1502. Can Make Arithmetic Progression From Sequence

Description

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