Find Digits

Problem Statement

You are given an integer N. Find the digits in this number that exactly divide N (division that leaves 0 as remainder) and display their count. For $N = 24$, there are 2 digits (2 & 4). Both of 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 for this case, our answer is 3.
- Division by 0 is undefined.

Input Format

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

Constraints
$1 \leq T \leq 15$
$0 < N < 10^{10}$

Output Format

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

Sample Input

```
2
12
1012
```

Sample Output

```
2
3
```

Explanation

2 digits in the number 12 divide it exactly. The first digit, 1, divides it exactly in twelve parts, and the second digit, 2 divides 12 equally in six parts.

1 divides 1012 exactly (and it occurs twice), and 2 also divides it exactly. Division by 0 is undefined, therefore it will not be counted.

This challenge was part of Pragyan 12.