

5452. Can Make Arithmetic Progression From Sequence

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Contest (/contest/weekly-contest-196/)

Given an array of numbers `arr`. A sequence of numbers is called an arithmetic progression if the difference between any two consecutive elements is the same.

Return `true` if the array can be rearranged to form an arithmetic progression, otherwise, return `false`.

Example 1:

Input: `arr = [3,5,1]`

Output: `true`

Explanation: We can reorder the elements as `[1,3,5]` or

User Accepted: 0

User Tried: 0

Total Accepted: 0

Total Submissions: 0

Difficulty: Easy

Example 2:

Input: `arr = [1,2,4]`

Output: `false`

Explanation: There is no way to reorder the elements to obtain an arithmetic progression.

Constraints:

- $2 \leq \text{arr.length} \leq 1000$
- $-10^6 \leq \text{arr}[i] \leq 10^6$

JavaScript



```
1 /**
2  * @param {number[]} arr
3  * @return {boolean}
4  */
5 const canMakeArithmeticProgression = (arr) => {
6     arr.sort((a, b) => a - b);
7     for (let i = 2; i < arr.length; i++) {
8         if ((arr[i] - arr[i - 1]) !== (arr[i - 1] - arr[i - 2])) {
9             return false;
10        }
11    }
```

```
12     return true;  
13 };
```

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