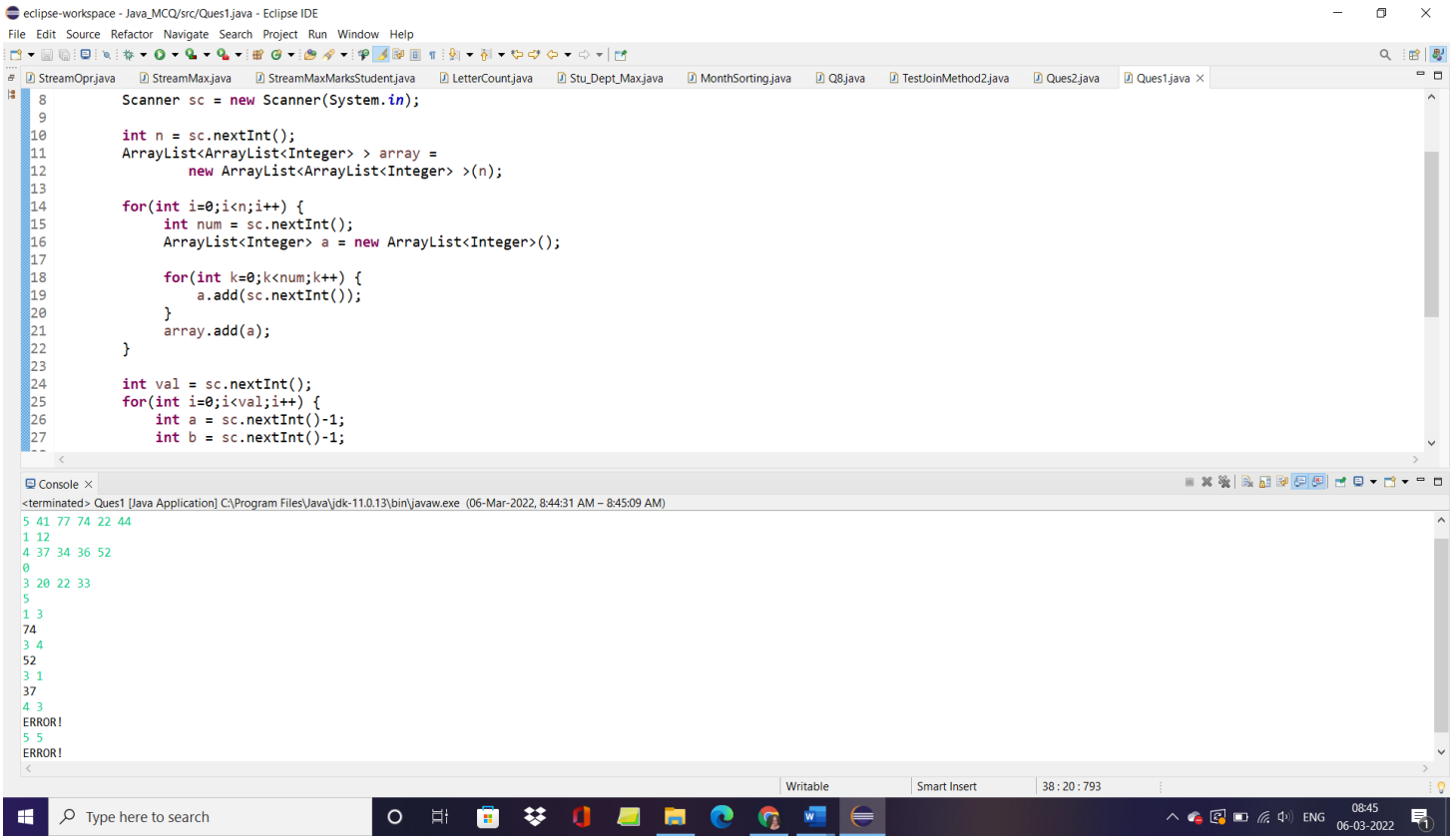
JAVA CODING ASSESSMENT

Q1.

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

public class Ques1 {

	public static void main(String[] args) {

		Scanner sc = new Scanner(System.in);

		int n = sc.nextInt();
		ArrayList<ArrayList<Integer> > array =
			new ArrayList<ArrayList<Integer> >(n);

		for(int i=0;i<n;i++) {
			int num = sc.nextInt();
			ArrayList<Integer> a = new ArrayList<Integer>();

			for(int k=0;k<num;k++) {
				a.add(sc.nextInt());
			}
			array.add(a);
		}
```

```
            int val = sc.nextInt();
            for(int i=0;i<val;i++) {
                  int a = sc.nextInt()-1;
                  int b = sc.nextInt()-1;

                  if(b>(array.get(a).size()) - 1) {
                        System.out.println("ERROR!");
                  }

                  else {
                        System.out.println(array.get(a).get(b));
                  }
            }

            sc.close();

