Problem A. Decomposition into a sum of cubes

Input file:	`stdin`
Output file:	`stdout`
Time limit:	1 second
Memory limit:	64 megabytes

Given a positive integer N, you should decompose it to the minimum quantity of positive perfect cubes. The program should print this minimum quantity.

Input

A single positive integer N ($1 \leq N \leq 10^6$).

Output

Program should print one positive integer — the minimum quantity of cubes.

Examples

stdin	stdout
33	5

Note

$33 = 2^3 + 2^3 + 2^3 + 2^3 + 1^3$, and 33 cannot be decomposed into a sum of less than five positive cubes.