<u>Dashboard</u> / <u>My courses</u> / <u>CS23331-DAA-2023-CSE</u> / <u>Divide and Conquer</u> / <u>2-Majority Element</u>

Started on	Thursday, 5 September 2024, 10:13 AM
State	Finished
Completed on	Thursday, 5 September 2024, 11:15 AM
Time taken	1 hour 2 mins
Marks	1.00/1.00
Cuada	10.00 out of 10.00 (1000)

```
Question 1
Correct
Mark 1.00 out of 1.00
```

Given an array nums of size n, return the majority element.

The majority element is the element that appears more than $\lfloor n / 2 \rfloor$ times. You may assume that the majority element always exists in the array.

Example 1:

```
Input: nums = [3,2,3]
Output: 3
```

Example 2:

```
Input: nums = [2,2,1,1,1,2,2]
Output: 2
```

Constraints:

```
    n == nums.length
    1 <= n <= 5 * 10<sup>4</sup>
    -2<sup>31</sup> <= nums[i] <= 2<sup>31</sup> - 1
```

For example:

Input	Result	
3 3 2 3		3
7 2 2 1 1 1 2	. 2	2
221112	. 2	

Answer: (penalty regime: 0 %)

```
#include <stdio.h>
   int majority(int nums[], int low, int high)
3 ▼ {
 4
        if (low==high)
             return nums[low];
 5
 6
        int mid=(low+high)/2;
 7
        int left=majority(nums,low, mid);
 8
        int right=majority(nums, mid + 1,high);
        if (left==right)
 9
10
             return left;
        int lc=0;
11
12
        for (int i=low;i<=high;i++)</pre>
             if (nums[i] == left)
13
14
                 1c++;
        int rc=0;
15
16
        for (int i=low;i<=high;i++)</pre>
17
             if (nums[i]==right)
18
                 rc++;
19
        if (lc>(low-high+1)/2)
20
             return left;
21
        if (rc>(low-high+1)/2)
22
             return right;
23
        return -1;
24
   int main()
25
26 ₹ {
27
        int n;
        scanf("%d",&n);
28
29
        int nums[n]:
```

	Input	Expected	Got	
~	3 3 2 3	3	3	~

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

■ 1-Number of Zeros in a Given Array

Jump to...

3-Finding Floor Value ►