PL-2020-C-Check pair with difference k

locked

Problem Submissions Leaderboard Discussions

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[i] - A[j] = k, i != j.

Input Format

1. First line is number of test cases T. Following T lines contain:
2. N, followed by N integers of the array
3. The non-negative integer k

Constraints

-

Output Format

Print 1 if such a pair exists and 0 if it doesn't.

Sample Input 0

```
1
3 1 3 5
4
```

Sample Output 0

```
1
```

Sample Input 1

```
1
3 1 3 5
99
```

Sample Output 1

```
0
```

Submissions: 950
Max Score: 100

Difficulty: Medium

Rate This Challenge:

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C

```c
#include <stdio.h>
#include <string.h>
#include <math.h>
#include <stdlib.h>

int checkpair(int* A, int N, int k)
{
  for (int i = 0; i < N; i++) {
    for (int j = 0; j < N; j++) {
      if (i != j && A[i] - A[j] == k) {
        return 1;
      }
    }
  }
  return 0;
}

int main() {
  int T;
  scanf("%d",&T);
  for (int i = 0; i < T; i++) {
    int N;
    scanf("%d",&N);
    int A[N];
    for (int j = 0; j < N; j++) {
      scanf("%d", &A[j]);
    }
    int k;
    scanf("%d",&k);
    if(checkpair(A,N,k)){
        printf("1\n");
    }
    else{
        printf("0\n");
    }

   }
   return 0;
  }
```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code