# Tiles

Time limit: 2 sec.
Memory limit: 512MB

## Description

Junhee loves patterns. When crossing a road, he steps on white paint and black tarmac on a crosswalk with some pattern.

Looking at a number of long narrow corridors in ASTU, he imagines how beautiful they would be with some patterns. Simply, he considers corridors are divided into 2 by n. Jihun majoring in industrial design is annoyed by Junhee because he keeps showing him his drawing of corridor with 1 by 2 block. So, Jihun decided to ask for your help.

Find the number of ways Junhee can fill a 2 by n corridor with 1 by 2 rectangles. For example, if n=5, there are 8 possible ways.

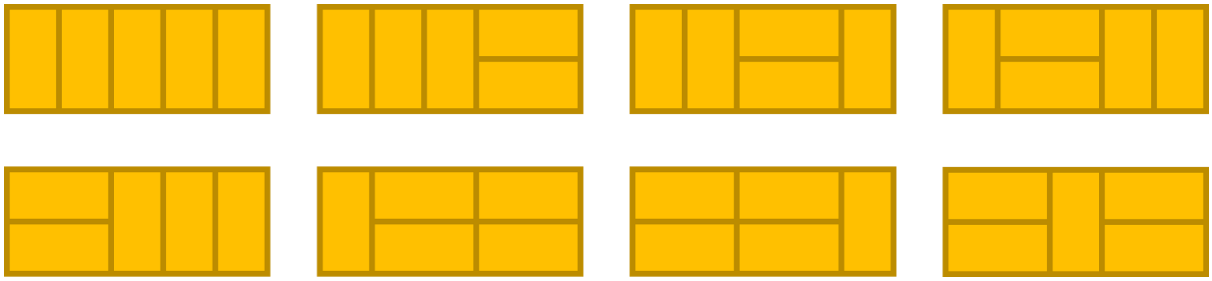

**Figure 1) An example of n=5 corridor**

The number can increase rapidly as n gets larger, so print the answer modulo 1,000,000,007.

## Input

The first line of the input contains a single integer n. ($1 \leq n \leq 100$)

## Output

In the first line, Print the answer modulo 1,000,000,007 as a single integer.

## Sample I/O

| Input(s) | Output(s) |
| --- | --- |
| 5 | 8 |