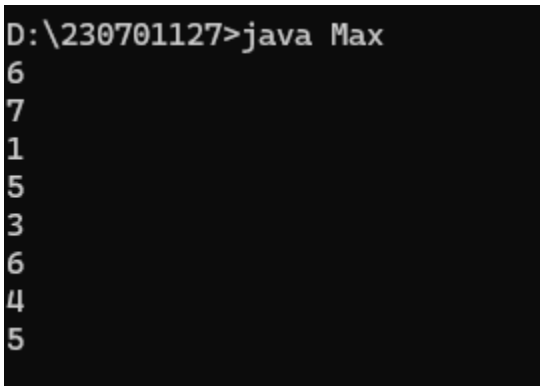
WEEK 2:

COUNT THE OCCURENCE:

```
import java.util.Scanner;

class Array {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);


        int n = sc.nextInt();

        int[] nums = new int[n];
        for (int i = 0; i < n; i++) {
            nums[i] = sc.nextInt();
        }


        int original = sc.nextInt();

                boolean found;

        do {
            found = false;
            for (int i = 0; i < n; i++) {
                if (nums[i] == original) {
                    original *= 2;  // Double the value of original
                    found = true;
                    break;              }
            }
        } while (found);

        System.out.println(original);
    }
}
```

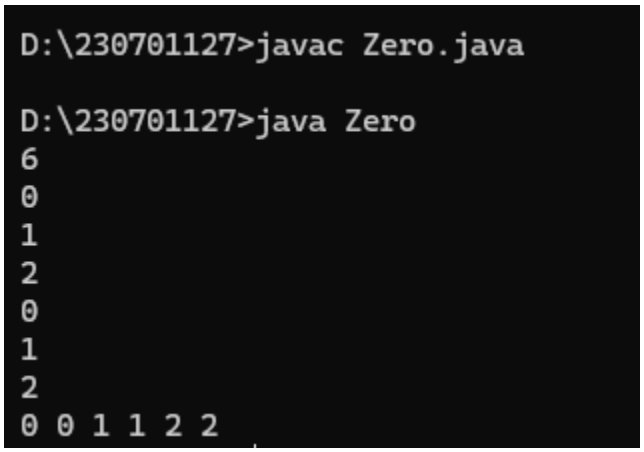
INVENTORY MANAGEMENT:

```
import java.util.*;
public class Max{3
public static void main(String[] args){
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 minPrice=arr[0];
int maxProfit=0;
for(int i=1;i<n;i++){
if(arr[i]<minPrice){
minPrice=arr[i];
}
else{
int profit=arr[i]-minPrice;
if(profit>maxProfit){
maxProfit=profit;
}
}
}
System.out.println(maxProfit);
}
}
```



SORT AN ARRAY OF 1’s,0’s and 2’s:

```
import java.util.*;
public class Zero{
public static void main(String[] args){
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();
}
Arrays.sort(arr);
for(int i:arr) System.out.printf("%d ",i);
}
}
```



FIND THE MISSING NUMBER PROGRAM:

```
import java.util.Scanner;
class Missing {
    public static void main(String[] args) {
        Scanner s = new Scanner(System.in);
        int n = s.nextInt();
        int arr[] = new int[n];
        for (int i = 0; i < n-1; i++) {
            arr[i] = s.nextInt();
        }
        int sum=0;
        for (int i = 0; i < n; i++) {
```

```
            sum=sum+arr[i];
        }
        int m=(n*(n+1))/2;
        int rem=m-sum;
        System.out.println(rem);
    }
}
```

```
D:\230701127>java Missing
5
1
3
4
5
2
```

MOVE ALL ZERO'S TO THE END OF THE ARRAY:

```
import java.util.Scanner;

class Zeros1 {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n = sc.nextInt();
        int arr[] = new int[n];
        int e;
        for (int i = 0; i < n; i++) {
            e = sc.nextInt();
            arr[i] = e;
        }

        int t = 0;
        int s = 0;
        int temp;
        for (int i = 0; i < n; i++) {
            if (arr[i] != t) {
                temp = arr[i];
```

```
            arr[i] = arr[s];
            arr[s] = temp;
            s++;
        }
    }


    for (int i = 0; i < n; i++) {
        System.out.print(arr[i] + " ");
    }
  }
}
```