

count frequency of digits

Young Dope was bored of finding whether a given number is palindromic or not. So he started another exercise described as follows. Given a number consisting of n digits, find the number of pairs of digits such that $\text{position}[i] = \text{position}[j]$ $1 \leq i, j \leq n$.

Input

First line contains T , the number of test cases < 100
Each test case contains a number with $1 \leq \text{length} \leq 10^5$ and digits only between 0 and 9 both inclusive.

Output

Number of pairs of such digits.

Example

Input:

2
1234
777

Output:

4
9