

# Problem 2206: Divide Array Into Equal Pairs

## Problem Information

**Difficulty:** Easy

**Acceptance Rate:** 79.26%

**Paid Only:** No

**Tags:** Array, Hash Table, Bit Manipulation, Counting

## Problem Description

You are given an integer array `nums` consisting of  $2 * n$  integers.

You need to divide `nums` into  $n$  pairs such that:

- \* Each element belongs to **exactly one** pair.
- \* The elements present in a pair are **equal**.

Return `true` if `nums` can be divided into  $n$  pairs, otherwise return `false`.

**Example 1:**

**Input:** `nums = [3,2,3,2,2,2]` **Output:** `true` **Explanation:** There are 6 elements in `nums`, so they should be divided into  $6 / 2 = 3$  pairs. If `nums` is divided into the pairs (2, 2), (3, 3), and (2, 2), it will satisfy all the conditions.

**Example 2:**

**Input:** `nums = [1,2,3,4]` **Output:** `false` **Explanation:** There is no way to divide `nums` into  $4 / 2 = 2$  pairs such that the pairs satisfy every condition.

**Constraints:**

`nums.length == 2 * n` `1 <= n <= 500` `1 <= nums[i] <= 500`

## Code Snippets

**C++:**

```
class Solution {  
public:  
    bool divideArray(vector<int>& nums) {  
  
    }  
};
```

**Java:**

```
class Solution {  
    public boolean divideArray(int[] nums) {  
  
    }  
}
```

**Python3:**

```
class Solution:  
    def divideArray(self, nums: List[int]) -> bool:
```