**Find distinct elements**

Submissions: [1501](https://practice.geeksforgeeks.org/problem_submissions.php?pid=2156)  Accuracy:

19.78%

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

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Given a **N** x**N** matrix. Write a program to find count of all the distinct elements common to all rows of the matrix. Print count of such elements.

**Input:**  
First line of input contains a single integer T which denotes the number of test cases. T test cases follows. First line of each test case contains a single integer N which denotes the dimension of matrix. Second line of each test case contains N\*N space separated integers which denotes elements of the matrix.

**Output:**  
For each test case, print count of all the distinct elements common to all rows of the matrix.

**Constraints:**  
1 <= T <= 100  
1 <= N <= 1000

**Example:  
Input:**  
2  
4  
2 1 4 3 1 2 3 2 3 6 2 3 5 2 5 3  
5  
12 1 14 3 16 14 2 1 3 35 14 1 14 3 11 14 25 3 2 1 1 18 3 21 14

**Output:**  
2  
3

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

Contributor: Harsh Agarwal  
[Author: harsh.agarwal0](https://auth.geeksforgeeks.org/user/harsh.agarwal0/practice/)

<https://practice.geeksforgeeks.org/problems/find-distinct-elements/0>

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp1

{

class Program

{

static void CommonInRows(int[][] m, int N)

{

List<HashSet<int>> lista = new List<HashSet<int>>();

for(int i =0; i<N; i++)

{

HashSet<int> fila = new HashSet<int>();

for(int j =0; j<N; j++)

{

fila.Add(m[i][j]);

}

lista.Add(fila);

}

//for(int i =0; i<lista.Count; i++)

//{

// foreach(int item in lista[i])

// {

// Console.Write(item + " ");

// }

// Console.WriteLine();

//}

//List<int> ans = new List<int>();

int ans = 0;

HashSet<int> primera = new HashSet<int>(m[0]);

foreach (int item in primera)

{

//int x = m[0, i];

bool contiene = true;

for (int j = 1; j < lista.Count; j++)

{

if (!lista[j].Contains(item))

{

contiene = false;

break;

}

}

if (contiene)

{

//ans.Add(item);

ans++;

}

}

Console.WriteLine(ans);

//foreach (int item in ans)

//{

// Console.Write(item + " ");

//}

}

static void Main(string[] args)

{

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

while (t-- > 0)

{

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

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

//int[] a = Array.ConvertAll("2 1 4 3 1 2 3 2 3 6 2 3 5 2 5 3".Trim().Split(' '), e => int.Parse(e));

//int N = 4;

int[][] matriz = new int[N][];

int indice = 0;

for (int i = 0; i < N; i++)

{

matriz[i] = new int[N];

for (int j = 0; j < N; j++)

{

matriz[i][j] = a[indice++];

}

}

CommonInRows(matriz, N);

}

Console.ReadLine();

}

}

}