

Started on Thursday, 30 October 2025, 8:49 AM

State Finished

Completed on Thursday, 30 October 2025, 9:01 AM

Time taken 12 mins 25 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  {
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=1;
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             i++;
28         }
29     }
30     printf("%d",found);
31     return 0;
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.