**Department of Computing Sciences**

**SUNY Brockport**

**CSC 219 (Programming in C)**

**Lab Exercise 5**

This lab uses arrays and pointers to manipulate strings in C.

In this lab you will implement 4 string functions, two using array notation and two using pointers. The functions must have the signatures given below. **You may not use any C library string functions.** The functions are:

1. int my\_strlen (char s []) – This function returns the number of characters in a string. You should use array notation for this function.
2. int my\_strcpy (char s [], char t []) – This function overwrites string s by a copy of the characters in string t. The copy should succeed only if the length of s is greater than or equal to the length of t. If the copy succeeds, the function returns 1. If the copy cannot be done, the function should return -1. You should use array notation for this function.
3. char \* my\_strcat (char s [], char t []) – this function dynamically allocates enough memory to hold a new string which will be the concatenation of string s followed by string t. The new string is returned. Strings s and t are not changed. Use pointers for this function.
4. void my\_strreverse (char s []) – this function overwrites the contents of string s with the reverse of string s. Use pointers to do the reversing.

Write a tester function (main) to test all of the above functions. Submit code and sample output.