

Description

Solution

Discuss (643)

Submissions

Python3

552. Student Attendance Record II

Hard 1820 250 Add to List Share

An attendance record for a student can be represented as a string where each character signifies whether the student was absent, late, or present on that day. The record only contains the following three characters:

- 'A' : Absent.
- 'L' : Late.
- 'P' : Present.

Any student is eligible for an attendance award if they meet **both** of the following criteria:

- The student was absent ('A') for **strictly** fewer than 2 days **total**.
- The student was **never** late ('L') for 3 or more **consecutive** days.

Given an integer `n`, return the **number** of possible attendance records of length `n` that make a student eligible for an attendance award. The answer may be very large, so return it **modulo** $10^9 + 7$.

Example 1:

Input: `n = 2`
Output: 8
Explanation: There are 8 records with length 2 that are eligible for an award: "PP", "AP", "PA", "LP", "PL", "AL", "LA", "LL"
Only "AA" is not eligible because there are 2 absences (there need to be fewer than 2).

Example 2:

Input: `n = 1`
Output: 3

Example 3:

Input: `n = 10101`
Output: 183236316

Constraints:

- $1 \leq n \leq 10^5$

Accepted 74,572 Submissions 166,422

Seen this question in a real interview before?

Yes

No

Companies

Related Topics

Similar Questions

1

class Solution:

2

def checkRecord(self, n: int) -> int:

3

MOD = 1000000007

4

new

m

Your previous

Problems

Pick One

< Prev

698

Next >

Submit