Dashbo... / My cour... / CS23331-DAA-2023-... / Competitive Program... / 5-Pair with Difference-O(n^2)Time Complexity,O(1) Space Com...

Started on	Wednesday, 20 November 2024, 6:14 PM
State	Finished
Completed on	Wednesday, 20 November 2024, 7:14 PM
Time taken	59 mins 55 secs
Marks	1.00/1.00
6	4.00 - 1 - (4.00 /400//)

Grade 4.00 out of 4.00 (**100**%)

```
Question 1
Correct
Mark 1.00 out of 1.00
```

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[j] - A[i] = k, i!=j. Input Format:

First Line n - Number of elements in an array

Next n Lines - N elements in the array

k - Non - Negative Integer

Output Format:

1 - If pair exists

0 - If no pair exists

Explanation for the given Sample Testcase:

YES as 5 - 1 = 4

So Return 1.

For example:

Input	Result
3	1
1 3 5	
4	

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
2
   int main()
3 ▼ {
4
        int n,a[20],k,f=0;
5
        scanf("%d",&n);
        for(int i=0;i<n;i++)</pre>
6
7
        {
8
             scanf("%d",&a[i]);
9
        }
         scanf("%d",&k);
10
11
        for(int i=0;i<n;i++)</pre>
12
13
             for(int j=i+1;j<n;j++)</pre>
14
15
                  if(a[j]-a[i]==k)
16
                  {
17
                      f=1;
18
19
             }
20
21
         if(f==0)
22
        {
23
             printf("0");
24
25
        }
26
        else
27
        {
28
             printf("1");
29
        }
30
   }
```

	Input	Expected	Got	
~	3 1 3 5 4	1	1	~
*	10 1 4 6 8 12 14 15 20 21 25 1	1	1	~
~	10 1 2 3 5 11 14 16 24 28 29 0	0	0	~
~	10 0 2 3 7 13 14 15 20 24 25 10	1	1	~

Passed all tests! 🗸

Correct

Marks for this submission: 1.00/1.00.

◄ 4-Print Intersection of 2 sorted arrays-O(m+n)Time Complexity,O(1) Space Complexity

Jump to...

6-Pair with Difference -O(n) Time Complexity,O(1) Space Complexity ►