Main.java

Share Run

Output Clear

```java
public class sequentialSearch{
    public static int sequentialSearch(int[]arr,int target){
        for(int i=0;i<arr.length;i++){
            if(arr[i]==target){
                return i;
            }
        }
        return -1;
    }
    public static void main(String[]args){
        int[]arr={17,1,1,83,50,28,29,3,71,22};
        int target=29;
        int result=sequentialSearch(arr,target);
        if(result!=-1){
            System.out.println("Elements found at index "+result);
        }else{
            System.out.println("Elements not found in the array");
        }

    }
}
```

```
java -cp /tmp/ZdTOMO21Wc/sequentialSearch
Elements found at index 6

=== Code Execution Successful ===
```

Main.java

Share Run

```java
public class BinarySearch{
    public static int binarySearch(int[] arr,int target){
        int left=0;
        int right=arr.length-1;
        while(left<=right){
            int mid=left+(right-left)/2;
            if(arr[mid]==target){
                return mid;
            }
            if(arr[mid]<target){
                left=mid+1;
            }else{
                right=mid-1;
            }
        }
        return -1;
    }
    public static void main(String[]args){
        int []sortedArr={2,3,4,10,40,50,70,80,90};
        int target=10;
        int result=binarySearch(sortedArr,target);
        if(result==-1){
            System.out.println("Elements not present in the array");
        }else{
            System.out.println("Elements found at index:"+result);
        }
    }
}
```

Output Clear

```
java -cp /tmp/eOdJ3OJX6w/BinarySearch
Elements found at index:3

=== Code Execution Successful ===
```

Main.java

Share Run

```java
public class BubbleSort{
    public static void bubbleSort(int[] arr){
        int n=arr.length;
        boolean swapped;
        for(int i=0;i<n-1;i++){
            swapped=false;
            for(int j=0;j<n-1-i;j++){
                if(arr[j]>arr[j+1]){
                    int temp=arr[j];
                    arr[j]=arr[j+1];
                    arr[j+1]=temp;
                    swapped=true;
                }
            }
            if(!swapped) break;
        }
    }
    public static void printArray(int[] arr){
        for(int value : arr){
            System.out.print(value + " ");
        }
        System.out.println();
    }
    public static void main(String[] args){
        int[] arr={56,12,9,34,68};
        System.out.println("Unsorted array:");
        printArray(arr);
        bubbleSort(arr);
        System.out.println("Sorted array:");
        printArray(arr);
    }
```

Output

Clear

```
java -cp /tmp/jjviPZHcqT/BubbleSort
Unsorted array:
56 12 9 34 68
Sorted array:
9 12 34 56 68

=== Code Execution Successful ===
```

Main.java

Share Run

```java
public class SelectionSort{
    public static void selectionSort(int[] array){
        int n=array.length;
        for(int i=0;i<n-1;i++){
            int minIndex=i;
            for(int j=i+1;j<n;j++){
                if(array[j]<array[minIndex]){
                    minIndex=j;
                }
            }
            int temp=array[minIndex];
            array[minIndex]=array[i];
            array[i]=temp;
        }
    }
    public static void printArray(int[]array){
        int n=array.length;
        for(int i=0;i<n;i++){
            System.out.println(array[i]+" ");
        }
        System.out.println();
    }
    public static void main(String[]args){
        int[]array={66,22,12,9,36};
        System.out.println("Original array: ");
        printArray(array);
        selectionSort(array);
        System.out.println("sorted array: ");
        printArray(array);
    }
}
```

Output

Clear

```
java -cp /tmp/deFjd1NBeJ/SelectionSort
Original array:
66
22
12
9
36

sorted array:
9
12
22
36
66

=== Code Execution Successful ===
```