Lyndon's Golf Contest 1 P7 - Fun Factoring

Time limit: 2.0s **Memory limit:** 256M

Your friend likes factoring numbers. In fact, your friend's favourite activity is coming up with numbers, and calculating its factors. One day, they decide that factoring numbers by hand takes too much effort, and entrusts you to write a program for them to do so.

Given an integer n ($1 \leq n \leq 10^9$), you must output all of the factors of n, including 1 and n. However, your friend demands that your code be short. Very short. Bytes take up space, after all.

Note: You may only submit to this problem in Python 3.

Input Specification

The first line of input contains a single integer n.

Output Specification

Output the factors of n, each on a separate line in *any* order, so long as there are no duplicates and all factors of n are outputted.

Scoring

Your score will be computed based on the **length of your source code**, the shorter the better. For an L-byte program,

- if $L \leq 54$, you will receive the full 100 points.
- if $55 \leq L \leq 63$, you will receive $80 - 2 \times (L - 55)$ points.
- if $64 \leq L$, you will receive $\lfloor 2^{0.16(100-L)} \rfloor$ points.

Sample Input

```
70
```

Sample Output

```
1
2
5
7
10
14
35
70
```