

## Problem C. Counting trapezoids

Source file name: `counting.c`, `counting.cpp`, `counting.java`  
 Input: Standard  
 Output: Standard  
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In mathematics there are sets of interesting numbers, some of them have a geometric representation, some examples are the square numbers and the triangular numbers. Square numbers are those that if you had  $N$  units you can arrange them in such a way that you can create a square with that units. Triangular numbers are those where the  $N$  units can be arranged in such a way that a triangle is created from  $L$  consecutive numbers starting from 1.

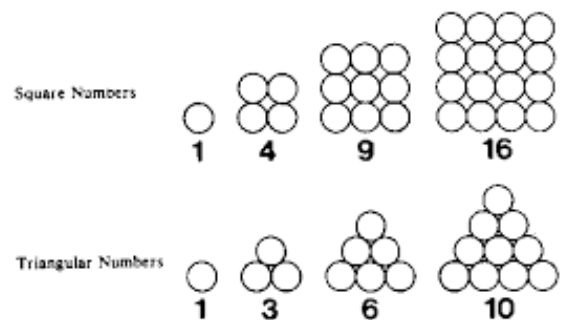


Figure 1: Some square and triangular numbers

There is another interesting set, we call it the trapezoid numbers, a trapezoid number  $N$ , is a number where the units can be arranged in a trapezoid figure from a number of 2 or more consecutive positive numbers, Triangular numbers are also trapezoid numbers that starts counting from 1. An example of trapezoid number is 5 which can be represented as a trapezoid with two numbers  $\{2,3\}$ .

Your task is given a number  $N$ , determine how many distinct trapezoids can be drawn using  $N$  units?

### Input

The input consists of several test cases. Each test case consists of a single line containing a single number  $N$ . The end of the test cases is given by the end of file (EOF).

- $1 \leq N \leq 10^9$

### Output

For each test case print in one line the number of different ways  $N$  can be represented as a trapezoid.

### Example

Input	Output
1	0
3	1
9	2

### Explication

There are 3 test cases in the file.

For the first test case the output is 0, there is no way to represent 1 as a trapezoid.

For the second test case the output is 1, the only way to represent 3 as a trapezoid is  $\{1,2\}$

For the third test case the output is 2, there are two ways to represent 9 as a trapezoid : $\{2,3,4\}$ ,  $\{4,5\}$ .