

1497. Check If Array Pairs Are Divisible by k

Description

Given an array of integers `arr` of even length `n` and an integer `k`.

We want to divide the array into exactly $n / 2$ pairs such that the sum of each pair is divisible by `k`.

Return `true` *If you can find a way to do that or* `false` *otherwise*.

Example 1:

Input: `arr = [1,2,3,4,5,10,6,7,8,9]`, `k = 5`

Output: `true`

Explanation: Pairs are (1,9), (2,8), (3,7), (4,6) and (5,10).

Example 2:

Input: `arr = [1,2,3,4,5,6]`, `k = 7`

Output: `true`

Explanation: Pairs are (1,6), (2,5) and (3,4).

Example 3:

Input: `arr = [1,2,3,4,5,6]`, `k = 10`

Output: `false`

Explanation: You can try all possible pairs to see that there is no way to divide `arr` into 3 pairs each with sum divisible by 10.

Constraints:

- `arr.length == n`
- `1 <= n <= 105`
- `n` is even.
- `-109 <= arr[i] <= 109`
- `1 <= k <= 105`

