Lab 7 (Practice)
Pointer (1)

Question-1.

Design a function to count how many words are there in a string. Word is separated by space. You need to design a function findWord(char* arr, int* i, int* count) to implement the operation. In main function, you should have a for loop to check through the string.

a. When current char is a space, skip;
b. When current char is some character, call function findWord. The function will check the current entire word, and increment the index of for loop in main function as well as count using call by pointer.

Output the number of characters in each words, as well as the total number of word.

Note:
This question is used to practice call by pointer. It can be easily implemented just in main function. Please do not do so, and solve the question with the function described above.

Expected Outcomes

Example

```
Enter the content of the string:
I am a CS student
Word 1 has 1 characters.
Word 2 has 2 characters.
Word 3 has 1 characters.
Word 4 has 2 characters.
Word 5 has 7 characters.
The number of words in the string is: 5
```

Question-2.

The suffix of a string is important in many algorithm to solve string problems. A string with length n may have n suffixes.
For example: we have a string bcdfg. It has 5 suffixes, which are bcdfg, cdfg, dfg, fg, g.
Design a program to find and sort all the suffixes of the input string in ascending order and output them.

Expected Outcomes

Example 1:

```
Enter the string:
suffix
The suffixes of the string are:
ffix
fix
ix
suffix
uffix
x
```