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Badge Progress (Details)

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Sherlock and Anagrams 🔖

by darkshadows

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Given a string S, find the number of "unordered anagrammatic pairs" of substrings. In other words, find the number of *unordered* pairs of substrings of S that are anagrams of each other.

Two strings are **anagrams** of each other if the letters of one string can be rearranged to form the other string.

Input Format

First line contains T, the number of testcases. Each testcase consists of string S in one line.

Constraints

$1 \leq t \leq 10$
$2 \leq length(s) \leq 100$

String s contains only the lowercase letters of the English alphabet.

Output Format

For each testcase, print the required answer in one line.

Sample Input 0

```
2
abba
abcd
```

Sample Output 0

```
4
0
```

Sample Input 1

```
5
ifailuhkqq
hucpoltgty
ovarjsnrbf
pvmupwjjjf
iwwhrlkpek
```

Sample Output 1

```
3
2
2
6
3
```

Explanation

Sample 0

Let's say $S[i, j]$ denotes the substring $S_i, S_{i+1}, \cdots, S_j$.

testcase 1:

For S= abba , anagrammatic pairs are: $\{S[1,1], S[4,4]\}$ (a and a), $\{S[1,2], S[3,4]\}$ (ab and ba), $\{S[2,2], S[3,3]\}$ (b and b) and $\{S[1,3], S[2,4]\}$ (abb and bba).

testcase 2:

No anagrammatic pairs.

Sample 1

Left as an exercise to you.

f 🐦 in

Submissions:14958

Max Score:50

Difficulty: Medium

Rate This Challenge:

☆ ☆ ☆ ☆ ☆

Need Help?

  Anagram

More

Current Buffer (saved locally, editable) ⑂ 🕓   Java 7   ⌄   ⤢ ⚙

```java
import java.io.*;
import java.util.*;
import java.text.*;
import java.math.*;
import java.util.regex.*;

public class Solution {

    static int sherlockAndAnagrams(String s){
        // Complete this function
    }

    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int q = in.nextInt();
        for(int a0 = 0; a0 < q; a0++){
            String s = in.next();
            int result = sherlockAndAnagrams(s);
            System.out.println(result);
        }
    }
}
```

Line: 1 Col: 1

⬆ Upload Code as File   ☐ Test against custom input   Run Code   Submit Code

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