Description | Editorial | Solutions | Submissions

1165. Single-Row Keyboard

Premium

Solved

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 = "pqrstuvwxyzabcdefghijklmno", word = "leetcode"
Output: 73
```

Constraints:

- `keyboard.length == 26`
- `keyboard` contains each English lowercase letter exactly once in some order.
- `1 <= word.length <= 10^4`
- `word[i]` is an English lowercase letter.

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

Yes | No

Accepted 84.9K | Submissions 97K | Acceptance Rate 87.5%

Topics

Companies

Hint 1

Hint 2

Hint 3

Hint 4

Discussion (5)

523 | 5

Code

Python3 • Auto

```python
class Solution:
    def calculateTime(self, keyboard: str, word: str) -> int:

        dictx = {}

        for i in range(0, len(keyboard)):
            dictx[keyboard[i]] = i

        dis = dictx[word[0]]

        for i in range(0, len(word)-1):
            dis += abs(dictx[word[i]] - dictx[word[i+1]])

        return dis
```

Saved

Ln 7, Col 35

Testcase | Test Result

Accepted Runtime: 62 ms

Case 1 | Case 2

Input

keyboard =
"abcdefghijklmnopqrstuvwxyz"

word =
"cba"

Output

4

Expected