

# Majority Element

Try to solve the Majority Element problem.

We'll cover the following ^

- Statement
- Examples
- Understand the problem
- Try it yourself

## Statement

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.

Constraints:

- $n == \text{nums.length}$
- $1 \leq n \leq 5 * 10^4$
- $-10^9 \leq \text{nums}[i] \leq 10^9$

## Examples

### Sample example 1

Input

nums	[1, 3, 5, 3, 3, 8, 3, 8, 3, 2, 3, 9, 4, 3, 3, 3]
------	--

Output

$\lfloor n / 2 \rfloor \Rightarrow 16 / 2 \Rightarrow 8$
--

Any number in the array above that appears more than 8 times will be our majority element. In this case, that number is 3. So, 3 is our output.

1 of 2

### Sample example 2

Input

nums	[1, 2, 2, 2, 1, 2, 1, 2, 1, 2, 1, 2]
------	--------------------------------------

Output

$\lfloor n / 2 \rfloor \Rightarrow 12 / 2 \Rightarrow 6$
--



Any number in the array above appears more than 6 times will be our majority element. In this case, that number is 2. So, 2 is our output.

2 of 2



## Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

### Majority Element

1

What is the output if the following value is given as input?

nums = [1, 2, 2, 2, 1, 2, 1, 2, 3, 4, 1, 2, 1, 2, 2]

A) 1

B) 2

C) 3

Submit Answer



Question 1 of 2  
0 attempted



Reset Quiz ↺

## Try it yourself

Implement your solution in the following coding playground:

Java



usercode > FindMajorityElement.java

```
3 public static int findMajorityElement(int[] nums) {  
4  
5     // Write your code here  
6  
7     return 0;  
8 }  
9 }
```



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Test Cases

Results

Case 1

Case 2

Case 3

Input #1

[1,2,1,1,1]

Majority Element

Need a Hint?

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Sum of Two Integers

Unique Paths

Mark as Completed