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Started on	Wednesday, 2 October 2024, 7:41 PM
State	Finished
Completed on	Wednesday, 2 October 2024, 7:42 PM
Time taken	35 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

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 major(int a[],int left,int right);
3  int count(int a[],int left,int right,int n);
4  int major(int a[],int left,int right)
5  {
6      if(left==right)
7      {
8          return a[left];
9      }
10     int mid=(left+right)/2;
11     int lm=major(a,left,mid);
12     int rm=major(a,mid+1,right);
13     if(lm==rm)
14     {
15         return lm;
16     }
17     int lc=count(a,left,right,lm);
18     int rc=count(a,left,right,rm);
19     return(lc>rc) ? lm:rm;
20 }
21
22 int count(int a[],int left,int right,int n)
23 {
24     int c=0;
25     for(int i=left;i<=right;i++)
26     {
27         if(a[i]==n)

```

```
28 |         {
29 |             c++;
30 |         }
31 |
32 |     }
33 |     return c;
34 | }
35 | int main(){
36 |     int n;
37 |     scanf("%d",&n);
38 |     int a[n];
39 |     for(int i=0;i<n;i++)
40 |     {
41 |         scanf("%d",&a[i]);
42 |
43 |     }
44 |     int maj=major(a,0,n-1);
45 |     printf("%d",maj);
46 | }
```

	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 ▶