import java.io.\*;

import java.util.Scanner;

import java.math.\*;

public class DemoJava {

    public static void main(String[] args) {

        int[] a;

        int n;

        Scanner scanner = new Scanner(System.in);

        System.out.println("Nhap n: ");

        n = scanner.nextInt();

        /\*khởi tạo mảng

         \*/

        a = new int[n];

        nhap(a,n);

        xuat(a,n);

        /\*In ra min max

         \*/

        System.out.println("Min: " + min(a,n));

        System.out.println("Max: " + max(a,n));

        /\*in so nguyen to ra màn hình

         \*/

        System.out.print("Cac so nguyen to la: ");

        for (int i=0;i<n;i++) {

            if (check(a[i])  )

                System.out.print(a[i] + " ");

        }

        System.out.println("");

        /\*\*gọi hàm sắp xếp

         \* in hàm sau khi sắp xếp

         \*/

        sapxep(a,n);

        xuat(a,n);

    }

    public static void nhap(int a[],int n){

        Scanner scanner = new Scanner(System.in);

        // tạo đối tượng scanner để nhập

        System.out.println("Moi nhap vao mang: ");

        for (int i=0;i<n;i++)

            a[i] = scanner.nextInt();

    }

    public static void xuat(int a[],int n){

        for (int i=0;i<n;i++)

            System.out.print(a[i] + " ");

        System.out.println(""); //dùng để xuống hàng

    }

    public static int min(int a[],int n){

        int min = a[0];

        for (int i=1;i<n;i++){

            if (a[i] < min)

                min = a[i];

        }

        return min;

    }

    public static int max(int a[],int n){

        int max = a[0];

        for (int i=1;i<n;i++){

            if (a[i] > max)

                max = a[i];

        }

        return max;

    }

    public static boolean check(int n){

        if(n<=1) return false;

        for (int i = 2;i<= Math.sqrt(n); i++)

            if(n%i==0) return false;

        //Nếu không chia hết thì trả về true

        return true;

    }

    public static void sapxep(int a[],int n){

        for (int i =0;i<n;i++)

            for (int j=0;j<n-1;j++){

                if (a[j] > a[j+1]){

                    int temp = a[j];

                    a[j] = a[i];

                    a[i] = temp;

                }

            }

    }

}