793. Intersection of Arrays

* [Description](http://www.lintcode.com/en/problem/intersection-of-arrays/#description)
* [Notes](http://www.lintcode.com/en/problem/intersection-of-arrays/#note)
* [Testcase](http://www.lintcode.com/en/problem/intersection-of-arrays/#testcase)
* [Judge](http://www.lintcode.com/en/problem/intersection-of-arrays/#judge)

Give a number of arrays, find their intersection, and output their intersection size.

 Notice

* The total number of all array elements is not more than 500000.
* There are no duplicated elements in each array.

Have you met this question in a real interview?

Yes

**Example**

Given [[1,2,3],[3,4,5],[3,9,10]], return 1

explanation:

Only element 3 appears in all arrays, the intersection is [3], and the size is 1.

Given [[1,2,3,4],[1,2,5,6,7][9,10,1,5,2,3]], return 2

explanation:

Only element 1,2 appear in all arrays, the intersection is [1,2], the size is 2.

[http://www.lintcode.com/en/problem/intersection-of-arrays/#](http://www.lintcode.com/en/problem/intersection-of-arrays/)

public static int intersectionOfArrays(int[][] arrs) {

// write your code here

int ans =0;

List<List<Integer> > lista =

new ArrayList();

for(int i =0; i<arrs.length; i++) {

List<Integer> fila = new ArrayList();

for(int j =0; j<arrs[i].length; j++) {

fila.add(arrs[i][j]);

}

lista.add(fila);

}

for(int col =0; col < lista.get(0).size(); col ++) {

int actual = lista.get(0).get(col);

boolean todos = true;

for(List<Integer> aux : lista)

{

if (!aux.contains(actual))

{

todos = false;

break;

}

}

if (todos)

{

ans++;

}

}

return ans;

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApp57

{

class Program

{

public static int intersectionOfArrays(int[][] arrs)

{

// write your code here

int ans = 0;

List<List<int>> lista =

new List<List<int>>();

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

{

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

for (int j = 0; j < arrs[i].Length; j++)

{

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

}

lista.Add(fila);

}

for (int col = 0; col < lista[0].Count; col++)

{

int actual = lista[0][col];

bool todos = true;

foreach(List<int> aux in lista)

{

if (!aux.Contains(actual))

{

todos = false;

break;

}

}

if (todos)

{

ans++;

}

}

return ans;

}

static void Main(string[] args)

{

int[][] matriz = { new int[] { 1, 2, 3 }, new int[] { 3, 4, 5 }, new int[] { 3, 9, 10 } };

Console.WriteLine(intersectionOfArrays(matriz));

Console.ReadLine();

}

}

}