

2559. Count Vowel Strings in Ranges

Attempted

Medium Topics Companies Hint

You are given a 0-indexed array of strings `words` and a 2D array of integers `queries`.

Each query `queries[i] = [li, ri]` asks us to find the number of strings present in the range `li` to `ri` (both inclusive) of `words` that start and end with a vowel.

Return an array `ans` of size `queries.length`, where `ans[i]` is the answer to the `i`th query.

Note that the vowel letters are 'a', 'e', 'i', 'o', and 'u'.

Example 1:

Input: `words = ["aba","bcb","ece","aa","e"], queries = [[0,2],[1,4],[1,1]]`

Output: `[2,3,0]`

Explanation: The strings starting and ending with a vowel are "aba", "ece", "aa" and "e".

The answer to the query `[0,2]` is 2 (strings "aba" and "ece").

to query `[1,4]` is 3 (strings "ece", "aa", "e").

to query `[1,1]` is 0.

We return `[2,3,0]`.

```
Python3
class Solution:
    def vowelStrings(self, words: List[str], queries: List[List[int]]) -> List[int]:
        VOWEL = {'a', 'e', 'i', 'o', 'u'}
        word = [0] * len(words)
        ans = []

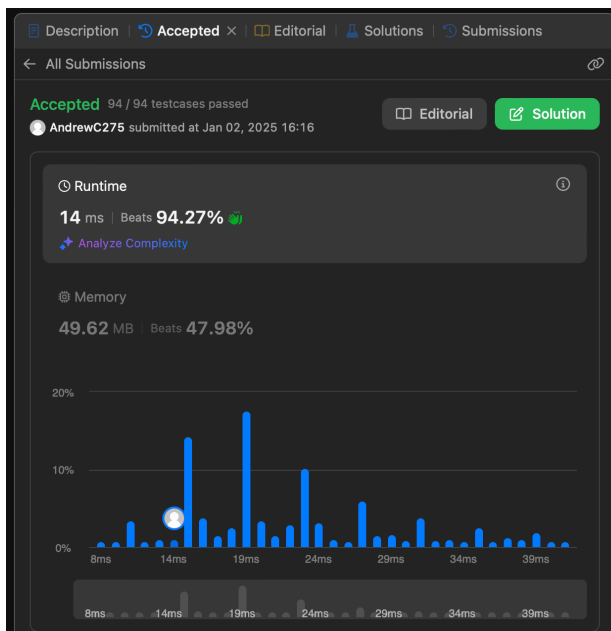
        for i in range(len(words)):
            if words[i][0] in VOWEL and words[i][-1] in VOWEL:
                word[i] = 1

        for q in queries:
            s, e = q[0], q[1]+1
            ssum = sum(word[s: e])
            ans.append(ssum)

        return ans
```

Accepted Runtime: 0 ms

time limit exceeded



```
Python3
class Solution:
    def vowelStrings(self, words: List[str], queries: List[List[int]]) -> List[int]:
        VOWEL = {'a', 'e', 'i', 'o', 'u'}
        word = [0]
        count = 0
        ans = []

        for w in words:
            if w[0] in VOWEL and w[-1] in VOWEL:
                count += 1
            word.append(count)

        print(word)

        for q in queries:
            s, e = q[0], q[1]+1
            ssum = word[e] - word[s]
            ans.append(ssum)

        return ans
```

Saved Ln 16, Col 32

• `sum()` is taking too much time,

use accumulated list to prevent multiple unnecessary calculations.