Problem 976: Largest Perimeter Triangle

Problem Information

Difficulty: Easy
Acceptance Rate: 61.61%
Paid Only: No
Tags: Array, Math, Greedy, Sorting

Problem Description

Given an integer array `nums`, return _the largest perimeter of a triangle with a non-zero area, formed from three of these lengths_. If it is impossible to form any triangle of a non-zero area, return `0`.

Example 1:

Input: nums = [2,1,2] **Output:** 5 **Explanation:** You can form a triangle with three side lengths: 1, 2, and 2.

Example 2:

Input: nums = [1,2,1,10] **Output:** 0 **Explanation:** You cannot use the side lengths 1, 1, and 2 to form a triangle. You cannot use the side lengths 1, 1, and 10 to form a triangle. You cannot use the side lengths 1, 2, and 10 to form a triangle. As we cannot use any three side lengths to form a triangle of non-zero area, we return 0.

Constraints:

* `3 <= nums.length <= 104` * `1 <= nums[i] <= 106`

Code Snippets

C++:

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

}
};
```

Java:

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

}
}
```

Python3:

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