

Problem 945: Minimum Increment to Make Array Unique

Problem Information

Difficulty: Medium

Acceptance Rate: 60.49%

Paid Only: No

Tags: Array, Greedy, Sorting, Counting

Problem Description

You are given an integer array `nums`. In one move, you can pick an index `i` where `0 <= i < nums.length` and increment `nums[i]` by `1`.

Return _the minimum number of moves to make every value in_ `nums` _**unique**_.

The test cases are generated so that the answer fits in a 32-bit integer.

Example 1:

Input: nums = [1,2,2] **Output:** 1 **Explanation:** After 1 move, the array could be [1, 2, 3].

Example 2:

Input: nums = [3,2,1,2,1,7] **Output:** 6 **Explanation:** After 6 moves, the array could be [3, 4, 1, 2, 5, 7]. It can be shown that it is impossible for the array to have all unique values with 5 or less moves.

Constraints:

* `1 <= nums.length <= 105` * `0 <= nums[i] <= 105`

Code Snippets

C++:

```
class Solution {  
public:  
    int minIncrementForUnique(vector<int>& nums) {  
  
    }  
};
```

Java:

```
class Solution {  
public int minIncrementForUnique(int[] nums) {  
  
}  
}
```

Python3:

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