

2472. Maximum Number of Non-overlapping Palindrome Substrings

Description

You are given a string `s` and a **positive** integer `k`.

Select a set of **non-overlapping** substrings from the string `s` that satisfy the following conditions:

- The **length** of each substring is **at least** `k`.
- Each substring is a **palindrome**.

Return *the maximum number of substrings in an optimal selection*.

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

Example 1:

Input: `s = "abaccdbbd", k = 3`

Output: `2`

Explanation: We can select the substrings underlined in `s = " aba cc dbbd "`. Both "aba" and "dbbd" are palindromes and have a length of at least `k = 3`.

It can be shown that we cannot find a selection with more than two valid substrings.

Example 2:

Input: `s = "adbcda", k = 2`

Output: `0`

Explanation: There is no palindrome substring of length at least 2 in the string.

Constraints:

- `1 <= k <= s.length <= 2000`
- `s` consists of lowercase English letters.

