Day 2

Task 2. SQUARES

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 **squ** 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.

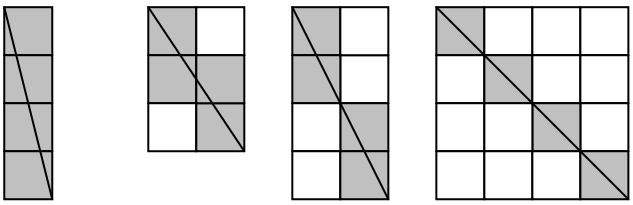
Output
The only line of the standard output should contain an integer – the calculated number of rectangles.

Remark: In 50% of test cases, $N \le 2000$.

EXAMPLE

Input
```
4
```

Output
```
4
```



Explanation: The different rectangles R for which $f(R)=4$ are 4: with side lengths 1 and 4, 2 and 3, 2 and 4, 4 and 4.