

Homework #2

Course: COP 3223C

Semester: Fall 2016

Due Date: September 23, 2016

Credit Value: 5% of final grade

Simple Conditionals, Loops and User-defined functions

Program Specification: Write a program that requests integer numbers from the user repetitively through the keyboard (using `printf` and `scanf`) until the user enters 0 when she/he wants to quit. Test each entry for whether the number entered is even or odd. Create two variables that accumulate the numbers entered, one for the even numbers and the other for the odd numbers. The program should also ask the name of the user and save it to a string variable. Upon completion of the data entry process (when the user enters 0), the program prints out the name of the user, the number and the total of the even numbers entered, and the number and the total of the odd numbers entered. Use at least one user-defined functions besides `main()`. There is no need to save any of the individual values during the program execution - only their cumulative totals and the number of even and odd numbers (separately!) entered. The output should be as follows:

```
<user name entered>, the numbers you entered are broken down as follows:  
You entered <aaa> even numbers with a total value of <bbb>.  
You also entered <ccc> odd numbers with a total value of <ddd>.
```

Where the labels between `< >` are the names of the variables whose values will be printed in its place.

There are several requirements (“**musts**”) in this assignment:

1. Your program **must** make use of at least one conditional structure (doesn't matter which one).
2. Your program **must** make use of at least one loop structure (doesn't matter which one).
3. Your program **must** also use have a user-defined function besides `main()`.
4. Your program **must** use `scanf()` to obtain the user's integer entries.
5. Your program must use `printf()` to print out the results to the screen.
6. Lastly (and obviously!), your program **must** be written in C and **must** compile and execute correctly from Code::Blocks

Submission instructions: Same as for HW #1: Submit your program source code as a .c file through the Webcourses homework submission page. Please name the file as HW2 - <first initial> <last name> and put your full name as the second comment line.