https://course.acciojob.com/idle?question=0b7eb158-d439-4415-bbae-fe874f3437a2

- EASY
- Max Score: 20 Points

Find All Duplicates in an Array

Given an integer array `nums` of length `n` where all the integers of `nums` are in the range `[1, n]` and each integer appears once or twice.

Return an array of all the integers that appears twice.

You must write an algorithm that runs in O(n) time and uses only constant extra space."

Input Format

The first line contains a single integer `n` (size of the array)

Second line contains n-spaced integers representing the array

Output Format

Print all the elements that appear twice in a sorted manner

Example 1

Input

```
8
4 3 2 7 8 2 3 1
```

Output

```
2 3
```

Explanation

2 and 3 are only the elements that are repeated twice

Example 2

Input

```
3
1 1 2
```

Output

```
1
```

Explanation

Only 1 is repeated twice

Constraints

```
1 <= n <= 10^5
```

```
0 <= arr[i] <= 10^9
```

Topic Tags

- **Arrays**

My code

```
// in java
import java.util.*;
import java.lang.*;
import java.io.*;
```

```
public class Main
{
	public static void main (String[] args) throws java.lang.Exception
	{
		//your code here
		HashMap<Integer,Integer>hm=new HashMap<>();

		Scanner s=new Scanner(System.in);
		int n=s.nextInt();
		int arr[]=new int[n];
			 int a[]=new int[n+1];
		for(int i=0;i<n;i++)
			arr[i]=s.nextInt();
		Arrays.sort(arr);
		for(int i=0;i<n;i++)
			hm.put(arr[i],hm.getOrDefault(arr[i],0)+1);
		 for(int i=0;i<n;i++)
			{
                                        if(hm.containsKey(arr[i]))
                                        {
                                              if(hm.get(arr[i])>1)
                                               {

System.out.print(arr[i]+" ");
                                                        hm.remove(arr[i]);
                                               }
                                        }

			}

	}
}
```