CS 2433 C/C++ Programming
Programming assignment 1
5 points
Due date and time: 11:59 PM, August 25, 2016

Objective: Familiarize with (assignment, **if**) statements, I/O procedures **printf** and **scanf**, header file, and use of the 'gcc' command. (NOTE: Use of the 'gcc' compiler is mandatory.)

Problem: Design and implement a C program (named 'p1.c') that reads a positive integer (***n***) from '**stdin**' (keyboard) and computes and prints the following information on '**stdout**' (terminal screen):

1) "[***n***] is odd." if the entered number is odd, or "[the number] is even." if it is even, either followed by a new-line.
2) "[***n***] is divisible by 11." if ***n*** mod 11 equals 0, else "[***n***] is odd modulo 11." if ***n*** mod 11 is odd, or "[***n***] is even modulo 11" if ***n*** mod 11 is even.

If the integer is negative or zero, or the input otherwise invalid, a message should be printed out stating that the entered input is invalid, that the program requires a positive integer input, then a new-line, and no further computation performed.

Requirements:
1) The program must be well documented. Documentation must include your name, course, semester, etc., as described in the program 0 assignment. Also, your documentation must include build instructions showing any compilation parameters used. (penalty 1pt)
2) Read an integer using the **scanf** function (penalty 2 point).
3) If the input value is negative, zero or otherwise invalid, the message described above must be displayed. (penalty 1pt)
4) Your programs must compile and run correctly on the department's csx.cs.okstate.edu server to get any credit. (penalty 5 points)
5) Submit the solutions using the "handin" command. Example submission command is "handin cs2433 program1 p1.c". The 'program1' specifies the folder to which you are submitting the file 'p1.c'.

In addition to the textbook (Savitch: Chapter 2, Flow of Control) and the Zybooks site (sections 2 and 3), the following Web sites may be of use to you as references regarding C language functions.

http://www.cplusplus.com/reference/

http://www.cprogrammingexpert.com/C/Tutorial/