

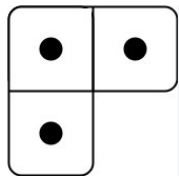
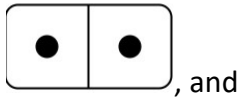
Brick Combinations

Rules:

1. Plagiarism is forbidden.
2. Write your program with C++.

Problem Definition:

- ✓ There's a long hallway needed to be paved with bricks, as a bricklayer, you are curious about how many ways you can pave the hallway. And the hallway is of size $(2 \times N)$. You have 2 kinds of bricks, which is:



- ✓ 1 integer (N) will be provided.
- ✓ You need to return the number of ways you can pave the hallway.
- ✓ Since the answer may be very large, you need to return it modulo $1e9 + 7$
- ✓ You need to use "Dynamic Programming Concept" in your code.

I/O Format:

Example 1:

Input:

2

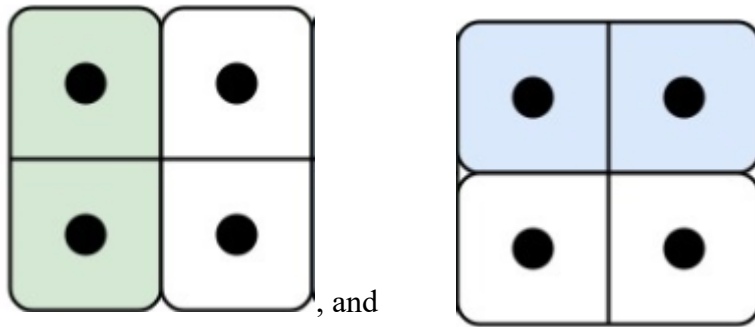
The first string is the source.

The second string is the target.

Output:

2

Explanation:



Example 2:

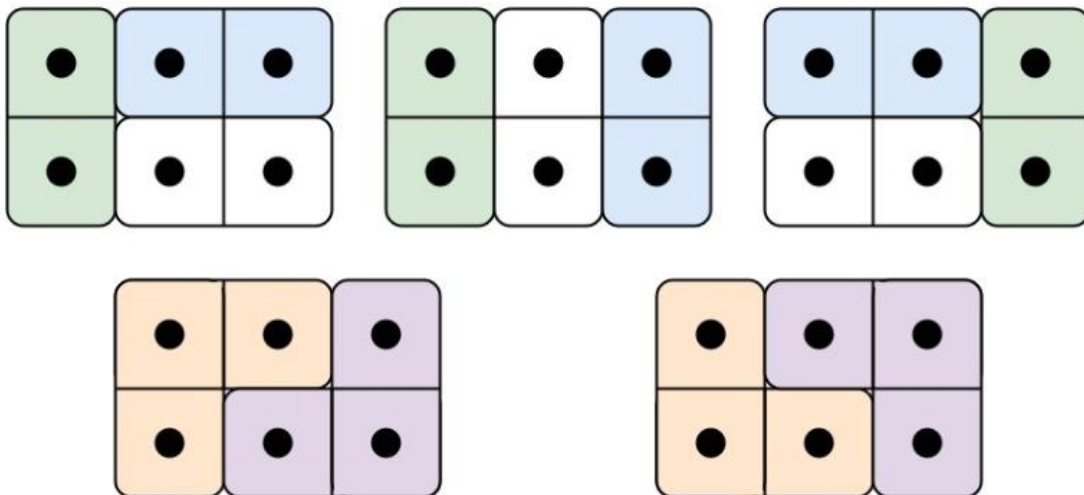
Input:

3

Output:

5

Explanation:



Constraints:

✓ $1 \leq N \leq 1000$