2518. Number of Great Partitions

Description

You are given an array `nums` consisting of **positive** integers and an integer `k`.

Partition the array into two ordered **groups** such that each element is in exactly **one** group. A partition is called great if the **sum** of elements of each group is greater than or equal to `k`.

Return *the number of* ***distinct*** *great partitions*. Since the answer may be too large, return it **modulo** `10^9 + 7`.

Two partitions are considered distinct if some element `nums[i]` is in different groups in the two partitions.

Example 1:

```
Input: nums = [1,2,3,4], k = 4
Output: 6
Explanation: The great partitions are: ([1,2,3], [4]), ([1,3], [2,4]), ([1,4], [2,3]), ([2,3], [1,4]), ([2,4], [1,3]) and ([4], [1,2,3]).
```

Example 2:

```
Input: nums = [3,3,3], k = 4
Output: 0
Explanation: There are no great partitions for this array.
```

Example 3:

```
Input: nums = [6,6], k = 2
Output: 2
Explanation: We can either put nums[0] in the first partition or in the second partition.
The great partitions will be ([6], [6]) and ([6], [6]).
```

Constraints:

- `1 <= nums.length, k <= 1000`
- `1 <= nums[i] <= 10^9`