

Given an array `arr[]` of size `n` and an integer `x`, return `1` if there exists a pair of elements in the array whose absolute difference is `x`, otherwise, return `-1`.

Example 1:

Input:

`n = 6`

`x = 78`

`arr[] = {5, 20, 3, 2, 5, 80}`

Output:

`1`

Explanation:

Pair (2, 80) have absolute difference of 78.

Example 2:

Input:

`n = 5`

`x = 45`

`arr[] = {90, 70, 20, 80, 50}`

Output:

`-1`

Explanation:

There is no pair with absolute difference of 45.

Your Task:

You need not take input or print anything. Your task is to complete the

function findPair() which takes integers n, x, and an array arr[] as input parameters and returns 1 if the required pair exists, return -1 otherwise.

Expected Time Complexity: $O(n * \log(n))$.

Expected Auxiliary Space: $O(1)$.

Constraints:

$1 \leq n \leq 10^6$

$1 \leq \text{arr}[i] \leq 10^6$

$0 \leq x \leq 10^5$

Solution:

```
class Solution {
    public int findPair(int n, int x, int[] arr) {
        Arrays.sort(arr);
        int i = 0, j = 1;

        while (i < n && j < n) {
            if (i != j && arr[j] - arr[i] == x) {
                return 1;
            } else if (arr[j] - arr[i] < x) {
                j++;
            } else {
                i++;
            }
        }

        return -1;
    }
}
```