

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
```