      }

}
```

OUTPUT –

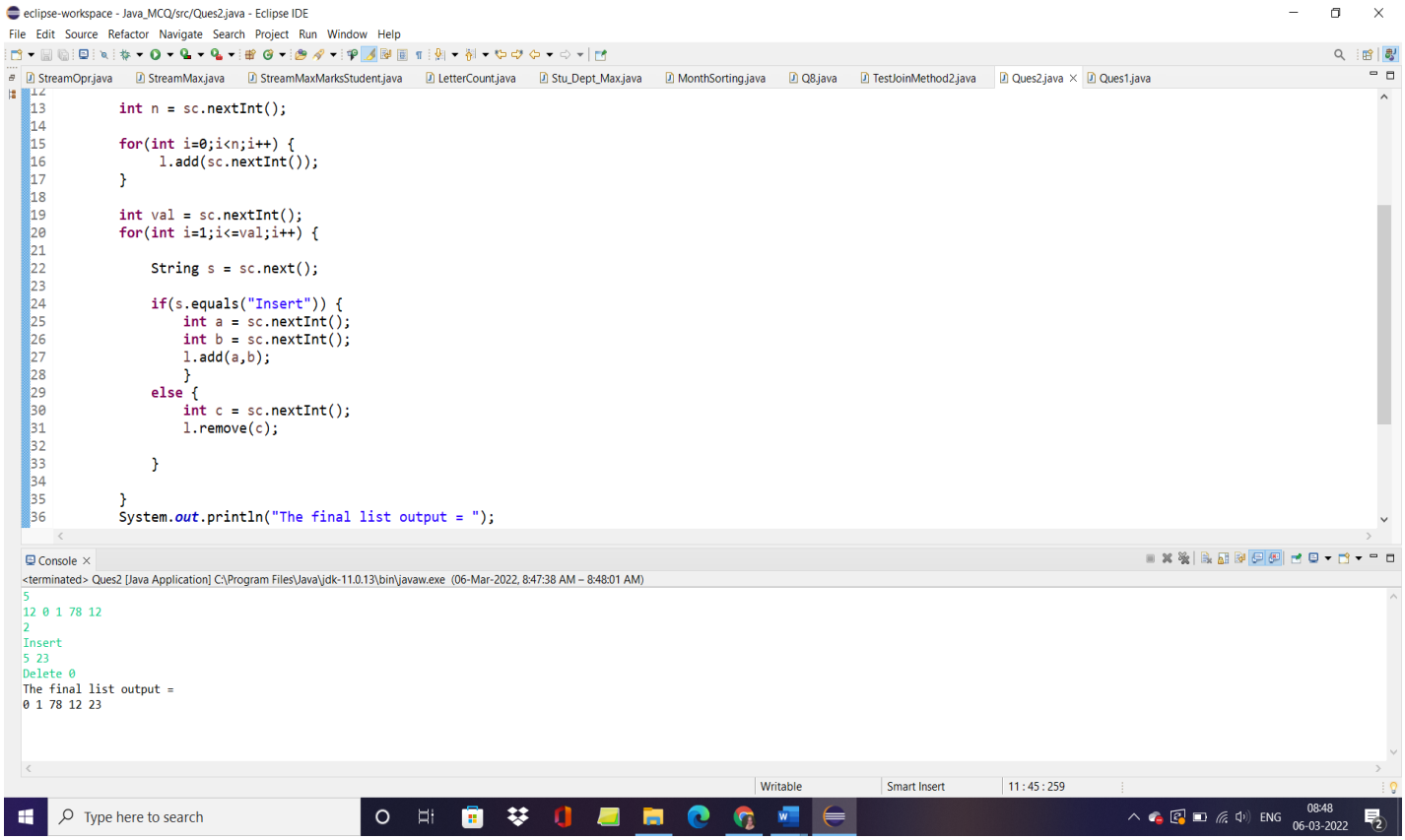


Q2.

```java
import java.util.ArrayList;
import java.util.Iterator;
import java.util.List;
import java.util.Scanner;

public class Ques2 {

	public static void main(String[] args) {
		List<Integer> l = new ArrayList<>();

		Scanner sc = new Scanner(System.in);

		int n = sc.nextInt();

		for(int i=0;i<n;i++) {
```

```
                l.add(sc.nextInt());
            }

            int val = sc.nextInt();
            for(int i=1;i<=val;i++) {

                String s = sc.next();

                if(s.equals("Insert")) {
                    int a = sc.nextInt();
                    int b = sc.nextInt();
                    l.add(a,b);
                    }
                else {
                    int c = sc.nextInt();
                    l.remove(c);

                    }

            }
            System.out.println("The final list output = ");
              Iterator<Integer> iter = l.iterator();
               while(iter.hasNext()) {
                  System.out.print(iter.next()+" ");
               }

          sc.close();

      }

}
```

OUTPUT –



Q3.

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

public class Ques3 {

	public static void main(String[] args) {
		HashMap<String, Integer> hash = new HashMap<>();
	  Scanner sc = new Scanner(System.in);
	  int n=sc.nextInt();
	  sc.nextLine();
	  for(int i=0;i<n;i++)
	  {
		String name=sc.nextLine();
		int phoneNo=sc.nextInt();
		sc.nextLine();
```

```
            hash.put(name,phoneNo);
        }
        while(sc.hasNext())
        {

           String str=sc.nextLine();
            try
            {
                int out=hash.get(str);
                System.out.println(str+"="+out);
            }
            catch(Exception e)
            {
                System.out.println("Not found");
            }
        }

        sc.close();

    }

}
```

OUTPUT –