**Triplet Sum in Array**

Submissions: [16566](https://practice.geeksforgeeks.org/problem_submissions.php?pid=732)  Accuracy:

34.9%

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

Show Topic Tags   

[Accolite](https://practice.geeksforgeeks.org/company/Accolite/)[Amazon](https://practice.geeksforgeeks.org/company/Amazon/)[CarWale](https://practice.geeksforgeeks.org/company/CarWale/)[OYO Rooms](https://practice.geeksforgeeks.org/company/OYO%20Rooms/)[Samsung](https://practice.geeksforgeeks.org/company/Samsung/)

Given an array A[] of n numbers and another number x, determine whether or not there exist three elements in A[] whose sum is exactly x.

Expected time complexity is O(n^2).

**Input:**

The first line of input contains an integer T denoting the number of test cases.  
The first line of each test case is n and x, n is the size of array.  
The second line of each test case contains n integers representing array elements C[i].  
  
**Output:**

Print 1 if there exist three elements in A whose sum is exactly x, else 0.

**Constraints:**

1 ≤ T ≤ 100  
1 ≤ N ≤ 200  
1 ≤ A[i] ≤ 1000  
  
**Example:**

**Input:**  
2  
6 13  
1 4 45 6 10 8  
5 10  
1 2 4 3 6

**Output:**  
1  
1

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

[Author: kartik](https://auth.geeksforgeeks.org/user/kartik/practice/)

<https://practice.geeksforgeeks.org/problems/triplet-sum-in-array/0>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp1

{

class Program

{

static int ContieneSum(int[] arr, int x)

{

Dictionary<int, int> diccio =

new Dictionary<int, int>();

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

{

diccio[arr[i]] = i;

}

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

{

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

{

int resto = x - (arr[i] + arr[j]);

if (diccio.ContainsKey(resto))

{

if (diccio[resto] != i && diccio[resto] != j)

{

Console.WriteLine(arr[i] + " " + arr[j] + " " + resto);

return 1;

}

}

}

}

return 0;

}

static void Main(string[] args)

{

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

while (t-- > 0)

{

string[] input = Console.ReadLine().Trim().Split(' ');

int n = int.Parse(input[0]);

int x = int.Parse(input[1]);

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

Console.WriteLine(ContieneSum(C, x));

}

//int[] arr = { 1, 4, 45, 6, 10, 8 };

//Console.WriteLine(ContieneSum(arr, 13));

Console.ReadLine();

}

}

}