<b>REPORT IS DUE:</b>	12noon, Monday, February 8, 2010
	by email (jdelgado@eecs.wsu.edu).

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#### Spring 2010