

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

The set of divisors of **12** can be expressed as $\{1, 2, 3, 4, 6, 12\}$. The divisor whose digits sum to the largest number is **6** (which, having only one digit, sums to itself). Thus, we print **6** as our answer.