2955. Number of Same-End Substrings

Description

You are given a **0-indexed** string `s`, and a 2D array of integers `queries`, where `queries[i] = [l_i, r_i]` indicates a substring of `s` starting from the index `l_i` and ending at the index `r_i` (both **inclusive**), i.e. `s[l_i..r_i]`.

Return *an array* `ans` *where* `ans[i]` *is the number of* ***same-end*** *substrings of* `queries[i]`.

A **0-indexed** string `t` of length `n` is called **same-end** if it has the same character at both of its ends, i.e., `t[0] == t[n - 1]`.

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

Example 1:

```
Input: s = "abcaab", queries = [[0,0],[1,4],[2,5],[0,5]]
Output: [1,5,5,10]
Explanation: Here is the same-end substrings of each query:
1st query: s[0..0] is "a" which has 1 same-end substring: "a".
2nd query: s[1..4] is "bcaa" which has 5 same-end substrings: "b caa", "bc aa", "bca a", "bc aa".
3rd query: s[2..5] is "caab" which has 5 same-end substrings: "c aab", "ca ab", "caa b", "c aa b".
4th query: s[0..5] is "abcaab" which has 10 same-end substrings: "a bcaab", "ab caab", "abc aab", "abca ab", "abcaa b", "abc aa b",
"abca ab", "abcaa b", "a bcaab".
```

Example 2:

```
Input: s = "abcd", queries = [[0,3]]
Output: [4]
Explanation: The only query is s[0..3] which is "abcd". It has 4 same-end substrings: "a bcd", "ab cd", "abc d".
```

Constraints:

- `2 <= s.length <= 3 * 10^4`
- `s` consists only of lowercase English letters.
- `1 <= queries.length <= 3 * 10^4`
- `queries[i] = [l_i, r_i]`
- `0 <= l_i <= r_i < s.length`