UVa Online Judge

11084 Anagram Division

Given a string s and a positive integer d you have to determine how many permutations of s are divisible by d.

Input

First line of the input contains one integer T the number of test cases. Each of the test cases is one line containing s and d separated by a single space.

Output

For each test case output contains an integer the number of permutations of s that are divisible by d.

Constraints

- s contains only digits.
- The length of s is between 1 and 10 inclusive.
- d is a positive integer between 1 and 10000.

Sample Input

```
3
000 1
1234567890 1
123434 2
```

Sample Output

```
1
3628800
90
```