

# 976. Largest Perimeter Triangle

Solved

Easy Topics Companies

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:

Problem List < > Run Submit

Description | Accepted | Editorial | Solutions | Submissions

All Submissions

Accepted

Zhukoviya submitted at Jul 01, 2024 21:32

Editorial Solution

Runtime: 121 ms | Beats 80.72% | Memory: 48.00 MB | Beats 100.00%

Analyze Complexity

10%

5%

0%

100ms 117ms 122ms 127ms 132ms 142ms 152ms

Code | C#

```
public class Solution {
    public int LargestPerimeter(int[] nums) {
        Array.Sort(nums);
        for (int i = nums.Length - 3; i >= 0; i--) {
            if (nums[i] + nums[i + 1] > nums[i + 2]) {
                return nums[i] + nums[i + 1] + nums[i + 2];
            }
        }
        return 0;
    }
}
```

Ln 11, Col 2

Testcase Test Result

Accepted Runtime: 65 ms

Case 1 Case 2

Input

nums =

[2,1,2]

Output

5

Expected

Код:

```
public class Solution
{
    public int LargestPerimeter(int[] nums)
    {
        Array.Sort(nums);
        for (int i = nums.Length - 3; i >= 0; i--)
```

```
    {
        if (nums[i] + nums[i + 1] > nums[i + 2])
        {
            return nums[i] + nums[i + 1] + nums[i + 2];
        }
    }
    return 0;
}
```