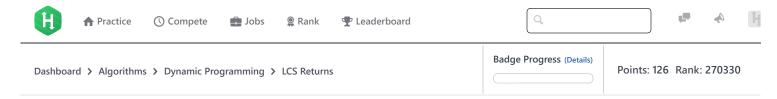
16/11/2017 HackerRank







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Given two strings, **a** and **b**, find and print the total number of ways to insert a character at any position in string **a** such that the length of the Longest Common Subsequence of characters in the two strings increases by one.

Input Format

The first line contains a single string denoting a. The second line contains a single string denoting b.

Constraints

Scoring

- $1 \le |a|, |b| \le 5000$
- Strings a and b are alphanumeric (i.e., consisting of arabic digits and/or upper and lower case English letters).
- The new character being inserted must also be alphanumeric (i.e., a digit or upper/lower case English letter).

Subtask

• $1 \leq |a|, |b| \leq 1000$ for 66.67% of the maximum score.

Output Format

Print a single integer denoting the total number of ways to insert a character into string a in such a way that the length of the longest common subsequence of a and b increases by one.

Sample Input

aa baaa

Sample Output

4

Explanation

The longest common subsequence shared by a = "aa" and b = "baaa" is aa, which has a length of 2. There are two ways that the length of the longest common subsequence can be increased to 3 by adding a single character to a:

- 1. There are **3** different positions in string **a** where we could insert an additional a to create longest common subsequence aaa (i.e., at the beginning, middle, and end of the string).
- 2. We can insert a b at the beginning of the string for a new longest common subsequence of baa.

As we have $\mathbf{3} + \mathbf{1} = \mathbf{4}$ ways to insert an alphanumeric character into \mathbf{a} and increase the length of the longest common subsequence by one, we print $\mathbf{4}$ on a new line.

16/11/2017 HackerRank

f y in Submissions:451 Max Score:50 Difficulty: Medium Rate This Challenge: ☆☆☆☆☆☆

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Current Buffer (saved locally, editable) & 🔈
                                                                                           Java 7
 1 ▼ import java.io.*;
 2 import java.util.*;
 3 import java.text.*;
 4 import java.math.*;
 5 import java.util.regex.*;
 6
 7 ▼ public class Solution {
        public static void main(String args[] ) throws Exception {
 8 ₹
 9 ₹
            /* Enter your code here. Read input from STDIN. Print output to STDOUT */
10
11
    }
12
                                                                                                                    Line: 1 Col: 1
                                                                                                                     Submit Code
                      Test against custom input
                                                                                                        Run Code
1 Upload Code as File
```

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