Sherlock and Anagrams

HackerRank

Problem Statement

Given a string S, find the number of unordered anagramic pairs of substrings.

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

```
2
abba
abcd
```

Sample Output

```
4
0
```

Explanation

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

testcase 1:
For S=abba, anagramic pairs are: $\{S[1,1], S[4,4]\}$, $\{S[1,2], S[3,4]\}$, $\{S[2,2], S[3,3]\}$ and $\{S[1,3], S[2,4]\}$.

testcase 2:
No anagramic pairs.