# Problem A. Airplane

Input file: `standard input`
Output file: `standard output`

$n$ people board an airplane with $n$ seats. The first passenger has lost his boarding pass, so he sits in a random seat. Each subsequent passenger sits in his own seat if it's available or takes a random unoccupied seat if it's not.

What's the probability that the $n$th passenger finds his seat occupied?

## Input

The input file contains several test cases. Each test case is described with one integer $n$ on a single line ($2 \leq n \leq 1\,000$).

The last line contains a single `0` and should not be processed.

## Output

For each test case, output the probability that the $n$th passenger finds his seat occupied on a single line.

If the probability is 0, output `0/1`. Otherwise, the probability should be expressed as an irreducible fraction $a/b$, where $a$ and $b$ are positive integers and $a$ and $b$ be are relatively prime. Do not print any spaces between the numbers or the division sign.

## Sample input and output

| standard input | standard output |
|---|---|
| 2<br>0 | 1/2 |