CS 162
Programming Lab 3

For this lab, you will write a simple recursive function. The test program and header file are provided for you.

isPalendrome

Implement a function isPalindrome which takes a string as an argument and returns true if the string reads the same forward and backwards and false otherwise. For example, "racecar" and "noon" are palindromes, but "banana" is not. Your function should be recursive (i.e. it should call itself and have a base case).

Programming Suggestions

Strings have several features that will help with this lab.

First, you can get the length of a string using the method myStr.length:

    string myString = "horse";

    long count = myString.length();

    count == 5

Next, you can reference an individual character in a string using the same subscript notation as with arrays:

    string myStr = "apple";

    myStr[3] == 'l'

Finally, you can use the substr method to get a substring of a string (first parameter is where to start, second is how many characters to include):

    string myStr = "Mary had a little lamb";

    string name = myStr.substr(0, 4);

    name == "Mary"

Testing your program

There is a test program provided in Moodle along with a recurse.h and a starting recurse.cpp. You are to write your functions in recurse.cpp and test them with the test program.