

## Lab 8 (Practice)

### Pointer (2)

#### Question-1.

Write a program including a function called **replace** (char\* str, char\* space). The return type is also char pointer. The function is used to replace all the spaces in the given input string str by the given input string space. Use dynamic allocation to arrange space for the return char\*.

Note:

1. You can assume that the input strings str and space are not null string.
2. Spaces may exist at the beginning or the end of the string.

#### Expected Outcomes:

<b>Example 1</b>
Enter the input string: <u>we are happy</u> Enter the input space str: <u>% 0</u> The modified string is: we% 0are% 0happy
<b>Example 2</b>
Enter the input string: <u>what</u> Enter the input space str: <u>123</u> The modified string is: what
<b>Example 3</b>
Enter the input string: <u>count the number of char</u> Enter the input space str: <u>&amp;&amp;&amp;</u> The modified string is: &&&count&&&the&&&number&&&of&&&char&&&

Question-2.

Write a program which has several string inputs. Use `char**` pointer to store the string inputs, and put this pointer and the input number as the input of the function void **sortStr**(`char** a, num`). In the function, you need to sort the strings from smallest to largest. The way to compare two strings is same as the way in lab10. You may consider how to initialize the `char**` pointer and how to display the sorted result.

Expected Outcomes:

Example 1
Enter the number of strings: <u>4</u> Enter the input strings: <u>abc bab daar daa</u> Sorted result: abc bab daa daar
Example 2
Enter the number of strings: <u>4</u> Enter the input strings: <u>bc hello welcome hollo</u> Sorted result: bc hello hollo welcome
Example 3
Enter the number of strings: <u>5</u> Enter the input strings: <u>when what where who whom</u> Sorted result: what when where who whom