# Sherlock and Anagrams ★

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Two strings are anagrams of each other if the letters of one string can be rearranged to form the other string. Given a string, find the number of pairs of substrings of the string that are anagrams of each other.

#### Example

#### s = mom

The list of all anagrammatic pairs is [m, m], [mo, om] at positions [[0], [2]], [[0, 1], [1, 2]] respectively.

## **Function Description**

Complete the function sherlockAndAnagrams in the editor below.

sherlockAndAnagrams has the following parameter(s):

string s: a string

#### Returns

• int: the number of unordered anagrammatic pairs of substrings in 8

### **Input Format**

The first line contains an integer  $m{q}$ , the number of queries.

Each of the next  $oldsymbol{q}$  lines contains a string  $oldsymbol{s}$  to analyze.

### Constraints

 $1 \le q \le 10$ 

# $2 \leq \text{ length of } s \leq 100$

**s** contains only lowercase letters in the range ascii[a-z].

## Sample Input 0

2 abba abcd

# Sample Output 0

0

## **Explanation 0**

The list of all anagrammatic pairs is [a, a], [ab, ba], [b, b] and [abb, bba] at positions [[0], [3], [[0, 1], [2, 3], [[1], [2]] and [[0, 1, 2], [1, 2, 3]] respectively.

No anagrammatic pairs exist in the second query as no character repeats.

# Sample Input 1

ifailuhkqq kkkk

## Sample Output 1

3

10



```
Explanation 1

For the first query, we have anagram pairs [i, i], [q, q] and [ifa, fai] at positions [[0], [3]], [[8], [9]] and [[0, 1, 2], [1, 2, 3]] respectively.

For the second query:

There are 6 anagrams of the form [k, k] at positions [[0], [1]], [[0], [2]], [[0], [3]], [[1], [2]], [[1], [3]] and [[2], [3]].

There are 3 anagrams of the form [kkk, kkk] at positions [[0, 1, 1, 2], [[0, 1], [2, 3]] and [[1, 2], [2, 3]].

Sample Input 2

1 cdcd

Sample Output 2

5

Explanation 2

There are two anagrammatic pairs of length 1: [c, c] and [d, d].

There are three anagrammatic pairs of length 2: [cd, dc], [cd, cd], [dc, cd] at positions [[0, 1], [1, 2]], [[0, 1], [2, 3]], [[1, 2], [2, 3]] respectively.
```

```
Change Theme
                                                                                       JavaScript (Node.js)

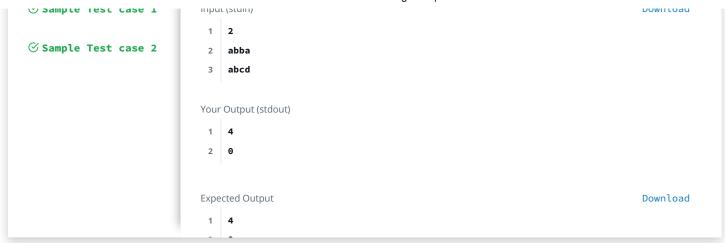
▼ 10 [2] 65
      // Complete the sherlockAndAnagrams function below.
 27
      function sherlockAndAnagrams(s) {
 28
 29
          let count = 0;
 30
 31
          // Size of our sliding window
 32
           for (let i = 1; i < s.length; i++) {
               let found = {};
 33
 34
               // Starting index of our sliding window
 35
 36
               for (let j = 0; j + i <= s.length; j++) {
 37
                   let substr = s.substr(j, i);
                   substr = substr.split('').sort().join('');
 38
 39
                   if (found[substr]) {
 40
                       count += found[substr];
 41
                       found[substr]++;
 42
                   } else {
                       found[substr] = 1;
 43
 44
 45
               }
 46
 47
          return count;
 48
 49
      }
 50
                                                                                                             Line: 49 Col: 2
☐ Test against custom input
                                                                                                             Submit Code
                                                                                              Run Code
```

# **Congratulations!**

You have passed the sample test cases. Click the submit button to run your code against all the test cases.







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