**Key Pair**

Submissions: [44269](https://practice.geeksforgeeks.org/problem_submissions.php?pid=552)  Accuracy:

27.56%

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

Associated Course(s): [Interview Preparation](https://practice.geeksforgeeks.org/courses/interview-preparation/)

Show Topic Tags   

[Amazon](https://practice.geeksforgeeks.org/company/Amazon/)[CarWale](https://practice.geeksforgeeks.org/company/CarWale/)[Flipkart](https://practice.geeksforgeeks.org/company/Flipkart/)[Microsoft](https://practice.geeksforgeeks.org/company/Microsoft/)

Given an array **A** of **N** positive integers and another number **X**. Determine whether or not there exist two elements in A whose sum is exactly X.

**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 A[i].

**Output:**  
Print "**Yes**" if there exist two elements in A whose sum is exactly X, else "**No**" (without quotes).

**Constraints:**  
1 ≤ T ≤ 100  
1 ≤ N ≤ 105  
1 ≤ A[i] ≤ 105

**Example:  
Input:**  
2  
6 16  
1 4 45 6 10 8  
5 10  
1 2 4 3 6

**Output:**  
Yes  
Yes

**Explanation:  
Testcases 1:** 10 and 6 are numbers making a pair whose sum is equal to 16.

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

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

<https://practice.geeksforgeeks.org/problems/key-pair/0>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp3

{

class Program

{

static string Contiene(int[] arr, int X)

{

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

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

{

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

{

dic[arr[i]]++;

}

else

{

dic[arr[i]] = 1;

}

if (dic.ContainsKey(X - arr[i]))

{

if (X - arr[i] == arr[i])

{

if (dic[arr[i]] > 1)

{

return "Yes";

}

}

else if (X - arr[i] != arr[i])

{

return "Yes";

}

}

}

return "No";

}

static void Main(string[] args)

{

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

//Console.WriteLine(Contiene(arr, 16));

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

while (t-- > 0)

{

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

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

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

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

Console.WriteLine(Contiene(arr, X));

}

Console.ReadLine();

}

}

}