



MUKESH V A 2024-CSD-A ▾

M2

Started on	Thursday, 4 September 2025, 9:02 AM
State	Finished
Completed on	Thursday, 4 September 2025, 9:27 AM
Time taken	25 mins 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

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 == nums.length`
- `1 <= n <= 5 * 104`
- `-231 <= nums[i] <= 231 - 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  {
4      int n; scanf("%d", &n);
5      int a[n];
6      for (int i = 0; i < n; i++) scanf("%d", &a[i]);
7      int majority(int l, int r)
8      {
9          if (l == r) return a[l];
10         int m = (l + r) / 2;
11         int left = majority(l, m);
12         int right = majority(m + 1, r);
13         if (left == right) return left;
14
15         int cl = 0, cr = 0;
16         for (int i = l; i <= r; i++)
17         {
18             if (a[i] == left) cl++;
19             else if (a[i] == right) cr++;
20         }
21         return cl > cr ? left : right;
22     }
23     printf("%d\n", majority(0, n - 1));
24     return 0;
25 }
26

```

2/ |

	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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