548. Intersection of Two Arrays II

* [Description](http://lintcode.com/en/problem/intersection-of-two-arrays-ii/" \l "description)
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Given two arrays, write a function to compute their intersection.

 Notice

* Each element in the result should appear as many times as it shows in both arrays.
* The result can be in any order.

Have you met this question in a real interview?

Yes

**Example**

Given *nums1* = [1, 2, 2, 1], *nums2* = [2, 2], return [2, 2].

<http://lintcode.com/en/problem/intersection-of-two-arrays-ii/>

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package javaapplication1;

import java.util.\*;

public class JavaApplication1 {

public static int[] intersection(int[] nums1, int[] nums2) {

// write your code here

HashMap<Integer, Integer> a = new HashMap();

for(int i =0; i<nums1.length; i++) {

if(a.containsKey(nums1[i])) {

a.put(nums1[i], a.get(nums1[i])+1 );

} else {

a.put(nums1[i], 1 );

}

}

HashMap<Integer, Integer> b = new HashMap();

for(int i =0; i<nums2.length; i++) {

if(b.containsKey(nums2[i])) {

b.put(nums2[i], b.get(nums2[i])+1 );

} else {

b.put(nums2[i], 1 );

}

}

List<Integer> lista =

new ArrayList<>();

for (Map.Entry<Integer, Integer> entry : a.entrySet()) {

// System.out.println("clave=" + entry.getKey() + ", valor=" + entry.getValue());

if(b.containsKey(entry.getKey())) {

int key = entry.getKey();

for(int i =0; i<Math.min(a.get(key), b.get(key)); i++) {

lista.add(key);

}

//lista.add(entry.getKey());

}

}

int[] res = new int[lista.size()];

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

res[i] = lista.get(i);

}

return res;

}

public static void main(String[] args) {

// TODO code application logic here

int[] nums1 = {1,2,2,1};

int[] nums2 = {2,2};

for(int elem : intersection(nums1, nums2) ) {

System.out.print(elem + " ");

}

}

}