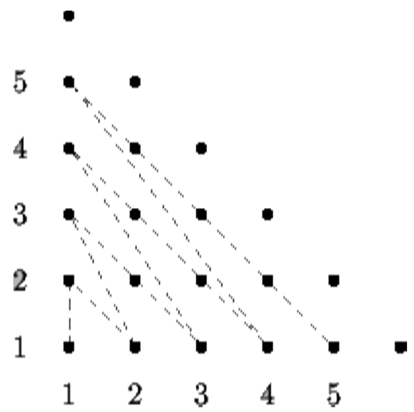
880 - Cantor Fractions

Time limit: 3.000 seconds

Cantor Fractions

Background

In the late XIXth century the German mathematician George Cantor argued that the set of positive fractions $\mathbf{Q}^+$ is equipotent to the set of positive integers **N**, meaning that they are both infinite, but of the same class. To justify this, he exhibited a mapping from **N** to $\mathbf{Q}^+$ that is onto. This mapping is just *traversal* of the **N** x **N** plane that covers all the pairs:



The first fractions in the Cantor mapping are:

$$\frac{1}{1}, \frac{2}{1}, \frac{1}{2}, \frac{3}{1}, \frac{2}{2}, \frac{1}{3}, \dots$$

Problem

Write a program that finds the *i*-th Cantor fraction following the mapping outlined above.

Input

The inputs consists of several lines with a positive integer number *i* each one.

Output

The output consists of a line per input case, that contains the *i*-th fraction, with numerator and denominator separed by a slash (/). The fraction should **not** be in the most simple form.

Sample Input
6

Sample Output
1/3