

Your goal in this problem is to divide a certain integer  $n$  by another integer  $m$  until  $n = 1$ , obtaining a sequence of numbers. Lets call  $a[i]$  each number of this sequence, and let's say it has  $k$  numbers (i.e. you must do  $k - 1$  successive divisions to reach  $n = 1$ ). You can only have this sequence if the following restrictions are met:

- $a[1] = n, a[i] = a[i - 1] \div m$ , for all  $1 < i \leq k$
- $a[i]$  is divisible by  $m$  (that is,  $a[i] \bmod m = 0$ ) for all  $1 \leq i < k$
- $a[1] > a[2] > a[3] > \dots > a[k]$

For instance, if  $n = 125$  and  $m = 5$ , you have 125, 25, 5 and 1 (you did 3 divisions:  $125/5, 25/5$  and  $5/5$ ). So,  $k = 4, a[1] = 125, a[2] = 25, a[3] = 5$  and  $a[4] = 1$ .

If  $n = 30$  and  $m = 3$ , you have 30, 10, 3 and 1. But  $a[2] = 10$ , and  $10 \bmod 3 = 1$ , so there is no sequence because it violates restriction 2. When the sequence doesn't exist we think it's not fun and, thus, very boring!

## Input

The input will consist on an arbitrary number of lines. Each line will consist of two non-negative integers  $n, m$  which are both less than 2000000000. You must read until you reach the end of file.

## Output

For each pair  $n, m$  you must print the correspondent sequence  $a$  (as defined above) in a single line, with each adjacent numbers of the sequence separated by a single space. In the case the sequence doesn't exist because it violates some restriction, just print the phrase 'Boring!' in a single line (without the quotes).

## Sample Input

```
125 5
30 3
80 2
81 3
```

## Sample Output

```
125 25 5 1
Boring!
Boring!
81 27 9 3 1
```