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 s

Input Format

The first line contains an integer q, the number of queries.

Each of the next q lines contains a string s to analyze.

Constraints

$1 \leq q \leq 10$

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

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

Sample Input 0

```
2
abba
abcd
```

Sample Output 0

```
4
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

```
2
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 $[kk, kk]$ at positions $[[0, 1], [1, 2]]$, $[[0, 1], [2, 3]]$ and $[[1, 2], [2, 3]]$.

There is 1 anagram of the form $[kkk, kkk]$ at position $[[0, 1, 2], [1, 2, 3]]$.

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 Language C#

```
using System.CodeDom.Compiler;
using System.Collections.Generic;
using System.Collections;
using System.ComponentModel;
using System.Diagnostics.CodeAnalysis;
using System.Globalization;
using System.IO;
using System.Linq;
using System.Reflection;
using System.Runtime.Serialization;
using System.Text.RegularExpressions;
using System.Text;
using System;

class Result
{

    /*
     * Complete the 'sherlockAndAnagrams' function below.
     *
     * The function is expected to return an INTEGER.
     * The function accepts STRING s as parameter.
     */

    public static int sherlockAndAnagrams(string s)

    {   var result = 0;
```

Line: 76 Col: 1

Upload Code as File

Test against custom input

Run Code

Submit Code