923. 3Sum With Multiplicity

Description

Given an integer array `arr`, and an integer `target`, return the number of tuples `i, j, k` such that `i < j < k` and `arr[i] + arr[j] + arr[k] == target`.

As the answer can be very large, return it **modulo** `10^9 + 7`.

Example 1:

```
Input: arr = [1,1,2,2,3,3,4,4,5,5], target = 8
Output: 20
Explanation:
Enumerating by the values (arr[i], arr[j], arr[k]):
(1, 2, 5) occurs 8 times;
(1, 3, 4) occurs 8 times;
(2, 2, 4) occurs 2 times;
(2, 3, 3) occurs 2 times.
```

Example 2:

```
Input: arr = [1,1,2,2,2,2], target = 5
Output: 12
Explanation:
arr[i] = 1, arr[j] = arr[k] = 2 occurs 12 times:
We choose one 1 from [1,1] in 2 ways,
and two 2s from [2,2,2,2] in 6 ways.
```

Example 3:

```
Input: arr = [2,1,3], target = 6
Output: 1
Explanation: (1, 2, 3) occured one time in the array so we return 1.
```

Constraints:

- `3 <= arr.length <= 3000`
- `0 <= arr[i] <= 100`
- `0 <= target <= 300`