Problem 2357: Make Array Zero by Subtracting Equal Amounts

Problem Information

Difficulty: Easy
Acceptance Rate: 73.69%
Paid Only: No
Tags: Array, Hash Table, Greedy, Sorting, Heap (Priority Queue), Simulation

Problem Description

You are given a non-negative integer array `nums`. In one operation, you must:

* Choose a positive integer `x` such that `x` is less than or equal to the **smallest non-zero** element in `nums`. * Subtract `x` from every **positive** element in `nums`.

Return _the**minimum** number of operations to make every element in _`nums` _equal to_`0`.

Example 1:

Input: nums = [1,5,0,3,5] **Output:** 3 **Explanation:** In the first operation, choose x = 1. Now, nums = [0,4,0,2,4]. In the second operation, choose x = 2. Now, nums = [0,2,0,0,2]. In the third operation, choose x = 2. Now, nums = [0,0,0,0,0].

Example 2:

Input: nums = [0] **Output:** 0 **Explanation:** Each element in nums is already 0 so no operations are needed.

Constraints:

* `1 <= nums.length <= 100` * `0 <= nums[i] <= 100`

Code Snippets

C++:

```cpp
class Solution {
public:
int minimumOperations(vector<int>& nums) {


}
};
```

Java:

```java
class Solution {
public int minimumOperations(int[] nums) {


}
}
```

Python3:

```python
class Solution:
def minimumOperations(self, nums: List[int]) -> int:
```