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(Easy)

## 6090. Min Max Game

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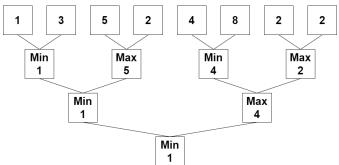
You are given a  $\mathbf{0}$ -indexed integer array nums whose length is a power of 2.

Apply the following algorithm on nums:

- 1. Let n be the length of nums . If n == 1, end the process. Otherwise, create a new 0-indexed integer array newNums of length n / 2.
- 2. For every **even** index i where  $0 \le i \le n / 2$ , **assign** the value of newNums[i] as min(nums[2 \* i], nums[2 \*i+11).
- 3. For every **odd** index i where  $\emptyset \le i \le n / 2$ , **assign** the value of newNums[i] as max(nums[2 \* i], nums[2 \*i+1]).
- 4. Replace the array nums with newNums.
- 5. Repeat the entire process starting from step 1.

Return the last number that remains in nums after applying the algorithm.

## Example 1:



```
Input: nums = [1,3,5,2,4,8,2,2]
Output: 1
Explanation: The following arrays are the results of applying the algorithm repeatedly.
First: nums = [1,5,4,2]
Second: nums = [1,4]
Third: nums = [1]
1 is the last remaining number, so we return 1.
```

## Example 2:

```
Input: nums = [3]
Output: 3
Explanation: 3 is already the last remaining number, so we return 3.
```

## **Constraints:**

- 1 <= nums.length <= 1024
- $1 \le nums[i] \le 10^9$
- nums.length is a power of 2.

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JavaScript
    1 \vee const minMaxGame = (a) => {
                                                                       while (a.length > 1) {
      2 •
        3
                                                                                                              let b = [];
                                                                                                              for (let i = 0; i < a.length / 2; i++) b.push(i % 2 == 0 ? Math.min(a[2 * i], a[2 * i + 1]) : Math.max(a[2 * i], a[2 * i]) : Math.max(a[2 * i], a[2
                                   a[2 * i + 1]));
      5
                                                                                                            a = b;
        6
        7
                                                                       return a[0];
        8
                                  };
```