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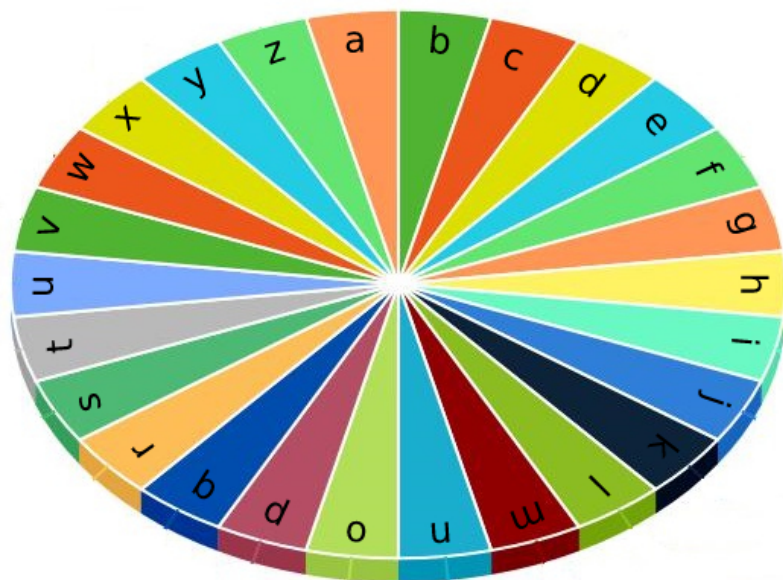
5834. Minimum Time to Type Word Using Special Typewriter

My Submissions (/contest/biweekly-contest-59/problems/minimum-time-to-type-word-using-special-typewriter/submissions/)

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There is a special typewriter with lowercase English letters `'a'` to `'z'` arranged in a **circle** with a **pointer**. A character can **only** be typed if the pointer is pointing to that character. The pointer is **initially** pointing to the character `'a'` .

User Accepted:	18
User Tried:	30
Total Accepted:	17
Total Submissions:	30
Difficulty:	Easy

Each second, you may perform one of the following operations:

- Move the pointer one character **counterclockwise** or **clockwise**.
- Type the character the pointer is **currently** on.

Given a string `word` , return the **minimum** number of seconds to type out the characters in `word` .

Example 1:

```
Input: word = "abc"
Output: 5
Explanation:
The characters are printed as follows:
- Type the character 'a' in 1 second since the pointer is initially on 'a'.
- Move the pointer clockwise to 'b' in 1 second.
- Type the character 'b' in 1 second.
- Move the pointer clockwise to 'c' in 1 second.
- Type the character 'c' in 1 second.
```

Example 2:

Input: word = "bza"
Output: 7
Explanation:
The characters are printed as follows:
- Move the pointer clockwise to 'b' in 1 second.
- Type the character 'b' in 1 second.
- Move the pointer counterclockwise to 'z' in 2 seconds.
- Type the character 'z' in 1 second.
- Move the pointer clockwise to 'a' in 1 second.
- Type the character 'a' in 1 second.

Example 3:

Input: word = "zjpc"
Output: 34
Explanation:
The characters are printed as follows:
- Move the pointer counterclockwise to 'z' in 1 second.
- Type the character 'z' in 1 second.
- Move the pointer clockwise to 'j' in 10 seconds.
- Type the character 'j' in 1 second.
- Move the pointer clockwise to 'p' in 6 seconds.
- Type the character 'p' in 1 second.
- Move the pointer counterclockwise to 'c' in 13 seconds.
- Type the character 'c' in 1 second.

Constraints:

- 1 <= word.length <= 100
- word consists of lowercase English letters.

JavaScript ▾

```javascript
const minTimeToType = (s) => {
    let a = [];
    for (let i = 0; i < 26; i++) a.push(String.fromCharCode(i + 97));
    // pr(a)
    let n = s.length;
    let idx = a.indexOf(s[0]);
    let move = Math.min(idx, 26 - idx);
    // r(move);
    for (let i = 1; i < n; i++) {
        let cur = s[i], pre = s[i - 1];
        let curI = a.indexOf(cur), preI = a.indexOf(pre);
        let min = Math.min(curI, preI), max = Math.max(curI, preI);
        let cw = max - min;
        let ccw = (min - 0) + (26 - max);
        move += Math.min(cw, ccw);
        // pr(pre, cur, cw, ccw);
    }
    // pr(move);
    return move + n;
};
```

☐ **Custom Testcase**   (Use Example Testcases)

⏵ Run   ☁ Submit

Submission Result: Accepted (/submissions/detail/541926645/) ❓   More Details ❯ (/submissions/detail/541926645/)

Share your acceptance!