RAJALAKSHMI ENGINEERING COLLEGE



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|---|---|
| **Started on** | Monday, 22 September 2025, 3:43 PM |
| **State** | Finished |
| **Completed on** | Monday, 22 September 2025, 3:52 PM |
| **Time taken** | 9 mins 5 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 `⌊n / 2⌋` 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 * 10^4`
- `-2^31 <= nums[i] <= 2^31 - 1`

**For example:**

| Input | Result |
|---|---|
| 3<br>3 2 3 | 3 |
| 7<br>2 2 1 1 1 2 2 | 2 |

**Answer:** (penalty regime: 0 %)

```
#include<stdio.h>
int maj(int a[],int l,int h){
    if(l==h)
        return a[l];
    int m=(l+h)/2;
    int lm=maj(a,l,m);
    int rm=maj(a,m+1,h);
    if(lm==rm)
    return lm;
    return (lm>rm)? lm:rm;
}
int main()
{
    int n;
    scanf("%d",&n);
    int a[n];
    for(int i=0;i<n;i++){
        scanf("%d",&a[i]);
    }
    printf("%d",maj(a,0,n-1));
}
```

| | Input | Expected | Got | |
|---|---|---|---|---|
| ✔ | 3<br>3 2 3 | 3 | 3 | ✔ |

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

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