

SIVARAM G ▾**SG****Started on** Thursday, 18 September 2025, 9:06 AM**State** Finished**Completed on** Thursday, 18 September 2025, 7:18 PM**Time taken** 10 hours 12 mins**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
3 2 3	
7	2
2 2 1 1 1 2 2	

Answer: (penalty regime: 0 %)

```

1 #include<stdio.h>
2 int countinrange(int nums[],int left, int right, int num)
3 {
4     int count=0;
5     for(int i=left;i<=right;i++)
6     {
7         if(nums[i]==num)
8         {
9             count++;
10        }
11    }
12    return count;
13 }
14 int findmajority(int nums[],int left, int right)
15 {
16     if(left==right)
17     {
18         return nums[left];
19     }
20     int mid=(left+right)/2;
21     int leftmajor=findmajority(nums,left,mid);
22     int rightmajor=findmajority(nums,mid+1,right);
23     if(leftmajor==rightmajor)
24     {
25         return leftmajor;
26     }

```

```

27     int leftcount=countinrange(nums,left,right,leftmajor);
28     int rightcount=countinrange(nums,left,right,rightmajor);
29     return (leftcount>rightcount) ? leftmajor : rightmajor;
30 }
31 int main()
32 {
33     int n;
34     scanf("%d",&n);
35     int nums[n];
36     for(int i=0;i<n;i++)
37     {
38         scanf("%d",&nums[i]);
39     }
40     int candidate=findmajority(nums,0,n-1);
41     int count=countinrange(nums,0,n-1,candidate);
42     if(count>n/2)
43     {
44         printf("%d\n",candidate);
45     }
46     else
47     {
48         printf("No majority element exists.\n");
49     }
50     return 0;
51 }
```

	Input	Expected	Got	
✓	3 3 2 3	3	3	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Back to Course](#)