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<b>Started on</b>	Tuesday, 1 October 2024, 1:43 PM
<b>State</b>	Finished
<b>Completed on</b>	Tuesday, 1 October 2024, 2:39 PM
<b>Time taken</b>	55 mins 57 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>10.00</b> out of 10.00 ( <b>100%</b> )

## 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:**

- $n == \text{nums.length}$
- $1 \leq n \leq 5 \times 10^4$
- $-2^{31} \leq \text{nums}[i] \leq 2^{31} - 1$

**For example:**

Input	Result
3 3 2 3	3
7 2 2 1 1 1 2 2	2

**Answer:** (penalty regime: 0 %)

```

1  #include<stdio.h>
2  int count(int arr[], int n, int n1){
3      int c = 0;
4      for(int i=0;i<n;i++){
5          if(arr[i]==n1){
6              c++;
7          }
8      }
9      return c;
10 }
11
12 int major(int arr[], int low, int high){
13     if(low==high){
14         return arr[0];
15     }
16
17     int mid = (low+high)/2;
18     int left = major(arr, low, mid);
19     int right = major(arr, mid+1, high);
20
21     if(left == right){
22         return left;
23     }
24
25     int lc = count(arr, high-low+1, left);
26     int rc = count(arr, high-low+1, right);
27

```

```
28 |     if(lc>rc){
29 |         return lc;
30 |     }
31 |     else{
32 |         return rc;
33 |     }
34 | }
35 |
36 | int main(){
37 |     int n ;
38 |     scanf("%d",&n);
39 |     int arr[n];
40 |     for(int i=0;i<n;i++){
41 |         scanf("%d",&arr[i]);
42 |     }
43 |     int ans = major(arr,0,n-1);
44 |     printf("%d",ans);
45 | }
```

	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

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3-Finding Floor Value ▶