Problem 2587: Rearrange Array to Maximize Prefix Score

Problem Information

Difficulty: Medium
Acceptance Rate: 42.18%
Paid Only: No
Tags: Array, Greedy, Sorting, Prefix Sum

Problem Description

You are given a **0-indexed** integer array `nums`. You can rearrange the elements of `nums` to **any order** (including the given order).

Let `prefix` be the array containing the prefix sums of `nums` after rearranging it. In other words, `prefix[i]` is the sum of the elements from `0` to `i` in `nums` after rearranging it. The **score** of `nums` is the number of positive integers in the array `prefix`.

Return _the maximum score you can achieve_.

Example 1:

Input: nums = [2,-1,0,1,-3,3,-3] **Output:** 6 **Explanation:** We can rearrange the array into nums = [2,3,1,-1,-3,0,-3]. prefix = [2,5,6,5,2,2,-1], so the score is 6. It can be shown that 6 is the maximum score we can obtain.

Example 2:

Input: nums = [-2,-3,0] **Output:** 0 **Explanation:** Any rearrangement of the array will result in a score of 0.

Constraints:

* `1 <= nums.length <= 105` * `-106 <= nums[i] <= 106`

Code Snippets

C++:

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

}
};
```

Java:

```
class Solution {
public int maxScore(int[] nums) {

}
}
```

Python3:

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