

Started on	Saturday, 1 November 2025, 8:20 PM
State	Finished
Completed on	Saturday, 1 November 2025, 8:33 PM
Time taken	12 mins 55 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 3 5 4	1

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         }
18         else if(diff<k)
19             j++;
20         else
21             i++;
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.