EvenNumberRemoval.java

```
package LAB_Problem.Problem11;

import java.util.ArrayList;

/**
 * ============================================================
 * Program Name: EvenNumberRemoval
 * Description :
 * Author      : Keshav Abhishek
 * Created On  : 21-02-2025
 * Organization: C.V. Raman Global University
 * ============================================================
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 * ============================================================
 */

public class EvenNumberRemoval {
    public static void main(String[] args) {
        ArrayList <Integer> data1 = new ArrayList<>();

        data1.add(100);
        data1.add(102);
        data1.add(103);
        data1.add(104);

        System.out.println("Before removal: " + data1);

        data1.removeIf(n->(n%2==0));

        System.out.println("After removal: " + data1);
    }
}
```

IntersectionArrays.java

```
package LAB_Problem.Problem11;

import java.util.ArrayList;

/**
 * ============================================================
 * Program Name: IntersectionArrays
 * Description :
 * Author      : Keshav Abhishek
 * Created On  : 21-02-2025
 * Organization: C.V. Raman Global University
 * ============================================================
 * Copyright (c) 2025, All rights reserved.
 * ============================================================
 */

public class IntersectionArrays {
    public static void intersectionArrays(){
        ArrayList <Integer> data1 = new ArrayList<>();
        ArrayList <Integer> data2 = new ArrayList<>();

        data1.add(100);
        data1.add(102);
        data1.add(103);
        data1.add(104);

        data2.add(100);
        data2.add(103);
        data2.add(105);
        data2.add(106);

        data1.retainAll(data2);

        System.out.println(data1);
    }
    public static void main(String[] args) {
        intersectionArrays();
    }
}
```

MaximumElement.java

```
package LAB_Problem.Problem11;

import java.util.ArrayList;
import java.util.Collections;
import java.util.Scanner;

/**
 * ============================================================
 * Program Name: MaximumElement
 * Description :
 * Author      : Keshav Abhishek
 * Created On  : 21-02-2025
 * Organization: C.V. Raman Global University
 * ============================================================
 * Copyright (c) 2025, All rights reserved.
 * ============================================================
 */

public class MaximumElement {
    public static void findLargest(){
        ArrayList <Integer> data = new ArrayList<>();
        Scanner sc = new Scanner(System.in);
        System.out.println("Number of elements: ");
        int times = sc.nextInt();
        for (int i = 0; i < times; i++) {
            System.out.print("Enter value: ");
            data.add(sc.nextInt());
        }
        sc.close();
        Collections.sort(data, Collections.reverseOrder());
        System.out.println("Largest element: " + data.get(0));
    }
    public static void main(String[] args) {
        findLargest();
    }
}
```

MergeArraySort.java

```
package LAB_Problem.Problem11;

import java.util.ArrayList;
import java.util.Collections;

/**
 * ============================================================
 * Program Name: MergeArraySort
 * Description :
 * Author      : Keshav Abhishek
 * Created On  : 21-02-2025
 * Organization: C.V. Raman Global University
 * ============================================================
 * Copyright (c) 2025, All rights reserved.
 * ============================================================
 */

public class MergeArraySort {
    public static void mergeTwoArrays(){
        ArrayList <Integer> data1 = new ArrayList<>();
        ArrayList <Integer> data2 = new ArrayList<>();

        data1.add(100);
        data1.add(102);
        data1.add(103);
        data1.add(104);

        data2.add(100);
        data2.add(103);
        data2.add(105);
        data2.add(106);

        data1.addAll(data2);
        Collections.sort(data1);

        System.out.println(data1);
    }
    public static void main(String[] args) {
        mergeTwoArrays();
    }
}
```

ReverseArrayList.java

```
package LAB_Problem.Problem11;

import java.util.ArrayList;

/**
 * ============================================================
 * Program Name: ReverseArrayList
 * Description :
 * Author      : Keshav Abhishek
 * Created On  : 21-02-2025
 * Organization: C.V. Raman Global University
 * ============================================================
 * Copyright (c) 2025, All rights reserved.
 * ============================================================
 */

public class ReverseArrayList {
    public static void reverseOrder(){
        ArrayList <Integer> data1 = new ArrayList<>();

        data1.add(100);
        data1.add(102);
        data1.add(103);
        data1.add(104);

        System.out.println("Forward Order: " + data1);

        int size = data1.size();

        for(int i = 0; i < size/2; i++){
            int temp = data1.get(i);
            data1.set(i, data1.get(size-i-1));
            data1.set(size - i - 1, temp);
        }

        System.out.println("Reverse Order: " + data1);

    }
    public static void main(String[] args) {
        reverseOrder();
    }
}
```

SecondLargest.java

```
package LAB_Problem.Problem11;

import java.util.ArrayList;
import java.util.Collections;
import java.util.HashSet;
import java.util.Scanner;

/**
 * ============================================================
 * Program Name: SecondLargest
 * Description :
 * Author      : Keshav Abhishek
 * Created On  : 21-02-2025
 * Organization: C.V. Raman Global University
 * ============================================================
 * Copyright (c) 2025, All rights reserved.
 * ============================================================
 */
public class SecondLargest {
    public static void find2ndLargest(){
        ArrayList <Integer> data = new ArrayList<>();
        Scanner sc = new Scanner(System.in);
        System.out.println("Number of elements: ");
        int times = sc.nextInt();
        for (int i = 0; i < times; i++) {
            System.out.print("Enter value: ");
            data.add(sc.nextInt());
        }
        HashSet <Integer> dataFilter = new HashSet<>(data);
        data = new ArrayList<>(dataFilter);
        sc.close();
        Collections.sort(data, Collections.reverseOrder());
        System.out.println("Second largest element: " + data.get(1));
    }
    public static void main(String[] args) {
        find2ndLargest();
    }
}
```