

1)Write a Java program that takes a list of integers as input and returns a list of duplicate integers.* /

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

class Q1{

public static void main(String args[]){

Scanner sc = new Scanner(System.in);

List<Integer> ls = new ArrayList<Integer>();//list declare kely

ls.add(1);

ls.add(2);

ls.add(2);

HashSet<Integer>seen = new HashSet<>();

HashSet<Integer>duplicate = new HashSet<>();

for (Integer s :ls){

System.out.println(s);

//System.out.println("after comparision:");

if(!seen.add(s)){

duplicate.add(s);

}

System.out.println("after comparision:");

System.out.println(duplicate);

}

}
```

Q2. 2) Create a Person class with attributes name and age. Write a Java program that sorts a list of Person objects first by age and then by name if the ages are equal.

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

```
class Person{
```

```
    String name;
```

```
    int age;
```

```
    public Person(String name, int age)
```

```
    {
```

```
        this.name = name;
```

```
        this.age = age;
```

```
    }
```

```
    public String toString()
```

```
    {
```

```
        return "Person name=" + name + ", age=" + age + "";
```

```
    }
```

```
    public String getName(){
```

```
        return name;
```

```
    }
```

```
    public int getAge(){
```

```
        return age;
```

```
    }
```

```
    public static void main (String args[])
```

```
    {
```

```

List<Person> stuList1 = new ArrayList<Person>();

stuList1.add(new Person ("Rasika",27));

stuList1.add(new Person ( "Satish", 51));

stuList1.add(new Person ("Snehal", 28));


stuList1.sort(Comparator.comparing(Person::getAge).thenComparing(Person::getName));


for(Person p:stuList1)
    {
        System.out.println(p);
    }
}
}*/

```

Q44) Write a Java program that merges two sorted lists of integers into a single sorted list.

```

import java.util.*;

class Q1{

    public static void main(String args[]){

        Scanner sc = new Scanner(System.in);

        List<Integer>ls = new ArrayList<Integer>();

        List<Integer>ls2 = new ArrayList<Integer>();

        ls.add(1);

        ls.add(2);

        ls.add(3);

        ls2.add(4);
    }
}

```

```
ls.addAll(ls2);
```

```
System.out.println(ls);
```

```
}
```

```
}
```