

# 1743. Count Substrings That Differ by One Character

## Difficulty : Medium

<https://leetcode.com/problems/count-substrings-that-differ-by-one-character>

Given two strings  $s$  and  $t$ , find the number of ways you can choose a non-empty substring of  $s$  and replace a **single character** by a different character such that the resulting substring is a substring of  $t$ . In other words, find the number of substrings in  $s$  that differ from some substring in  $t$  by **exactly** one character.

For example, the underlined substrings in "computer" and "computation" only differ by the 'e'/'a', so this is a valid way.

Return *the number of substrings that satisfy the condition above*.

A **substring** is a contiguous sequence of characters within a string.

### Example 1:

**Input:**  $s = \text{"aba"}, t = \text{"baba"}$

**Output:** 6

**Explanation:** The following are the pairs of substrings from  $s$  and  $t$  that differ by exactly 1 character:

("aba", "baba")

("aba", "baba")

("aba", "baba")

("aba", "baba")

("aba", "baba")

("aba", "baba")

The underlined portions are the substrings that are chosen from  $s$  and  $t$ .

### Example 2:

**Input:**  $s = \text{"ab"}, t = \text{"bb"}$

**Output:** 3

**Explanation:** The following are the pairs of substrings from  $s$  and  $t$  that differ by 1 character:

("ab", "bb")

("ab", "bbb")

("ab", "bb")

The underlined portions are the substrings that are chosen from  $s$  and  $t$ .

### Constraints:

- $1 \leq s.length, t.length \leq 100$
- $s$  and  $t$  consist of lowercase English letters only.