1.

```java
import java.util.Scanner;

public class assign {

    static void sort012(int arr[], int n)
    {
        int a=0, b=0, c=0;
        for(int i=0;i<n;i++)
        {
            if(arr[i]==0) a++;
            else if(arr[i]==1) b++;
            else c++;
        }

        int i=0;

        while(a>0)
        {
            arr[i++]=0;
            a--;
        }

        while(b>0)
        {
            arr[i++]=1;
```

```java
            b--;
        }


        while(c>0)
        {
            arr[i++]=2;
            c--;
        }
    }
    public static void main(String[] args) {

        Scanner scan=new Scanner(System.in);

        int n=scan.nextInt();

        int[] arr=new int[n];

        for(int i=0;i<n;i++)
        {
            arr[i]=scan.nextInt();
        }

        sort012(arr, n);

        for(int i=0;i<n;i++)
        {
```

```java
            System.out.println(arr[i]+" ");
        }


    }
}
```

2.

```java
import java.util.Scanner;


public class assign {


    static int MissingNumber(int arr[], int n)
    {
        int sum=0;


        for(int i=0;i<n;i++)
        {
            sum+=arr[i];
        }


        return (n*(n+1)/2)-sum;
    }
    public static void main(String[] args) {


        Scanner scan=new Scanner(System.in);


        int n=scan.nextInt();
```

```java
        int[] arr=new int[n];

        for(int i=0;i<n;i++)
        {
            arr[i]=scan.nextInt();
        }

        int ans=MissingNumber(arr, n);

        System.out.println(ans);

    }
}
```

3.
```java
import java.util.Scanner;

public class assign {

    static int majorityElement(int arr[], int n)
    {
        int count=0, ans=0;

        for(int i=0;i<n;i++)
        {
```

```java
            count=1;

            for(int j=i+1;j<n;j++)

            {

                if(arr[j]==arr[i]) count++;

            }

            if(count>(n/2)) ans=count;

        }


        return ans;

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

        Scanner scan=new Scanner(System.in);


        int n=scan.nextInt();


        int[] arr=new int[n];


        for(int i=0;i<n;i++)

        {

            arr[i]=scan.nextInt();

        }


        int ans=majorityElement(arr, n);


        System.out.println(ans);
```

```
    }
}
```