


747. Largest Number At Least Twice of Others

Solved 

Easy

Topics

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Hint

You are given an integer array `nums` where the largest integer is **unique**.

Determine whether the largest element in the array is **at least twice** as much as every other number in the array. If it is, return the **index** of the largest element, or return `-1` otherwise.

Example 1:

Input: `nums = [3,6,1,0]`

Output: `1`

Explanation: 6 is the largest integer.

For every other number in the array `x`, 6 is at least twice as big as `x`.

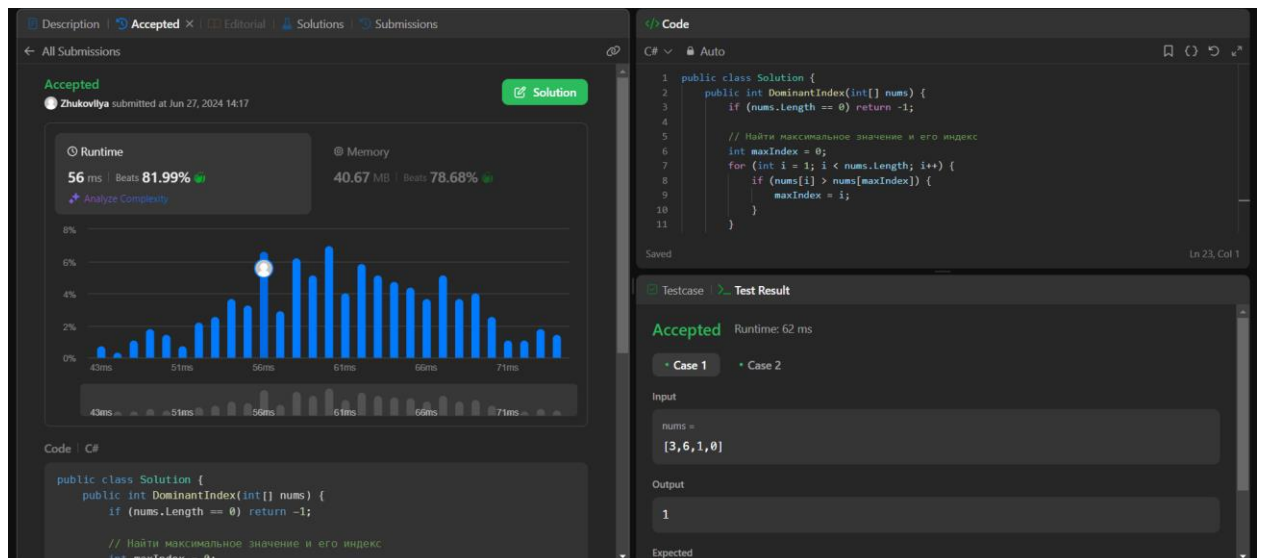
The index of value 6 is 1, so we return 1.

Example 2:

Input: `nums = [1,2,3,4]`

Output: `-1`

Explanation: 4 is less than twice the value of 3, so we return -1.



The screenshot displays a code editor interface. On the left, the 'Description' tab is active, showing the problem statement and a bar chart of runtime performance. The chart indicates a runtime of 56 ms, which beats 81.99% of other submissions. Below the chart, the C# code is shown. On the right, the 'Code' tab is active, displaying the same C# code. Below the code, the 'Testcase' tab is active, showing the input `[3,6,1,0]` and the output `1`, which is marked as 'Accepted'.

```
public class Solution {
    public int DominantIndex(int[] nums) {
        if (nums.Length == 0) return -1;

        // Найти максимальное значение и его индекс
        int maxIndex = 0;
        for (int i = 1; i < nums.Length; i++) {
            if (nums[i] > nums[maxIndex]) {
                maxIndex = i;
            }
        }
    }
}
```

Код:

```
public class Solution
{
    public int DominantIndex(int[] nums)
    {
        if (nums.Length == 0) return -1;

        // Найти максимальное значение и его индекс
        int maxIndex = 0;
        for (int i = 1; i < nums.Length; i++)
        {
            if (nums[i] > nums[maxIndex])
            {
                maxIndex = i;
            }
        }
    }
}
```

```
        }  
    }  
  
    // Проверить, является ли максимальное значение хотя бы в два раза больше  
    всех остальных  
    for (int i = 0; i < nums.Length; i++)  
    {  
        if (i != maxIndex && nums[maxIndex] < 2 * nums[i])  
        {  
            return -1;  
        }  
    }  
  
    return maxIndex;  
}  
}
```