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Solution

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1359. Count All Valid Pickup and Delivery Options

Hard 1421 129 Add to List Share

Given n orders, each order consist in pickup and delivery services.

Count all valid pickup/delivery possible sequences such that $delivery(i)$ is always after of $pickup(i)$.

Since the answer may be too large, return it modulo $10^9 + 7$.

Example 1:

Input: $n = 1$

Output: 1

Explanation: Unique order (P1, D1), Delivery 1 always is after of Pickup 1.

Example 2:

Input: $n = 2$

Output: 6

Explanation: All possible orders: (P1,P2,D1,D2), (P1,P2,D2,D1), (P1,D1,P2,D2), (P2,P1,D1,D2), (P2,P1,D2,D1) and (P2,D2,P1,D1).

This is an invalid order (P1,D2,P2,D1) because Pickup 2 is after of Delivery 2.

Example 3:

Input: $n = 3$

Output: 90

Constraints:

- $1 \leq n \leq 500$

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class Solution {

public int countOrders(int n) {

}

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Console

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https://leetcode.com/problems/count-all-valid-pickup-and-delivery-options/

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