# Cosc 2P12
# Assignment 3

You are to write a program in MIPS assembly language that will print a table of temperatures (Celsius, Fahrenheit and Kelvin) in a specified range. Your program is to prompt the user to select a Unit by entering (c,f or k), once selected your program will prompt for the low and high temperature of that unit (temperature range). We will assume that the input of c,f or k is case sensitive and lower case only, any other input will cause the prompt to reappear (loop on bad input). The temperature range will always be input as valid integer numbers, and will always be low first, high second, thus you can assume no user error.

The output will be a well formatted table with headings, so that the input unit will be in the **first** column followed by the other 2 units (order of these is not important). The input unit will list in increments of 1 degree. We will also assume that all values in the table are integer values.

To convert Celsius to Fahrenheit, use the following: $F = C*9/5 +32$. To convert C to K: $K=C+273$.

For this assignment you are free to use procedures. You may use the "skinny way" of calling and returning from a procedure since they are fairly small and straight forward. The benefit will be to ensure that you organize the conversions in such a way to allow for easy calling and calculation. Be sure to implement the initial unit menu as a case statement with a default. The range calculation (rows of the table) will need a looping structure.

Be sure to properly document your code by adding comments as described in lab. Comments should add understanding to the code and not just repeat the assembly instruction. Marks are deducted for poorly documented code.

## Submission

This submission will be submitted electronically as a MIPS assembly file.

The TA will be running your program to ensure it is fully functional. Make the marker happy!!!

For the electronic submission, use Sakai, an assignment 3 submission will be available.

The End