1343. Dice Roll Simulation

Difficulty : Hard

https://leetcode.com/problems/dice-roll-simulation

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 or
```

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 <= n <= 5000`
- `rollMax.length == 6`
- `1 <= rollMax[i] <= 15`