

1165. Single-Row Keyboard Premium

Easy Topics Companies Hint

There is a special keyboard with **all keys in a single row**.

Given a string `keyboard` of length `26` indicating the layout of the keyboard (indexed from `0` to `25`). Initially, your finger is at index `0`. To type a character, you have to move your finger to the index of the desired character. The time taken to move your finger from index `i` to index `j` is `|i - j|`.

You want to type a string `word`. Write a function to calculate how much time it takes to type it with one finger.

Example 1:

Input: `keyboard = "abcdefghijklmnopqrstuvwxyz", word = "cba"`
Output: `4`
Explanation: The index moves from `0` to `2` to write 'c' then to `1` to write 'b' then to `0` again to write 'a'.
Total time = `2 + 1 + 1 = 4`.

Example 2:

Input: `keyboard = "pqrstuvwxyzabcdefghijklmnopqrstuvwxyz", word = "leetcode"`
Output: `73`

Constraints:

- `keyboard.length == 26`
- `keyboard` contains each English lowercase letter exactly once in some order.
- `1 <= word.length <= 104`
- `word[i]` is an English lowercase letter.

Seen this question in a real interview before? 1/5

Yes No

Accepted **88K** | Submissions **100.4K** | Acceptance Rate **87.6%**

Topics

Hash Table String

Companies

0 - 6 months

Google **2**

Hint 1

Can be the problem divided in parts, so solving each part and sum their solutions it should return the answer? Yes, you only need to divide the problem in finger jumps.

Hint 2

In each finger jump you need to move your finger from one character to another, you need to know its index.

Hint 3

Map each character to it's index.

Hint 4

Use a hash table to do that.

Discussion (5)