

DMOPC '22 Contest 5 P1 - Triple Triplets

Time limit: 1.0s **Memory limit:** 256M

Russell Westbrook has farmed enough triple doubles in his career and is now pursuing a passion for triple triplets. Let the Triple value of an array A be the number of distinct triplets $1 \leq i < j < k \leq |A|$ such that $A_i + A_j = A_k$. For example, the Triple value of the array $[1, 2, 10, 3]$ is 1. The only triplet that satisfies this condition is $(1, 2, 4)$, as $A_1 + A_2 = A_4$. Please tell Russell the maximum Triple value of all possible arrays with positive integer values that add up to N .

Constraints

$$1 \leq N \leq 10^6$$

Subtask 1 [20%]

$$1 \leq N \leq 15$$

Subtask 2 [80%]

No additional constraints.

Input Specification

The first and only line contains the integer N .

Output Specification

Output the maximum Triple value of all possible arrays with positive integer values that add up to N .

Sample Input

5

Sample Output

3