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Status	Finished
Started	Saturday, 19 April 2025, 9:34 AM
Completed	Saturday, 19 April 2025, 9:47 AM
Duration	12 mins 42 secs
Marks	1.00/1.00
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 $A[j] - A[i] = k$, $i \neq j$.

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,c=0;
4      scanf("%d",&n);
5      int a[n];
6      for(int i=0;i<n;i++){
7          scanf("%d",&a[i]);
8      }
9      scanf("%d",&k);
10     for(int i=n-1;i>=0;i--){
11         for(int j=0;j<n;j++){
12             if(a[i]-a[j]==k && k!=0){
13                 c=1;
14                 break;
15             }
16         }
17     }
18     printf("%d",c);
19 }
```

	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	✓

	Input	Expected	Got	
✓	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

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