

Started on Saturday, 1 November 2025, 8:03 PM

State Finished

Completed on Saturday, 1 November 2025, 8:14 PM

Time taken 11 mins 24 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     int n,k;
4     scanf("%d",&n);
5     int arr[n];
6     for(int i=0;i<n;i++){
7         scanf("%d",&arr[i]);
8     }
9     scanf("%d",&k);
10    int i=0,j=1;
11    int found=0;
12    while(i<n && j<n){
13        int diff = arr[j] - arr[i];
14        if(diff == k && i!=j){
15            found = 1;
16            break;
17        }else if(diff < k){
18            j++;
19        }else{
20            i++;
21        }
22    }
23    printf("%d\n",found);
24    return 0;
25 }
```

	Input	Expected	Got	
✓	3 1 3 5 4	1	1	✓

	Input	Expected	Got	
✓	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.