1263. Number of Dice Rolls With Target Sum

Difficulty : Medium

https://leetcode.com/problems/number-of-dice-rolls-with-target-sum

You have `n` dice, and each dice has `k` faces numbered from `1` to `k`.

Given three integers `n`, `k`, and `target`, return *the number of possible ways (out of the* k^n *total ways) to roll the dice, so the sum of the face-up numbers equals* `target`. Since the answer may be too large, return it **modulo** $10^9 + 7$.

Example 1:

```
Input: n = 1, k = 6, target = 3
Output: 1
Explanation: You throw one die with 6 faces.
There is only one way to get a sum of 3.
```

Example 2:

```
Input: n = 2, k = 6, target = 7
Output: 6
Explanation: You throw two dice, each with 6 faces.
There are 6 ways to get a sum of 7: 1+6, 2+5, 3+4, 4+3, 5+2, 6+1.
```

Example 3:

```
Input: n = 30, k = 30, target = 500
Output: 222616187
Explanation: The answer must be returned modulo 10^9 + 7.
```

Constraints:

- `1 <= n, k <= 30`
- `1 <= target <= 1000`