

CS23331-DAA-2024-CSE / 2-Majority Element



2-Majority Element

Started on	Wednesday, 17 September 2025, 8:50 AM
State	Finished
Completed on	Wednesday, 17 September 2025, 9:08 AM
Time taken	18 mins 19 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00 [Flag question](#)

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:

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

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 main(){
3     int n;
4     scanf("%d", &n);
5     int a[n];
6     for(int i=0;i<n;i++){
7         scanf("%d", &a[i]);
8     }
9     int ca = a[0];
10    int c = 1;
11    for(int i=1;i<n;i++){
12
13
14        if(a[i] == ca){
15            c++;
16        }
17        else if(a[i] != ca && c == 0){
18            ca = a[i];
19            c = 1;
20        }
21        else if(a[i] != ca){
22            c--;
23        }
24    }
25    printf("%d", ca);
26 }

```

	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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