CS 2213 Advanced Programming Recitation - Exercise

Strings – pointer arithmetic

Using **pointer arithmetic**, re-write the **string** functions discussed in class. Specifically, implement the following functions.

- a function that counts the number of characters in a string S1.
- a function that reverses the characters in a string S1.
- a function that compares 2 strings S1 and S2 using lexicographic order, returns 0 if they are the same, -1 if S1 comes before S2, or 1 if S1 comes after S2
- a function that searches string S1 in S2 and returns 1 if S1 is in S2; otherwise returns 0.

Also write a driver/client program which declares S1 and S2 as character pointers and accepts input for them using GetLine() function in the textbook's simpio.h library.

char *S1, *S2;
S1 = GetLine();
S2 = GetLine();

Then call the above functions and print the appropriate results after each function…

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You must submit your work using Blackboard Learn and respect the following rules:

1) All assignments must be submitted as either a zip or tar archive file unless it is a single pdf file.
2) Assignments must include all source code.
3) Assignments must include an output.txt file which demonstrates the final test output run by the student.
4) If your assignment does not run/compile, the output.txt file should include an explanation of what was accomplished, what the error message was that prevented the student from finishing the assignment and what the student BELIEVES to be the underlying cause of the error.

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