

## #Problem 1: Letter Conversion - Small to Capital

Description: You will be given a string S containing only small letters from the English alphabet. You need to write a C program to convert the string containing capital letters.

Limits:

$1 \leq |S| \leq 100$

S will contain only small letters and will not have space.

Test Cases:

Input	Output
rizvee	RIZVEE
muntasir	MUNTASIR
dipto	DIPTO
parker	PARKER

## #Problem 2: Palindrome Checking

Description: You will be given a string S. You need to write a C program to determine if the given string is a palindrome or not. A string is palindrome if it reads the same whether we read it from the start or from the end.

If the given string is found as a palindromic string, print "YES". Otherwise, print "NO". Please carefully read the input-output section for more clarification.

Limits:

$1 \leq |S| \leq 100$

S may contain any characters but not space.

Test Cases:

Input	Output
abba	YES
012210	YES
RIZEZR	NO
MOOM	YES

### #Problem 3: Character Count

Description: You will be given a string S containing only small letters from the English alphabet. You need to write a C program to calculate the frequency/number of occurrences of each small letter found in S belonging to the English Alphabet. During printing, maintain the ascending order of the letters. Please see the input-output section for more clarification.

Limits:

$1 \leq |S| \leq 100$

Test Cases:

Input	Output
abdbccc	a:1 b:2 c:3 d:1 e:0 f:0 g:0 h:0 i:0 j:0 k:0 l:0 m:0 n:0 o:0 p:0 q:0 r:0 s:0 t:0 u:0 v:0 w:0 x:0 y:0 z:0
wazzzza	a:2 b:0 c:0 d:0 e:0 f:0 g:0 h:0

	i:0 j:0 k:0 l:0 m:0 n:0 o:0 p:0 q:0 r:0 s:0 t:0 u:0 v:0 w:1 x:0 y:0 z:5
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Variations/ Food for thought

- You will print only those letters frequency that are found in the input
- During printing the letters, you will maintain their occurrence forder. String = caca, so first you will print 'c' s frequency then the frequency of 'a'.

## #Problem 4: Implementing strcmp function

Description:

In the first line, you will be given a string S1. In the following line, you will be given another string S2. You need to write a C program that will determine the lexicographic order between S1 and S2. You can not use the built in function (strcmp) here. Please see the input-output section for more clarification.

Limits:

$1 \leq |S| \leq 100$

Test Cases:

Input	Output
aaab baaa	aaab < baaa
aaab baaa	baaa > aaab
ababc Ababc	ababc > Ababc

ababc ababc	ababc = ababc
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### #Problem 5: string\_contain function

Description: In the first line, you will be given a string T. In the following line, you will be given another string P. You need to write a C program, to determine if P is contained in T or not. Please see the input-output section for more clarification.

P is contained in T means, there is a substring of T which is P.

Test Cases:

Input	Output
BaaaCaaaD aaa	YES
BaaCaaD aaa	NO
amidiptobolchi dipto	YES
endoftheword end	YES