11296   Counting Solutions of an Integer Equation

Given, n, count the number of solutions to the equation $x + 2y + 2z = n$, where x, y, z, n are non negative integers.

Input

There is at most 1500 inputs. Each input is n ($n < 1000001$) on a single line.

Output

For each input, output the number of solutions on a single line.

Sample Input

```
2
3
```

Sample Output

```
3
3
```