Lab # 10

December 01, 2016

Task 1: Implement the following integer functions:

a) Function `celsius` returns the Celsius equivalent of a Fahrenheit temperature.

b) Function `fahrenheit` returns the Fahrenheit equivalent of a Celsius temperature.

c) Use these functions to write a program that prints charts showing the Fahrenheit equivalents of all Celsius temperatures from 0 to 100 degrees, and the Celsius equivalents of all Fahrenheit temperatures from 32 to 212 degrees. Print the outputs in a tabular format that minimizes the number of lines of output while remaining readable.

(5 marks)

Task 2: Write a C program that plays the game of "guess the number" as follows: Your program chooses the number to be guessed by selecting an integer at random in the range 1 to 1000. The program then types: **(5 marks)**

```
I have a number between 1 and 1000.
Can you guess my number?
Please type your first guess.
```

The player then types a first guess. The program responds with one of the following:

```
1. Excellent! You guessed the number!
   Would you like to play again (y or n)?

2. Too low. Try again.

3. Too high. Try again.
```

Grading and LMS Submission

- Make sure that the lab engineer has graded your programs until 5 pm.
- You've uploaded the C source files in Zip format over LMS until 5:30 pm.