Day 2

Task 1. JUMPS

A bunny has to pass *n* meters with jumps of lengths 3, 2 or 1 meters. In how many different ways this can be done, if the lengths of successive jumps form a non-increasing sequence?
Write program **jumps**, which computes the number we are looking for.

Input
The value of *n* should be entered from the standard input ($1 \le n \le 10^9$).

Output
The program should write to the standard output one integer, equal to the remainder of the found number, divided by 1000000.

Remark: In 50% of test cases, $n \le 10^5$.

EXAMPLE

Input
6

Output
7

Explanation: The number of different ways is 7, and its remainder modulo 1000000 is also 7. The different sequences of jumps are:

1) 3+3
2) 3+2+1
3) 3+1+1+1
4) 2+2+2
5) 2+2+1+1
6) 2+1+1+1+1
7) 1+1+1+1+1+1