# 2055. Plates Between Candles

## Description

There is a long table with a line of plates and candles arranged on top of it. You are given a **0-indexed** string s consisting of characters '\*' and 'I' only, where a '\*' represents a **plate** and a 'I' represents a **candle**.

You are also given a **0-indexed** 2D integer array queries where queries[i] = [left; right;] denotes the **substring** s[left; ...right;] (**inclusive**). For each query, you need to find the **number** of plates **between candles** that are **in the substring**. A plate is considered **between candles** if there is at least one candle to its left **and** at least one candle to its right **in the substring**.

• For example, s = "||\*\*||\*\*|\*", and a query [3, 8] denotes the substring ||\*\*|| \*\* ||\*\*|. The number of plates between candles in this substring is 2, as each of the two plates has at least one candle in the substring to its left and right.

Return an integer array answer where answer[i] is the answer to the i th query.

#### **Example 1:**

```
Input: s = "**|**|***|", queries = [[2,5],[5,9]]
Output: [2,3]
Explanation:
- queries[0] has two plates between candles.
- queries[1] has three plates between candles.
```

#### Example 2:

```
Input: s = "***|**|**|**|**|**|, queries = [[1,17],[4,5],[14,17],[5,11],[15,16]]
Output: [9,0,0,0,0]
Explanation:
- queries[0] has nine plates between candles.
- The other queries have zero plates between candles.
```

### **Constraints:**

- 3 <= s.length <= 10 <sup>5</sup>
- s consists of '\*' and 'I' characters.
- 1 <= queries.length <= 10<sup>5</sup>
- queries[i].length == 2
- 0 <= left i <= right i < s.length