**Two Repeated Elements**

[array](http://www.practice.geeksforgeeks.org/tag-page.php?tag=array&isCmp=0)

You are given an array of N+2 integer elements. All elements of the array are in range 1 to N. And all elements occur once except two numbers which occur twice. Find the two repeating numbers.

**Input:**  
The first line of the input contains an integer T, denoting the total number of test cases. Then T test cases follow Each test case consists of two lines. First line of each test case contains an integer N denoting the range of numbers to be inserted in array of size N+2. Second line of each test case contains the N+2 space separated integers denoting the array elements.  
  
**Output:**Print the two elements occuring twice in the array. Order of the two elements must be preserved as in the original list.  
  
**Constraints:**  
1 ≤ T ≤ 30  
1 ≤ N ≤ 100  
  
**Example:**

**INPUT**  
1  
4  
1 2 1 3 4 3  
**OUTPUT**  
1 3

\*\*For More Examples Use Expected Output\*\*

<http://www.practice.geeksforgeeks.org/problem-page.php?pid=763#comment-2718170631>

**import** java.util.\*;

**import** java.lang.\*;

**import** java.io.\*;

**class** GFG {

**public** **static** **void** main(String[] args) {

*// TODO code application logic here*

        Scanner sc = **new** Scanner(System.in);

**int** t = Integer.parseInt(sc.nextLine());

**while**(t-- > 0) {

**int** n = Integer.parseInt(sc.nextLine());

*// String[] input =  "12 5 15 17 4 1 2 9 13 16 3 7 6 10 14 11 4 19 8 18 2".split(" ");//     sc.nextLine().split(" ");*

*//String[] input =  "1 2 2 1".split(" ");*

            String[] input = sc.nextLine().split(" ");

*//int[] arr = new int[n+2];*

            ArrayList<Integer> lista = **new** ArrayList<Integer>();

**for**(**int** i =0; i < n+2; i++) {

*// arr[i] = Integer.parseInt(input[i]);*

                lista.add(Integer.parseInt(input[i]));

            }

*/\*for(int i =0; i < n+2; i++) {*

*System.out.print(arr[i] + " ");*

*}\*/*

            HashMap<Integer, Integer> hm = **new** HashMap<Integer, Integer>();

**for**(**int** i =0; i < n+2; i++) {

**if**(hm.containsKey(lista.get(i))) {

                    hm.put(lista.get(i), hm.get(lista.get(i)) + 1);

                } **else** {

                    hm.put(lista.get(i), 1);

                }

            }

            ArrayList<Integer> ans = **new** ArrayList<Integer>();

**int** i=0;

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

                Integer key = entry.getKey();

                Integer value = entry.getValue();

**if**(value > 1) {

*//System.out.print(key + " ");*

*//ans[i]=key;*

*//i++;*

                    ans.add(key);

                }

*//System.out.println(key + " " + value);*

*// ...*

            }

*//System.out.println(ans.size());*

*//System.out.println(ans.get(0) + " "+ ans.get(1));*

            //ver cual se repite primero

//1 2 2 1 ¿ por qué es 2 1 en lugar de 1 2 ¿

//porque leyendo de izquierda a derecha el 2 se repite primero

**int** a = lista.lastIndexOf(ans.get(0));

**int** b = lista.lastIndexOf(ans.get(1));

**if**(a < b) {

                System.out.println(ans.get(0) + " " + ans.get(1));

            }**else**{

                System.out.println(ans.get(1) +  " " + ans.get(0));

            }

        }

    }

}