Lab 11 Pointer (1)

Question-2.

Design a function to called "stringCompare" to implement the comparison among strings. The rules for string comparison between string s1 and s2 are the followings:

- 1. Compare s1 and s2 bit by bit from the beginning of both strings.
- 2. If the i-1 bits of the two strings are identical, then:
 - a. If ith bit of s1 is larger than s2, s1 is larger than s2 regardless the remaining part;
 - b. If ith bit of s1 is smaller than s2, s1 is smaller than s2 regardless the remaining part;
 - c. If ith bit of s1 is equal to s2, continue the operation on i+1th bit until one string ends;
- 3. When one string ends, and there is still no result for bitwise comparison, the string with longer length is larger. If the lengths of the two string are identical, the two strings are equal.

The function returns 1 if s1 is larger than s2, -1 if s1 is smaller than s2 and 0 if they are identical. Use the function you designed to compare the two input strings.

Expected Outcomes

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Example 1

Enter the first strings:
qwert
Enter the second string:
qwer
The first string is larger.

Example 2

Enter the first strings:
Qwer
Enter the second string:
awer
The second string is larger.

Example 3

Enter the first strings:
Qwer
Enter the second string:
Qwer
Enter the second string:
Qwer
Enter the second string:
Qwer
The two strings are equal.
```