

Problem C

Common Factors

Everyone likes to share things in common with other people.

Numbers are the same way! Numbers like it when they have a factor in common.

For example, 4 and 6 share a common factor of 2, which gives them something to talk about.

For a given integer n , we define a function, $f(n)$, equal to the number of integers in the range $[1, n]$ that share a common factor greater than 1 with n .

Furthermore, we can define a second function, $g(n)$, which characterizes the fraction of numbers that like a given number as follows: $g(n) = \frac{f(n)}{n}$

What we really want to know though, is, for any integer $2 \leq k \leq n$, what is the maximum value of $g(k)$?

12: 1, 12, 2, 6, 3, 4

$$1 \times 12 = 12$$

$$2 \times 6 = 12$$

$$3 \times 4 = 12$$

Photo by Bob Chao

Input

The input consists of a single integer n ($2 \leq n \leq 10^{18}$), the value of n for the input case.

Output

For the provided test case, output the result as a fraction, in lowest terms, in the form p/q where the greatest common divisor of p and q is 1.

Sample Input 1

10

Sample Output 1

2/3

Sample Input 2

100

Sample Output 2

11/15