1502. Can Make Arithmetic Progression From Sequence

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A sequence of numbers is called an **arithmetic progression** if the difference between any two consecutive elements is the same.

Given an array of numbers `arr`, 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 [5,3,1] with differences 2 and -2 respectively,
between each consecutive elements.
```

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 <= arr.length <= 1000`
- `-10^6 <= arr[i] <= 10^6`

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```java
class Solution {
    public boolean canMakeArithmeticProgression(int[] arr) {

        Arrays.sort(arr);
        int prevDiff = arr[1] - arr[0];

        for(int i = 1; i < arr.length - 1; i++){
            int currentDiff = arr[i+1] - arr[i];

            if(prevDiff != currentDiff)
                return false;

            prevDiff = currentDiff;
        }

        return true;
    }
}
```

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