RAJALAKSHMI ENGINEERING COLLEGE

MAAHESH S 2024-CSD-A

M2

Started on	Thursday, 4 September 2025, 8:33 AM
State	Finished
Completed on	Thursday, 4 September 2025, 8:44 AM
Time taken	11 mins 18 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 `⌊n / 2⌋` 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 * 10^4`
- `-2^31 <= nums[i] <= 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 %)

```c
#include<stdio.h>
int main(){
    int n;
    scanf("%d",&n);
    int nums[n];
    for(int i=0;i<n;i++){
        scanf("%d",&nums[i]);
    }
    int count=0;
    int candiate=0;
    for(int i=0;i<n;i++){
        if(count==0){
            candiate=nums[i];
            count=1;
        }else if(nums[i]==candiate){
            count++;
        }else{
            count--;
        }
    }
    printf("%d\n",candiate);
    return 0;
}
```

	Input	Expected	Got	
✔	3 3 2 3	3	3	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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