## Problem 1: Fibonacci

Time limit: 1s Memory limit: 256MB

The Fibonacci sequence is defined as:

$$F_0 = 0$$
  
 $F_1 = 1$   
 $F_n = F_{n-1} + F_{n-2}, \quad \forall n > 1$ 

Given a positive integer n, calculate  $F_n \mod (10^9 + 7)$ .

## Input

- A single positive integer n.

## Output

- A single integer, the value of  $F_n \mod (10^9 + 7)$ 

Sample Input	Sample Output
3	2

## Scoring:

- 30% of score has  $n \le 20$
- 40% of score has  $n \le 10^6$
- 30% of score has  $n \le 10^{18}$