

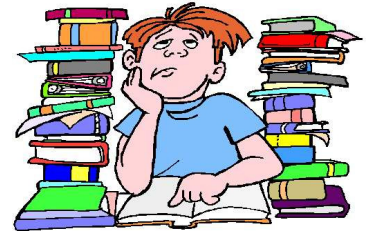
Homework 03

Due Date: Monday 03 February 2014 11:59 PM MST

Note: If you submit after the due date (but before the hard deadline), your submission score will be penalized by 20%.

Hard Deadline: Wednesday 05 February 2014 11:59 PM MST

Note: If you submit any time after the hard deadline, you will not receive credit.



Problem 01 (15 points)

Write a function that, when you call it, displays a message telling how many times it has been called: “I have been called 3 times”, for instance. Write a main() program that calls this function at least 10 times. Try implementing this function in two different ways. First, use a global variable to store the count. Second, use a local static variable. Which is more appropriate? Why can't you use a local variable?

Problem 02 (15 points)

Write a complete C++ program with the two alternate functions specified below, each of which simply triples the variable count defined in main. In main function, test the two functions by asking the user to input an integer value, save it to a variable, then call the two functions, and display the variable before and after the function calls. Then compare and contrast the two approaches. These two functions are

- a) function tripleByValue that passes a copy of count by value, triples the copy and returns the new value and
- b) function tripleByReference that passes count by reference via a reference parameter and triples the original value of count through its alias (i.e., the reference parameter).