1704. Determine if String Halves Are Alike

Solved

Easy

Topics

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Hint

You are given a string s of even length. Split this string into two halves of equal lengths, and let a be the first half and b be the second half.

Two strings are **alike** if they have the same number of vowels ('a', 'e', 'i', 'o', 'u', 'A', 'E', 'I', 'O', 'U'). Notice that s contains uppercase and lowercase letters.

Return true *if* a *and* b *are* **alike**. Otherwise, return false.

Example 1:

Input: s = "book"
Output: true
Explanation: a = "bo" and b = "ok". a has 1 vowel and b has 1 vowel. Therefore, they are alike.

Example 2:

Input: s = "textbook"
Output: false
Explanation: a = "text" and b = "book". a has 1 vowel whereas b has 2. Therefore, they are not alike. Notice that the vowel o is counted twice.

Constraints:

- 2 <= s.length <= 1000
- s.length is even.
- s consists of **uppercase and lowercase** letters.

```
class Solution {
    String vowels = "aeiouAEIOU";

    public boolean halvesAreAlike(String S) {
        int mid = S.length() / 2, ans = 0;
        for (int i = 0, j = mid; i < mid; i++, j++) {
            if (vowels.indexOf(S.charAt(i)) >= 0) ans++;
            if (vowels.indexOf(S.charAt(j)) >= 0) ans--;
        }
        return ans == 0;
    }
}
```