

January 2025 CSE 102

Online on Strings & Function [C1+C2]

Duration: 60 minutes

Take a character, **ch** and an integer, **n** as input. Also, take a string (the range of the string length is [1, 1000]) as input. Your **main task** is to determine the number of substrings that contain **ch** at least **n** times.

For this task, implement a function with prototype **int CountChar(char str[], char c)** that will return the number of occurrences of **c** inside **str**.

Write another function named **int findChar(char ch, int n, char str[])** for the main task. This function will take **ch**, **n**, and the input string, **str** and return the result using the **CountChar** function. In your main function, call the **findChar** function, and after getting the result print it.

You can only use the **strlen**, **strcmp**, **strcat**, and **strcpy** functions from the **string.h** library.

Sample I/O:

Input	Output
a 1 abc	3
a 2 abcd	0
b 2 abbcbba	17

Explanation: Consider the first test case. Substrings of “abc” are “a”, “b”, “c”, “ab”, “bc”, “abc”. Among these substrings “a”, “ab”, and “abc” contain ‘a’ at least 1 time. So, output is 3.