

## CS 12 - Lab 5

### Strings and String Functions

In this lab you will use strings and the string functions. Be sure to include all necessary information at the top of the program and use good commenting and style throughout your program.

You will continue to learn the Linux operating system during this lab. For the rest of the quarter you must make sure that your programs compile using g++.

You must use the string functions wherever possible to receive full credit.

Write a short function that creates a *double* of a specified string. A string *double* is defined to be the string immediately followed by the string again. Your function should take the two string parameters, the source string and the destination string. The double of the source string should be stored into the destination string. You may assume that the destination string has enough room to hold the double of the string. Your function should also return the destination string. Your function should not have any output. Examples of string doubles are shown below:

```
str = 'Bye'
strdouble = 'ByeBye'

str = 'Rah'
strdouble = 'RahRah'

str = 'Did you hear an echo?'
strdouble = 'Did you hear an echo?Did you hear an echo?'
```

Now write a short main program that allows the user to input a string, calls your string double function, and prints the string and its double to the screen. After prompting the user for the string, your program should create enough space for the destination string using dynamic allocation.