

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



2-Majority Element

Started on	Tuesday, 30 September 2025, 12:14 PM
State	Finished
Completed on	Tuesday, 30 September 2025, 12:15 PM
Time taken	36 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:

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

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 int majorityElement(int* nums, int n) {
4     int count = 0, candidate = 0;
5     for (int i = 0; i < n; i++) {
6         if (count == 0) {
7             candidate = nums[i];
8             count = 1;
9         } else if (nums[i] == candidate) {
10             count++;
11         } else {
12             count--;
13         }
14     }
15     return candidate;
16 }
17
18 int main() {
19     int n;
20     scanf("%d", &n);
21     int nums[n];
22     for (int i = 0; i < n; i++) {
23         scanf("%d", &nums[i]);
24     }
25
26     int result = majorityElement(nums, n);
27     printf("%d\n", result);
28
29     return 0;
30 }
31
```

	Input	Expected	Got	
✓	3	3	3	✓
	3 2 3			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

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