

Online (Divide and Conquer)

Time: 30 minutes

Given a string of characters, count the number of substrings of minimum length 2 that are inverted. An inverted substring is a substring in which the characters are in reverse order. For example, for the input string “abdcba”, the inverted substrings are “dcba”, “dcb”, “cba”, “dc”, “cb”, “ba”. So the output will be the number of such substrings, 6.

You must use a **divide and conquer** approach to solve this problem. The input will contain the string, and as output, return only the number of inverted substrings (length of substring > 1) in the first line.

Intended time complexity: $O(n \log n)$

Sample Input:

abdcba

Sample output:

6