

```
import java.util.*;

public class Day4{

    static Scanner sc = new Scanner(System.in);

    public static void main(String[] args) {

        // TODO Auto-generated method stub


        int[] nums = {19, -13, 15, -12, -18, -16, 1, 3};

        Set1_Q1(nums);

        Set1_Q2();

        Set2_Q1();

        Set2_Q2();

    }

    public static void Set1_Q1(int[] nums) {

        int l = 0;

        int r = nums.length-1;

        while(l<r) {

            if(nums[l]<0) {

                l++;

            }

            else if(nums[r]>0) {

                r--;

            }

            else {

                int temp = nums[l];

                nums[l] = nums[r];

                nums[r] = temp;

            }

        }

    }

}
```

```

for (int i : nums) {
    System.out.print(i+" ");
}
System.out.println();
for(int i = 0 ; i<nums.length ; i++) {
    for(int j = 0 ; j < nums.length ; j++) {
        if(nums[i]<nums[j]) {
            int temp = nums[i];
            nums[i] = nums[j];
            nums[j] = temp;
        }
    }
}
for (int i : nums) {
    System.out.print(i+" ");
}
}

```

```

public static void Set1_Q2() {
    int[] nums = new int[5];
    boolean flag = false;
    for (int i = 0; i < nums.length; i++) {
        System.out.print("Enter "+(i+1)+" number: ");
        nums[i] = sc.nextInt();
    }
    System.out.print("Enter number to find: ");
    int key = sc.nextInt();
    int j;
}

```

```

        for (j = 0; j < nums.length; j++) {
            if(nums[j]==key) {
                flag = true;
                break;
            }
        }
        if(flag) {
            System.out.println("Element Found at "+j+" position in array");
        }
        else {
            System.out.println("Element Not Found");
        }
    }
}

public static void Set2_Q1() {
    int[] nums = new int[5];
    boolean flag = false;
    for (int i = 0; i < nums.length; i++) {
        System.out.print("Enter "+(i+1)+" number: ");
        nums[i] = sc.nextInt();
    }

    System.out.print("Enter number to find: ");
    int key = sc.nextInt();
    int l = 0;
    int r = nums.length-1;
    int mid = -1;
    while(l<=r) {
        mid = (l+r)/2;
        if(key<nums[mid]) {

```

```

        r = mid - 1;
    }
    else if(key>nums[mid]) {
        l = mid + 1;
    }
    else {
        flag=true;
        break;
    }
}
if(flag) {
    System.out.println("Element Found at "+mid+" position in array");
}
else {
    System.out.println("Element Not Found");
}
}

public static void Set2_Q2() {
    int[] nums = new int[10];
    for (int i = 0; i < nums.length; i++) {
        System.out.print("Enter "+(i+1)+" number: ");
        nums[i] = sc.nextInt();
    }
    int l = 0;
    int r = nums.length-1;
    while(l<r) {
        if(nums[l]%2==0) {
            l++;

```

```
    }  
    else if(nums[r]%2!=0) {  
        r--;  
    }  
    else {  
        int temp = nums[l];  
        nums[l] = nums[r];  
        nums[r] = temp;  
    }  
}  
for (int i : nums) {  
    System.out.print(i+" ");  
}  
System.out.println();  
}  
}
```