B. Counting Solutions of an Integer Equation

Problem

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

The Input

There is at most 1500 inputs. Each input is \mathbf{n} (\mathbf{n} <1000001) on a single line.

The Output

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

Sample Input

2

Sample Output

3

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