

과반수를 차지하는(절반을 초과하는) 엘리먼트를 출력하라.

Input: nums = [3,2,3]

Output: 3

1.브루트포스

class Solution:

```
def majorityElement(self, nums: List[int]) -> int:
    for n in nums:
        if nums.count(n) > len(nums) // 2:
            return n
```

2.다이나믹 프로그래밍

import collections

class Solution:

```
def majorityElement(self, nums: List[int]) -> int:
    counts = collections.defaultdict(int)
    for num in nums:
        if counts[num] == 0:
            counts[num] = nums.count(num)
        if counts[num] > len(nums) // 2:
            return num
```

3.분할 정복

import collections

class Solution:

```
def majorityElement(self, nums: List[int]) -> int:
    if not nums:
        return None
    if len(nums) == 1:
        return nums[0]
    half = len(nums) // 2
    a = self.majorityElement(nums[:half])
    b = self.majorityElement(nums[half:])
    return [b, a][nums.count(a) > half]
```

4.파이썬 다운

class Solution:

```
def majorityElement(self, nums: List[int]) -> int:
    return sorted(nums)[len(nums) // 2]
```