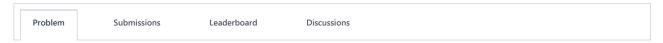


# **Best Divisor**





Your submission will run against only preliminary test cases. Full test cases will run at the end of the day.

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

•  $0 < n \le 10^5$ 

# **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.

Contest ends in <u>5 days</u>
Submissions: 3134
Max Score: 20
Difficulty: Easy
Rate This Challenge:
ななななな

```
10
                 int max_sum = 0, menor_divisor = int.MaxValue;
11
                 int sum = 0;
12
                  for (int i = 1; i \le n / 2; i++)
13
14 ▼
15
                      if (n \% i == 0)
16
17
                          sum = i.ToString().Sum(e => e - '0');
18
19
                          if (sum > max_sum)
20 ▼
21
                               max\_sum = sum;
22
                               menor_divisor = i;
23
24
                          else if (sum == max_sum)
25 ▼
26
                               if (i < menor_divisor)</pre>
27
28
                                   menor_divisor = i;
29
30
                                                                                                                        }
31
32
33
34
                    sum = n.ToString().Sum(e => e - '0');
35
                 if (sum > max_sum)
36
37
                  {
38
                      max\_sum = sum;
39
                      menor_divisor = n;
40
41
                 else if (sum == max_sum)
42
43
                      if (n < menor_divisor)</pre>
44 ▼
45
                          menor_divisor = n;
46
47
                 }
48
                 Console.WriteLine(menor_divisor);
49
50
         }
51
52
                                                                                                          Line: 49 Col: 46
                      Test against custom input
                                                                                                             Submit Code
1 Upload Code as File
                                                                                                Run Code
```

Join us on IRC at #hackerrank on freenode for hugs or bugs.

Contest Calendar | Interview Prep | Blog | Scoring | Environment | FAQ | About Us | Support | Careers | Terms Of Service | Privacy Policy | Request a Feature