# 1758. Distribute Repeating Integers

# Difficulty: Hard

#### https://leetcode.com/problems/distribute-repeating-integers

You are given an array of n integers, nums, where there are at most 50 unique values in the array. You are also given an array of m customer order quantities, quantity, where quantity[i] is the amount of integers the i<sup>th</sup> customer ordered. Determine if it is possible to distribute nums such that:

- The i<sup>th</sup> customer gets **exactly** quantity[i] integers,
- The integers the ith customer gets are all equal, and
- Every customer is satisfied.

**Input:** nums = [1,2,3,4], quantity = [2]

Return true if it is possible to distribute nums according to the above conditions.

### Example 1:

Output: false

```
Explanation: The 0<sup>th</sup> customer cannot be given two different integers.

Example 2:

Input: nums = [1,2,3,3], quantity = [2]
Output: true
Explanation: The 0<sup>th</sup> customer is given [3,3]. The integers [1,2] are not used.

Example 3:

Input: nums = [1,1,2,2], quantity = [2,2]
Output: true
Explanation: The 0<sup>th</sup> customer is given [1,1], and the 1st customer is given [2,2].
```

### **Constraints:**

```
    n == nums.length
    1 <= n <= 10<sup>5</sup>
    1 <= nums[i] <= 1000</li>
    m == quantity.length
    1 <= m <= 10</li>
    1 <= quantity[i] <= 10<sup>5</sup>
```

• There are at most 50 unique values in nums.