
Divisors in order

P39308_en

Examen parcial d'Informàtica, FME (2013-11-04)

Write a program to print in order all the divisors of a given number.

Input

Input consists of several cases, each with a natural number n between 1 and 10^9 .

Output

For every n , print the divisors of n in increasing order.

Observations

- Your program must be “efficient” to be accepted by the judge.
- You are not allowed to use vectors or alike.

Hint

Every divisor smaller than the square root of n has a corresponding divisor greater than the square root of n . It could be useful to make two loops, one for “small” divisors, and another for “large” divisors.

Sample input

```
200
6
1
100
999999998
999999937
```

Sample output

```
divisors of 200: 1 2 4 5 8 10 20 25 40 50 100 200
divisors of 6: 1 2 3 6
divisors of 1: 1
divisors of 100: 1 2 4 5 10 20 25 50 100
divisors of 999999998: 1 2 691 1382 723589 1447178 499999999 999999998
divisors of 999999937: 1 999999937
```

Problem information

Author : Salvador Roura
Translator : Salvador Roura
Generation : 2024-04-30 20:58:10