

Vedhavyas Pavankalyan G L 2023-IT-A**V2****Started on** Sunday, 19 October 2025, 5:56 PM**State** Finished**Completed on** Sunday, 19 October 2025, 5:57 PM**Time taken** 14 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
1 3 5	
4	

Answer: (penalty regime: 0 %)

```

1 #include <stdio.h>
2
3 int main() {
4     int n;
5     scanf("%d", &n);
6     int a[n];
7     for (int i = 0; i < n; i++)
8         scanf("%d", &a[i]);
9     int k;
10    scanf("%d", &k);
11    int i = 0, j = 1;
12    while (i < n && j < n) {
13        int diff = a[j] - a[i];
14        if (i != j && diff == k) {
15            printf("1");
16            return 0;
17        } else if (diff < k)
18            j++;
19        else
20            i++;
21    }
22    printf("0");
23    return 0;
24 }
```

	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.

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