747. Largest Number At Least Twice of Others

Solved

Easy | Topics | Companies | Hint

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

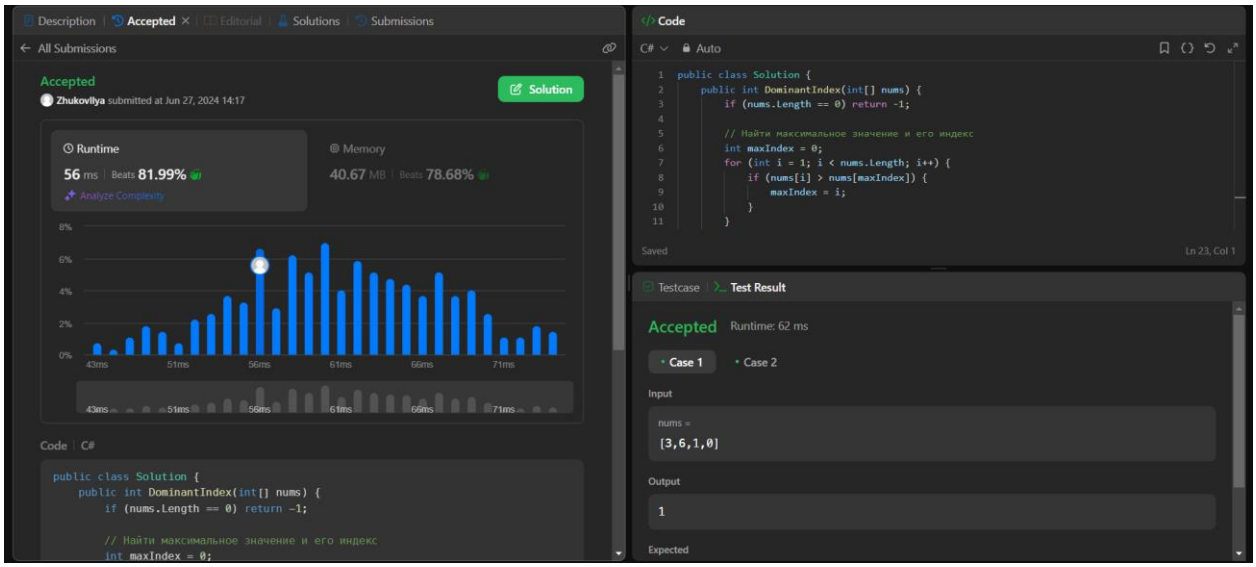
Determine whether the largest element in the array is **at least twice** as much as every other number in the array. If it is, return *the **index** of the largest element, or return* `-1` *otherwise.*

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.
```



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;
    }
}
```