

10484 Divisibility of Factors

Given two integers N and D , you will have to find how many of the factors of $N!$ (factorial N) are divisible by D .

Input

The input file contains several lines of input. Each line contains two integers N ($0 \leq N \leq 100$) and D ($0 < |D| \leq 2^{31} - 1$). Input is terminated by a line containing two zeroes. This line should not be processed.

Output

For each line of input produce one line of output. This line contains a single integer, which denotes of many different factors of $N!$ are divisible by D .

Sample Input

```
10 2
9 3
0 0
```

Sample Output

```
240
128
```