

## Palindromic String With A Variation

Given a string, determine if it is a palindrome, considering only alphanumeric characters and ignoring cases.

**Example:**

"A man, a plan, a canal: Panama" is a palindrome.

"race a car" is not a palindrome.

Return 0 / 1 ( 0 for false, 1 for true ) for this problem

## Check If Two Strings Are Anagrams

Given two strings **a** and **b** consisting of lowercase characters. The task is to check whether two given strings are an anagram of each other or not. An anagram of a string is another string that contains the same characters, only the order of characters can be different. For example, "act" and "tac" are an anagram of each other.

### Example 1:

**Input:**

a = geeksforgeeks, b = forgeeksgeeks

**Output:** YES

**Explanation:** Both the string have same characters with same frequency. So, both are anagrams.

### Example 2:

**Input:**

a = allergy, b = allergic

**Output:** NO

**Explanation:** Characters in both the strings are not same, so they are not anagrams.

## Reverse Words In A String

Given a String S, reverse the string without reversing its individual words. Words are separated by dots.

### Example 1:

**Input:**

S = i.like.this.program.very.much

**Output:** much.very.program.this.like.i

**Explanation:** After reversing the whole string(not individual words), the input string becomes

much.very.program.this.like.i

### Example 2:

**Input:**

S = pqr.mno

**Output:** mno.pqr

**Explanation:** After reversing the whole string , the input string becomes

mno.pqr

## Lexicographical Rank Of A String

Given a string, find the rank of the string amongst its permutations sorted lexicographically.

Assume that no characters are repeated.

**Example :**

Input : 'acb'

Output : 2

The order permutations with letters 'a', 'c', and 'b' :

abc

acb

bac

bca

cab

cba

The answer might not fit in an integer, so return your answer % 1000003