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Started on	Tuesday, 1 October 2024, 12:23 PM
State	Finished
Completed on	Tuesday, 1 October 2024, 12:27 PM
Time taken	3 mins 15 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
3  // Function to find the majority element
4  int findMajorityElement(int nums[], int n) {
5      int count = 0, candidate = 0;
6
7      for (int i = 0; i < n; i++) {
8          if (count == 0) {
9              candidate = nums[i];
10         }
11         if (nums[i] == candidate) {
12             count++;
13         } else {
14             count--;
15         }
16     }
17
18     return candidate;
19 }
20
21 int main() {
22     int n;
23
24
25     scanf("%d", &n);
26
27     int nums[n];

```

```
28 |
29 |
30 | for (int i = 0; i < n; i++) {
31 |     scanf("%d", &nums[i]);
32 | }
33 |
34 | int result = findMajorityElement(nums, n);
35 |
36 | printf("%d\n", result);
37 |
38 | return 0;
39 | }
```

	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 ▶