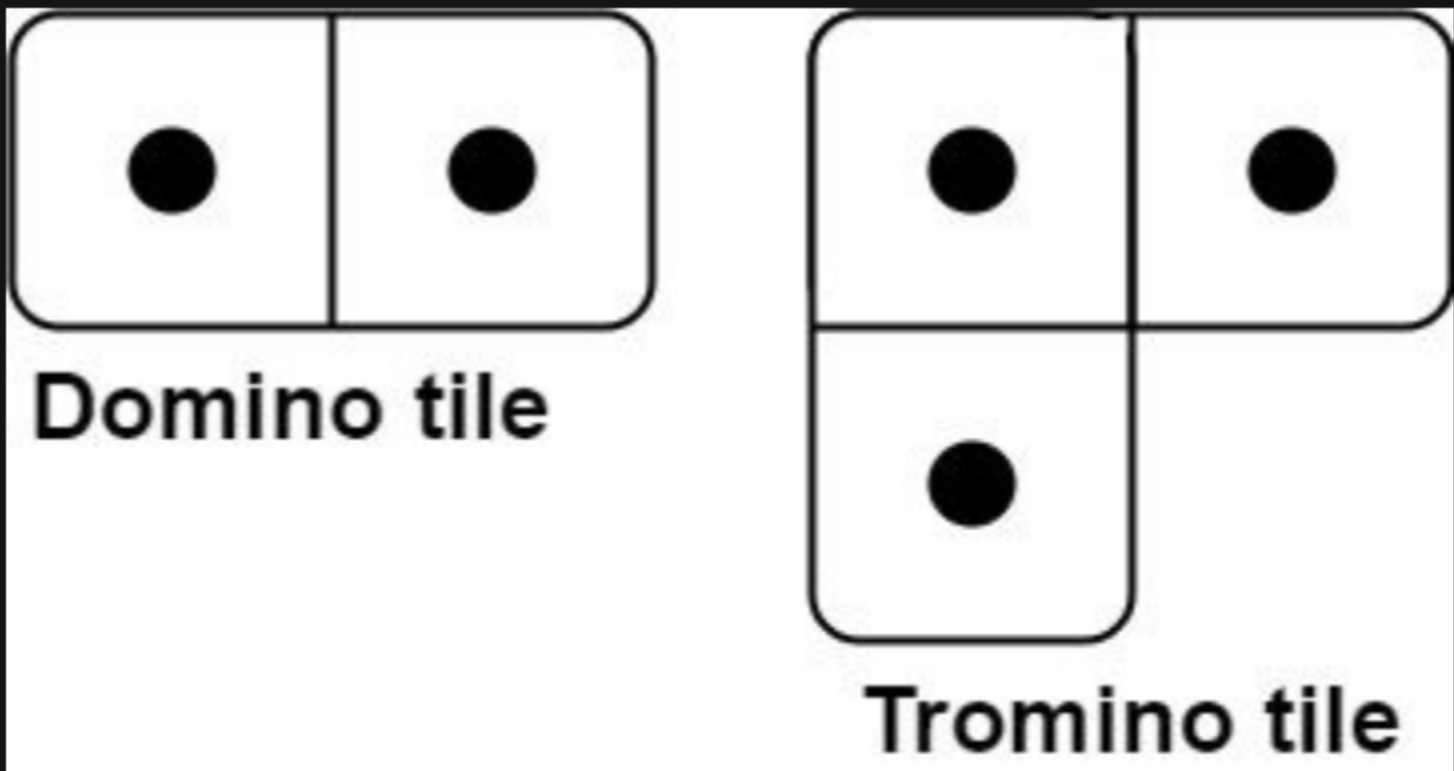


790. Domino and Tromino Tiling

Description

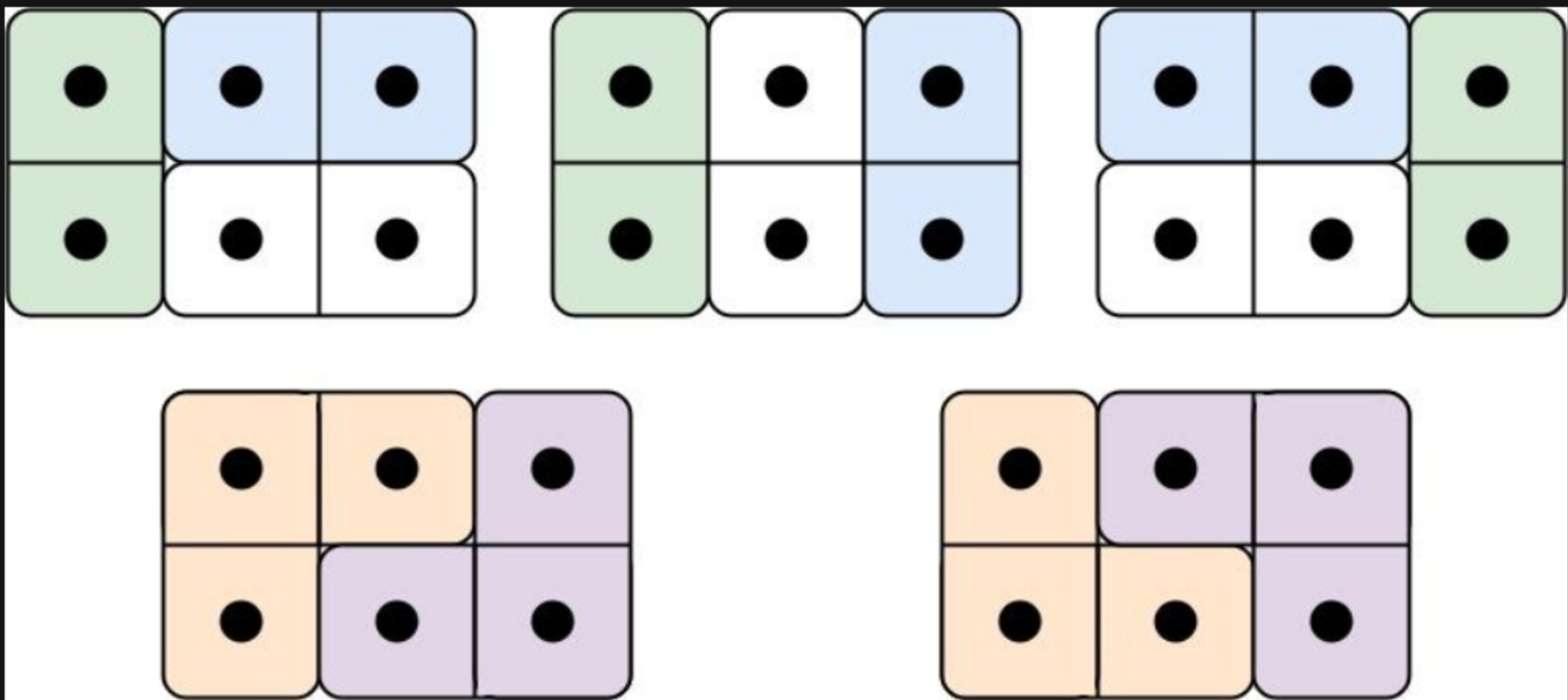
You have two types of tiles: a `2 x 1` domino shape and a tromino shape. You may rotate these shapes.



Given an integer `n`, return *the number of ways to tile an `2 x n` board*. Since the answer may be very large, return it **modulo** `$10^9 + 7$` .

In a tiling, every square must be covered by a tile. Two tilings are different if and only if there are two 4-directionally adjacent cells on the board such that exactly one of the tilings has both squares occupied by a tile.

Example 1:



Input: `n = 3`
Output: `5`
Explanation: The five different ways are shown above.

Example 2:

Input: `n = 1`
Output: `1`

Constraints:

- `1 ≤ n ≤ 1000`

