beecrowd | 1563

# The Big Problem

By Gabriel Dalalio, ITA Brazil

**Timelimit: 1**

Choosing randomly two integers A and B between 1 and N inclusive, what is the chance that the number B is less than or equal to the remainder of N divided by A?

For example, for N = 5, there are 25 possible choices for (A, B), but the only pairs that satisfy the condition are (2,1), (3,1), (3,2) and (4,1). Therefore, for N = 5 the probability is 4/25.

## Input

The input consists of several test cases. Each test case consists of a line containing an integer **N** ($1 \leq \mathbf{N} \leq 10^8$).

## Output

For each test, the output consists of a line containing the irreducible fraction that answers the given question.

| Sample Input | Sample Output |
|---|---|
| 1 | 0/1 |
| 2 | 0/1 |
| 3 | 1/9 |
| 4 | 1/16 |
| 5 | 4/25 |
| 6 | 1/12 |
| 7 | 8/49 |
| 8 | 1/8 |

Contest Dalalio 2014