

Lab 5: String Manipulation in C

Instructions:

In this lab, you will work with strings in C, using common string manipulation functions. You will perform operations such as finding the length of a string, comparing two strings alphabetically, and concatenating two strings. Additionally, you will manually implement a function to reverse a string. **File should be named (Lab5.c)**

Goals:

By the end of this lab, you should be able to:

1. Declare and manipulate strings in C to perform common operations.
2. Use essential string functions like **strlen()**, **strcmp()**, and **strcat()** effectively.
3. Implement custom string functions to reinforce your understanding of string handling and indexing in C.

Sample Output:

```
Enter the first string: Hello
Enter the second string: World
Length of first string: 5
Length of second string: 5
Hello comes before World alphabetically.
Concatenated string: HelloWorld
Reversed first string: Reversed string: olleH
Reversed second string: Reversed string: dlrow
```

Grading Criteria:

1. Program executes and achieves desired output: 100 points
 - a. The program should compile and run without errors. If it doesn't compile, it will receive 0 points.
2. Correct function implementation: -10 points each
 - a. Deduct 10 points for incorrect or missing implementation of any required function (string_length, compare_strings, concatenate_strings, string_reverse).
3. Formatting and Readability: -5 points
 - a. Deduct points for poor code formatting, inconsistent indentation, or missing comments.