https://course.acciojob.com/idle?question=80705e86-341b-4e37-92e5-6c828e51c5be

- EASY
- Max Score: 30 Points

0-1 Sorting

You are given an array arr of length `n` containing only `0's` and `1's`. Your task is to segregate all the `0's` to the left of the array and all the `1's` to the right of the array.

Input Format

The first line of input contains an integer `n`, size of the array.

The next line contains `n` space seperated integers(0 or 1) denoting the elements of the array.

Output Format

Print n space seperated integers denoting the segregated array.

Example 1

Input

```
15
0 0 0 1 1 1 1 0 1 1 0 0 1 0 1
```

Output

```
0 0 0 0 0 0 0 1 1 1 1 1 1 1 1
```

Explanation

We have arr = [0 0 0 1 1 1 1 0 1 1 0 0 1 0 1]

Moving all the 0's in the beginning and all the 1's at the end.

The final segregated array is [0 0 0 0 0 0 0 1 1 1 1 1 1 1 1]

Example 2

Input

```
6
1 0 1 0 1 1
```

Output

```
0 0 1 1 1 1
```

Explanation

The sorted array is [0 0 1 1 1 1]

Constraints

1 <= n <= 10^6

0 <= arr[i] <= 1

Topic Tags

- **2-Pointers**
- **Sorting**
- **Arrays**

My code

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

public class Main {
        static int[] Sorting01(int n,int[] arr){
       // Your code here
                int ar[]=new int[n];
                int t=0;
                for(int i=0;i<n;i++)
                        if(arr[i]==0)
                                ar[t++]=arr[i];
                 for(int i=0;i<n;i++)
                        if(arr[i]!=0)
                                ar[t++]=arr[i];
                return ar;
    }
```

```
    public static void main(String[] args) throws Throwable {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int arr[] = new int[n];
        for(int i=0;i<n;++i){
            arr[i] = sc.nextInt();
        }
        int[] ans=Sorting01(n,arr);
        for(int i=0;i<n;++i){
            System.out.print(ans[i] + " ");
        }
    }
}
```