

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`
- `-109 <= nums[i] <= 109`

Follow-up: Could you solve the problem in linear time and in **`O(1)`** space?

Solution:

```
class Solution {
    public int majorityElement(int[] nums) {
        HashMap<Integer,Integer> n=new HashMap<Integer,Integer>();
        for(int i=0;i<nums.length;i++){
            if(n.containsKey(nums[i])){
                int count=n.get(nums[i]);
                if((count+1)>(nums.length/2)){
                    return nums[i];
                }
                n.put(nums[i],count+1);
            }else{
                n.put(nums[i],1);
            }
        }
        return nums[0];
    }
}
```