**552. Student Attendance Record II**

Hard

696128Add to ListShare

Given a positive integer **n**, return the number of all possible attendance records with length n, which will be regarded as rewardable. The answer may be very large, return it after mod 109 + 7.

A student attendance record is a string that only contains the following three characters:

1. **'A'** : Absent.
2. **'L'** : Late.
3. **'P'** : Present.

A record is regarded as rewardable if it doesn't contain **more than one 'A' (absent)** or **more than two continuous 'L' (late)**.

**Example 1:**

**Input:** n = 2

**Output:** 8

**Explanation:**

There are 8 records with length 2 will be regarded as rewardable:

"PP" , "AP", "PA", "LP", "PL", "AL", "LA", "LL"

Only "AA" won't be regarded as rewardable owing to more than one absent times.