

# Find Digits

Given an integer,  $N$ , traverse its digits ( $d_1, d_2, \dots, d_n$ ) and determine how many digits evenly divide  $N$  (i.e.: count the number of times  $N$  divided by each digit  $d_i$  has a remainder of  $0$ ). Print the number of evenly divisible digits.

**Note:** Each digit is considered to be unique, so each occurrence of the same evenly divisible digit should be counted (i.e.: for  $N = 111$ , the answer is  $3$ ).

## Input Format

The first line is an integer,  $T$ , indicating the number of test cases.  
The  $T$  subsequent lines each contain an integer,  $N$ .

## Constraints

$$1 \leq T \leq 15$$
$$0 < N < 10^9$$

## Output Format

For every test case, count and print (on a new line) the number of digits in  $N$  that are able to evenly divide  $N$ .

## Sample Input

```
2
12
1012
```

## Sample Output

```
2
3
```

## Explanation

The number **12** is broken into two digits, **1** and **2**. When **12** is divided by either of those digits, the calculation's remainder is **0**; thus, the number of evenly-divisible digits in **12** is **2**.

The number **1012** is broken into four digits, **1**, **0**, **1**, and **2**. **1012** is evenly divisible by its digits **1**, **1**, and **2**, but it is *not* divisible by **0** as **division by zero is undefined**; thus, our count of evenly divisible digits is **3**.