# 821. Shortest Distance to a Character

# Description

Given a string s and a character c that occurs in s, return an array of integers answer where answer.length == s.length and answer[i] is the distance from index i to the closest occurrence of character c in s.

The distance between two indices i and j is abs(i - j), where abs is the absolute value function.

#### Example 1:

```
Input: s = "loveleetcode", c = "e"
Output: [3,2,1,0,1,0,0,1,2,2,1,0]
Explanation: The character 'e' appears at indices 3, 5, 6, and 11 (0-indexed).
The closest occurrence of 'e' for index 0 is at index 3, so the distance is abs(0 - 3) = 3.
The closest occurrence of 'e' for index 1 is at index 3, so the distance is abs(1 - 3) = 2.
For index 4, there is a tie between the 'e' at index 3 and the 'e' at index 5, but the distance is still the same: abs(4 - 3) == abs(4 - 5) = 1.
The closest occurrence of 'e' for index 8 is at index 6, so the distance is abs(8 - 6) = 2.
```

### **Example 2:**

```
Input: s = "aaab", c = "b"
Output: [3,2,1,0]
```

### **Constraints:**

- 1 <= s.length <= 10 <sup>4</sup>
- s[i] and c are lowercase English letters.
- It is guaranteed that c occurs at least once in s.