

# Rectangles Counting

Let  $R$  be a rectangle with integer side lengths. The rectangle is divided into unit squares. Considering one of the diagonals, we denote by  $f(R)$  the number of squares which have a common interior point with it. For example, if the side lengths of  $R$  are 2 and 4 then  $f(R)=4$ . Write a program to find out the number of all different rectangles  $R$  for which  $f(R) = N$ . Two rectangles with sides  $a \times b$  and  $b \times a$  are not different.

□

## Input

In a single line of the standard input the integer  $N$  ( $0 < N < 10^6$ ) is given.

## Output

The only line of the standard output should contain an integer – the calculated number of rectangle.

## Sample Input

4

## Sample Output

4

**Problem for kid - Please, think like kid.**