Find Digits



Problem Statement

You are given a number N. Find the digits in this number that exactly divide N and display their count. For N = 24, there are 2 digits - 2 & 4. Both these digits exactly divide 24. So our answer is 2.

Note

- If the same number is repeated twice at different positions, it should be counted twice, e.g., For *N*=122, 2 divides 122 exactly and occurs at ones' and tens' position. So it should be counted twice. So for this case, our answer is 3.
- ullet Division by 0 is undefined.

Input Format

The first line contains T (number of test cases) followed by T lines (each containing an integer N).

Constraints

 $1 \le T \le 15$ $0 \le N \le 10^{10}$

Output Format

For each test case, display the count of digits in N that exactly divide N in separate line.

Sample Input

2 12 1012

Sample Output

2 3

Explanation

- 1. 2 digits in the number 12 divide the number exactly. Digits at tens' place, 1, divides 12 exactly in 12 parts, and digit at ones' place, 2 divides 12 equally in 6 parts.
- 2. 1 divides 1012 at two places and 2 divides it at one place. Divide by 0 is an undefined behaviour and it will not be counted.

This challenge was a part of Pragyan 12