Fibonacci 1

In the Fibonacci integer sequence, F0 = 0, F1 = 1, and Fn = Fn-1 + Fn-2 for n ≥ 2. For example, the first ten terms of the Fibonacci sequence are:

0, 1, 1, 2, 3, 5, 8, 13, 21, 34, …

Given an integer n, your goal is to compute the last Fn mod (10^9 + 7).

Input

The input test file will contain a single line containing n (n ≤ 100).

There are multiple test cases!

Output

For each test case, print the Fn mod (10^9 + 7).

Sample Input

9

Sample Output

34