2559. Maximum Number of Non-overlapping Palindrome Substrings

Difficulty: Hard

https://leetcode.com/problems/maximum-number-of-non-overlapping-palindrome-substrings

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.