

# 1223. Dice Roll Simulation

## Description

A die simulator generates a random number from `1` to `6` for each roll. You introduced a constraint to the generator such that it cannot roll the number `i` more than `rollMax[i]` ( **1-indexed** ) consecutive times.

Given an array of integers `rollMax` and an integer `n`, return *the number of distinct sequences that can be obtained with exact `n` rolls*. Since the answer may be too large, return it **modulo**  `$10^9 + 7$` .

Two sequences are considered different if at least one element differs from each other.

### Example 1:

**Input:** `n = 2, rollMax = [1,1,2,2,2,3]`

**Output:** `34`

**Explanation:** There will be 2 rolls of die, if there are no constraints on the die, there are  $6 * 6 = 36$  possible combinations. In this case, looking at `rollMax` array, the numbers 1 and 2 appear at most once consecutively, therefore sequences (1,1) and (2,2) cannot occur, so the final answer is  $36 - 2 = 34$ .

### Example 2:

**Input:** `n = 2, rollMax = [1,1,1,1,1,1]`

**Output:** `30`

### Example 3:

**Input:** `n = 3, rollMax = [1,1,1,2,2,3]`

**Output:** `181`

### Constraints:

- `$1 \leq n \leq 5000$`
- `rollMax.length == 6`
- `$1 \leq \text{rollMax}[i] \leq 15$`

