

[Dashboard](#) / [My courses](#) / [CS23331-DAA-2023-CSE](#) / [Divide and Conquer](#) / [2-Majority Element](#)

Started on	Friday, 30 August 2024, 2:32 PM
State	Finished
Completed on	Friday, 4 October 2024, 1:49 PM
Time taken	34 days 23 hours
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 find_majority(int nums[], int size) {
3     int count = 0, candidate;
4     for (int i = 0; i < size; i++) {
5         if (count == 0) {
6             candidate = nums[i];
7             count = 1;
8         } else if (nums[i] == candidate) {
9             count++;
10        } else {
11            count--;
12        }
13    }
14    return candidate;
15 }
16
17 int main() {
18     int size;
19
20     scanf("%d", &size);
21     int nums[size];
22
23     for (int i = 0; i < size; i++) {
24         scanf("%d", &nums[i]);
25     }
26     int majority = find_majority(nums, size);
27     printf("%d\n", majority);
28     return 0;
29 }
30

```

	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 ▶