Sherlock and Anagrams

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.

For 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. It must return an integer that represents the number of anagrammatic pairs of substrings in s.

sherlockAndAnagrams has the following parameter(s):

- s: a string .

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

$1 \leq q \leq 10$

$2 \leq |s| \leq 100$

String s contains only lowercase letters $\in$ ascii[a-z].

Output Format

For each query, return the number of unordered anagrammatic pairs.

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.

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Max Score 50
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