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<b>Started on</b>	Sunday, 10 November 2024, 7:53 PM
<b>State</b>	Finished
<b>Completed on</b>	Sunday, 10 November 2024, 8:01 PM
<b>Time taken</b>	7 mins 34 secs
<b>Marks</b>	1.00/1.00
<b>Grade</b>	<b>4.00</b> out of 4.00 ( <b>100%</b> )

## 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 a[n];
6      for(int i=0;i<n;i++){
7          scanf("%d",&a[i]);
8      }
9      scanf("%d",&k);
10     int flag=0;
11     for(int i=0;i<n;i++){
12         for(int j=0;j<n;j++){
13             if(i==j){
14                 continue;
15             }
16             else if(a[i]-a[j]==k || a[j]-a[i]==k){
17                 flag=1;
18                 break;
19             }
20         }
21     }
22     if(flag){
23         break;
24     }
25 }
26 printf("%d",flag);
27 }
```

	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.

[◀ 4-Print Intersection of 2 sorted arrays- \$O\(m+n\)\$ Time Complexity, \$O\(1\)\$  Space Complexity](#)

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