

# Problem F

## F - Fractional Sequence

Time Limit: 1 second, Memory limit: 2G

Consider the following increasing sequence,  $S$ , of rational numbers:

$$1, 2, 2\frac{1}{2}, 3, 3\frac{1}{3}, 3\frac{2}{3}, 4, 4\frac{1}{4}, 4\frac{1}{2}, 4\frac{3}{4}, 5, 5\frac{1}{5}, 5\frac{2}{5}, 5\frac{3}{5}, 5\frac{4}{5}, 6, \dots$$

$S$  is composed of an infinite set of blocks,  $N_1, N_2, N_3, \dots$ , where block  $N_i$  is

$$i, i + 1/i, i + 2/i, \dots, i + (i - 1)/i.$$

So  $S(1) = 1, S(2) = 2, S(3) = 2\frac{1}{2}$ , etc. Write a program which takes as input an integer  $n$  and outputs  $S(n)$ .

### Input

Input is a single line containing an integer,  $n$  ( $1 \leq n \leq 4 \times 10^9$ ).

### Output

Output  $S(n)$  as a single integer if the answer is a whole number. Otherwise, output the integer part, a single space and a proper fraction  $a/b$  in lowest terms (i.e.  $0 < a < b$  and  $GCD(a, b) = 1$ ). See the sample outputs.

#### Sample Input 1

326

#### Sample Output 1

26

#### Sample Input 2

448

#### Sample Output 2

30 2/5

#### Sample Input 3

4000000000

#### Sample Output 3

89443 19596/89443

This page is intentionally left blank.