https://course.acciojob.com/idle?question=9c6f4b13-2afe-4896-8a55-bd00718cd318

- EASY
- Max Score: 30 Points

Exceptionally Odd

You are given an array `arr` of `n` positive integers where all numbers occur an even number of times except one number which occurs an odd number of times. Find the exceptional number which occurs an odd number of times.

Input Format

line 1: contains an integer `n` denoting the size of the array `arr`.

line 2: contains `n` spaced integers denoting elements of the array `arr`.

Output Format

Print a single integer denoting the element which occurs an odd number of times.

Example 1

Input

```
7
1 2 3 2 3 1 3
```

Output

```
3
```

Explanation In the array, except 3, every other element is present an even number of times. So 3 will be the exceptional number.

Example 2

Input

```
5
10 10 2 2 7
```

Output

```
7
```

Constraints

1<=n<=10^5

1<=arr[i]<=10^6

Topic Tags

- **Bit Manipulation**

My code

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

class Solution {
    public void exceptionalElement(int[]A,int n) {
        //Write code here and print output
            HashMap<Integer,Integer>hm=new HashMap<>();
            for(int i=0;i<A.length;i++)
                    {
                            hm.put(A[i],hm.getOrDefault(A[i],0)+1);
                    }
```

```
        for(int i:hm.keySet())
                {
                        if(hm.get(i)%2 !=0)
                                System.out.print(i);
                }
    }
}

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n;
        n = sc.nextInt();
        int[] A = new int[n];
        for (int i = 0; i < n; i++)
                A[i] = sc.nextInt();
        Solution Obj = new Solution();
        Obj.exceptionalElement(A,n);
        sc.close();
    }
}
```