**Sum equals to Sum**

Submissions: [5623](https://practice.geeksforgeeks.org/problem_submissions.php?pid=2078)  Accuracy:

41.83%

   Difficulty: [Easy](https://practice.geeksforgeeks.org/Easy/0/0/)   Marks: 2

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Given an array **A** of distinct integers. The task is to find if there are two pairs (a, b) and (c, d) such that a+b = c+d, and elements of array are distinct.

**Input:**  
First line consists of T test cases. First line of every test case consists of N, denoting the number of elements of array. Second line of every test case consists of elements of array.

**Output:**  
Singple line output, print the 1 if pair exsits else 0.

**Constraints:**  
1 <= T <= 200  
1 <= N <= 105  
1 <= Ai <= 106

**Example:  
Input:**  
2  
7  
3 4 7 1 2 9 8  
7  
65 30 7 90 1 9 8  
**Output:**  
1  
0  
**Explanation:  
Testcase 1:** **(3, 7)** and **(9, 1)** are the pairs whose sum are equal.

\*\* For More Input/Output Examples Use ['Expected Output'](https://practice.geeksforgeeks.org/problems/sum-equals-to-sum/0#ExpectOP) option \*\*

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<https://practice.geeksforgeeks.org/problems/sum-equals-to-sum/0>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp1

{

class Program

{

static int ContienePares(int[] arr)

{

Dictionary<int, int> dic = new Dictionary<int, int>();

for(int i =0; i<arr.Length-1; i++)

{

for(int j = i+1; j<arr.Length; j++)

{

if (dic.ContainsKey(arr[i] + arr[j]))

{

dic[arr[i] + arr[j]]++;

if (dic[arr[i] + arr[j]] > 1) return 1;

}

else

{

dic[arr[i] + arr[j]] = 1;

}

}

}

//foreach(KeyValuePair<int,int> kvp in dic)

//{

// if (kvp.Value > 1) return 1;

//}

return 0;

}

static void Main(string[] args)

{

int t = int.Parse(Console.ReadLine());

while ( t-- > 0)

{

int n = int.Parse(Console.ReadLine());

int[] arr = Array.ConvertAll(Console.ReadLine().Trim().Split(' '), e => int.Parse(e));

Console.WriteLine(ContienePares(arr));

}

Console.ReadLine();

}

}

}