Best Divisor

Kristen loves playing with and comparing numbers. She thinks that if she takes two different positive numbers, the one whose digits sum to a larger number is *better* than the other. If the sum of digits is equal for both numbers, then she thinks the smaller number is *better*. For example, Kristen thinks that 13 is better than 31 and that 12 is better than 11.

Given an integer, n, can you find the divisor of n that Kristin will consider to be the best?

Input Format

A single integer denoting n.

Constraints

- $0 < n \leq 10^5$

Output Format

Print an integer denoting the best divisor of n.

Sample Input 0

```
12
```

Sample Output 0

```
6
```

Explanation 0

6 has sum of digits equal to 6 and this is greater than sums of digits of all other divisors $(1, 2, 3, 4, 12)$