

<https://course.acciojob.com/idle?question=0b474ed5-9d42-4b71-bbb7-7424d139805c>

● MEDIUM

● Max Score: 40 Points

●

DiffK

Given an array A of sorted integers and another non negative integer k , find if there exists 2 indices i and j such that $A[i] - A[j] = k$, $i \neq j$.

Note: Try doing this in less than linear space complexity.

You have to complete `diffPossible` function which contains array A and integer K or B (given difference) as inputs and you have to return integer output as 1 or 0.

Input Format

First line contains a number n which denotes the size of the array.

Second line will contain n spaced separated elements of array A

Third line will contain a non-negative integer k .

Output Format

Print 0 or 1 (i.e. 0 for false, 1 for true) for this problem.

Example 1:

Input

```
3
1 3 5
4
```

Output

1

Explanation

As $5 - 1 = 4$

Example 2:

Input

5
1 3 5 6
7

Output

0

Explanation

There is no pair whose difference is equal to 7.

Constraints

$2 \leq A.length \leq 10^4$

$-10^9 \leq A[i] \leq 10^9$

$-10^9 \leq k \leq 10^9$

Topic Tags

- 2-Pointers
- Arrays

My code

```
// n java
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
    public static void main (String[] args) throws
java.lang.Exception
    {
        //your code here
        Scanner s=new Scanner(System.in);
        int n=s.nextInt();
        int arr[]=new int[n];
        for(int i=0;i<n;i++)
        {
            arr[i]=s.nextInt();
            int k=s.nextInt();
            int a=1,b=0;
            for(int i=0;i<n-1;i++)
            for(int j=i+1;j<n;j++)
            {
                if(arr[j]-arr[i]==k) { System.out.print("1");return;}

            }
            System.out.print("0");
        }
    }
}
```

