Problem Link:

<https://leetcode.com/problems/count-vowel-strings-in-ranges/?envType=daily-question&envId=2025-01-02>

Solution:

class Solution {

public:

vector<int> vowelStrings(vector<string>& words, vector<vector<int>>& queries) {

auto isVowel = [](char ch)

{

return ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u';

};

int n = words.size();

vector<int> str(n, 0);

for (int i = 0; i < n; ++i)

{

string word = words[i];

if (isVowel(word[0]) && isVowel(word[word.size() - 1]))

{

str[i] = 1;

}

}

vector<int> sum(n, 0);

sum[0] = str[0];

for (int i = 1; i < n; ++i)

{

sum[i] = sum[i - 1] + str[i];

}

vector<int> ans;

for (const auto& query : queries)

{

int l = query[0], r = query[1];

if (l > 0)

{

ans.push\_back(sum[r] - sum[l - 1]);

}

else

{

ans.push\_back(sum[r]);

}

}

return ans;

}

};