



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP RAYAN 🖫

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### PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

# D. Pikachu the climber

time limit per test: 1 second memory limit per test: 256 megabytes

Pikachu and Ash are training at the base of the legendary staircase. You are given an N. Pikachu starts at step 0 and wants to reach step N.

Pikachu can jump either 1 or 2 steps at a time. Formally, in one move Pikachu chooses  $s \in \{1,2\}$  and increases his current step by s.

Your task is to determine the number of distinct jump sequences that move Pikachu from step 0 to step N. Two sequences are different if they differ at any position. Output the answer modulo  $10^9+7$ .

## Input

A single integer  $N(1 \leq N \leq 10^9)$  the number of steps

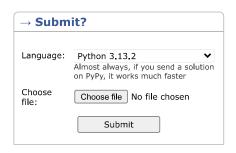
### **Output**

Print the number of distinct jump sequences modulo  $10^9 + 7$ 

### **Scoring**

Subtask	Constraints	Points
1	$1 \leq N \leq 20$	50
2	$1 \leq N \leq 10^5$	150
3	$1 \leq N \leq 10^9$	300

# Codemon 1 Contest is running 00:22:39 Contestant



→ Your points		
	Points	
Α		
В		
С		
D		
E		
F		

# **Examples**

input	Сору
1	
output	Сору
1	
input	Сору
2	
output	Сору
2	

### Note

For N=1 pikachu has only one sequence  $\{1\}$ .

For N=2 pikachu has two possible sequences  $\{1,1\}$  and  $\{2\}$ . It can be shown that no other sequence is possible.

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