

Started on Monday, 3 November 2025, 9:25 PM

State Finished

Completed on Monday, 3 November 2025, 9:30 PM

Time taken 4 mins 29 secs

Marks 1.00/1.00

Grade **10.00** out of 10.00 (**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 $A[j] - A[i] = k$, $i \neq j$.

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 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n;
5     scanf("%d",&n);
6     int arr[n];
7     for(int i=0;i<n;i++)
8     {
9         scanf("%d",&arr[i]);
10    }
11    int x;
12    scanf("%d",&x);
13    int i=0,j=0;
14    int found=0;
15    while(i<n && j<n)
16    {
17        if(i!=j && (arr[j]-arr[i]==x))
18        {
19            found=1;
20            break;
21        }
22        else if(arr[j]-arr[i]<x)
23        {
24            j++;
25        }
26        else
27        {
28            i++;
29        }
30    }
31    printf("%d",found);
32 }
```

	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.