

```
import java.util.*;
```

```
public class merge {  
    public static void main(String args[]) {  
        Scanner scanner = new Scanner(System.in);  
        ArrayList<Integer> sum = new ArrayList<>();  
  
        System.out.print("Enter size: ");  
        int a=scanner.nextInt();  
  
        System.out.println("Enter " + a + " elements:");  
        for (int i = 0; i < a; i++) {  
            sum.add(scanner.nextInt());  
        }  
  
        System.out.print("Insert element: ");  
        int element = scanner.nextInt();  
  
        System.out.print("Insert at index: ");  
        int index = scanner.nextInt();  
  
        if (index >= 0 && index <= sum.size()) sum.add(index, element);  
        System.out.println("After insert: " + sum);  
  
        System.out.print("Delete index: ");  
        int delete = scanner.nextInt();  
        if (delete >= 0 && delete < sum.size()) sum.remove(delete);  
        System.out.println("After delete: " + sum);  
    }  
}
```

```
System.out.print("Insert element: ");  
int element = scanner.nextInt();  
  
System.out.print("Insert at index: ");  
int index = scanner.nextInt();  
  
if (index >= 0 && index <= sum.size()) sum.add(index, element);  
System.out.println("After insert: " + sum);  
  
System.out.print("Delete index: ");  
int delete = scanner.nextInt();  
if (delete >= 0 && delete < sum.size()) sum.remove(delete);  
System.out.println("After delete: " + sum);  
  
System.out.print("2nd array size: ");  
int m = scanner.nextInt();  
  
System.out.println("Enter " + m + " elements:");  
for (int i = 0; i < m; i++) {  
    sum.add(scanner.nextInt());  
}  
  
System.out.println("After merge: " + sum);  
}  
}
```

merge.java

```
1 import java.util.*;
2
3 public class merge {
4     public static void main(String args[]) {
5         Scanner scanner = new Scanner(System.in);
6         ArrayList<Integer> sum = new ArrayList<>();
7
8         System.out.print("Enter size: ");
9         int a=scanner.nextInt();
10
11        System.out.println("Enter " + a + " elements:");
12        for (int i = 0; i < a; i++) {
13            sum.add(scanner.nextInt());
14        }
15
16        System.out.print("Insert element: ");
17        int element = scanner.nextInt();
18    }
}
```

Output

Clear

```
Enter 5 elements:
11
44
77
33
66
Insert element: 55
Insert at index: 3
After insert: [11, 44, 77, 55, 33, 66]
Delete index: 2
After delete: [11, 44, 55, 33, 66]
2nd array size: 3
Enter 3 elements:
22
77
88
After merge: [11, 44, 55, 33, 66, 22, 77, 88]
```

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

```
public class Sri {  
    public static void main(String args[]) {  
        Scanner scanner = new Scanner(System.in);  
  
        System.out.print("Enter number of elements: ");  
        int num = scanner.nextInt();  
  
        int arr[] = new int[num];  
        System.out.println("Enter " + num + " elements:");  
        for (int i = 0; i < num; i++) {  
            arr[i] = scanner.nextInt();  
        }  
  
        System.out.print("Enter number to search: ");  
        int target = scanner.nextInt();  
  
        for (int i = 0; i < num; i++) {  
            if (arr[i] == target) {  
                System.out.println("Found at index: " + i);  
                boolean found = true;  
                break;  
            }  
        }  
  
        boolean sort = true;  
        for (int i = 1; i < num; i++) {  
            if (arr[i] < arr[i - 1]) {  
                sort = false;  
                break;  
            }  
        }  
        System.out.println("Array is sorted: " + sort);  
    }  
}
```

```
    }  
}  
System.out.println("Array is sorted: " + sort);  
  
int largest = Integer.MIN_VALUE;  
int small = Integer.MIN_VALUE;  
for (int i = 0; i < num; i++) {  
    if (arr[i] > largest) {  
        small = largest;  
        largest = arr[i];  
    } else if (arr[i] > small && arr[i] != largest) {  
        small = arr[i];  
    }  
}  
if (small == Integer.MIN_VALUE) {  
    System.out.println("Second largest not found (all elements may be equal)");  
} else {  
    System.out.println("Second largest number: " + small);  
}  
  
int max = arr[0];  
int min = arr[0];  
for (int i = 1; i < num; i++) {  
    if (arr[i] > max) {  
        max = arr[i];  
    }  
    if (arr[i] < min) {  
        min = arr[i];  
    }  
}  
System.out.println("Maximum: " + max);  
System.out.println("Minimum: " + min);  
}
```

Sri.java

Share

Run

```
50      System.out.println("Second largest number: " + small
51      );
52  }
53  int max = arr[0];
54  int min = arr[0];
55  for (int i = 1; i < num; i++) {
56      if (arr[i] > max) {
57          max = arr[i];
58      }
59      if (arr[i] < min) {
60          min = arr[i];
61      }
62  }
63  System.out.println("Maximum: " + max);
64  System.out.println("Minimum: " + min);
65  }
66  }
```

Output

Clear

Enter number of elements: 5
Enter 5 elements:
11
33
77
99
11
Enter number to search: 77
Found at index: 2
Array is sorted: false
Second largest number: 77
Maximum: 99
Minimum: 11

=== Code Execution Successful ===