

# 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;

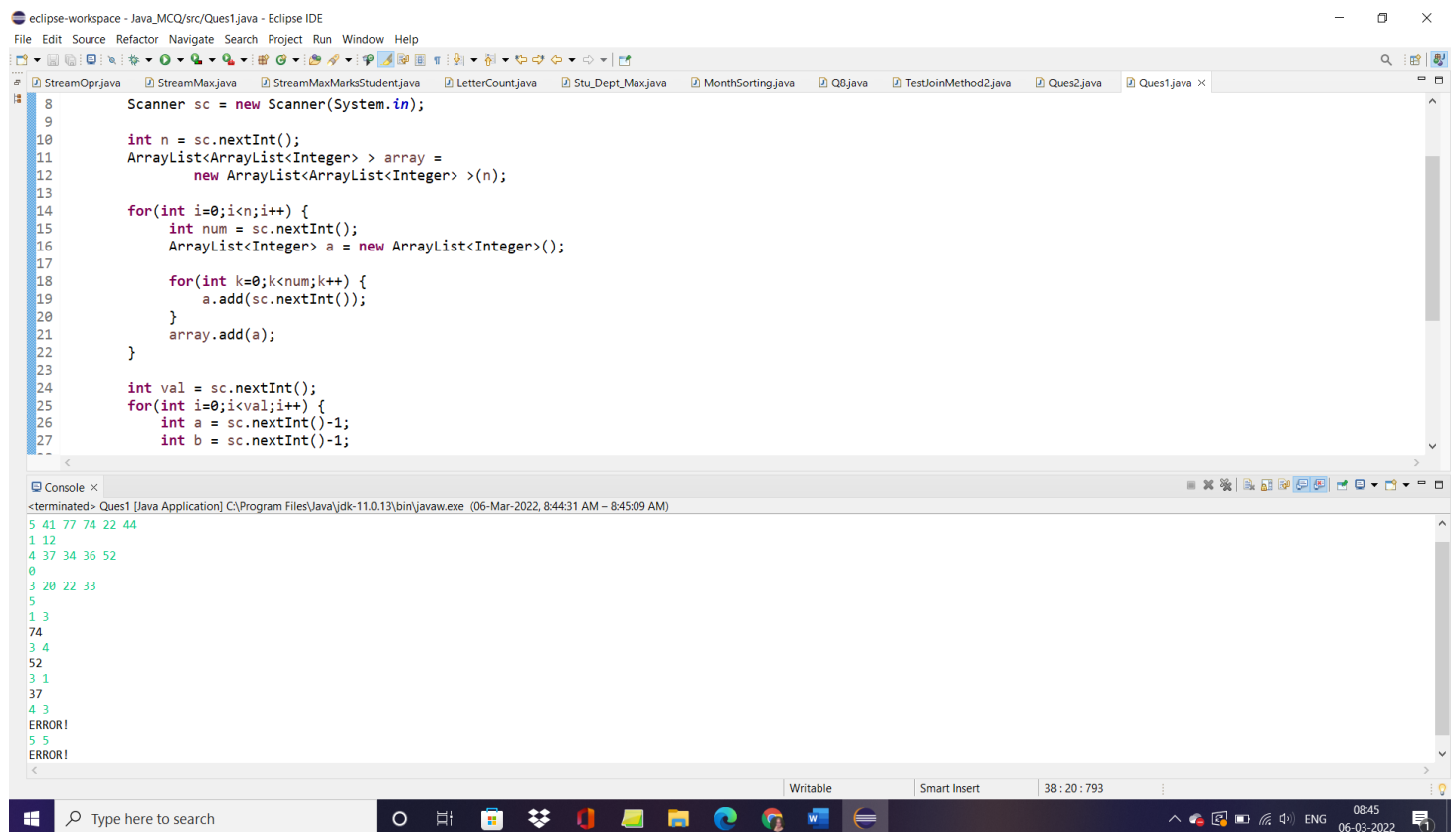
    if(b>(array.get(a).size()) - 1) {
        System.out.println("ERROR!");
    }

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

sc.close();

}
```

**OUTPUT –**



## Q2.

```
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 –**

The screenshot shows the Eclipse IDE with a Java project named 'Java\_MCQ'. The editor displays the source code for 'Ques2.java'. The code uses a Scanner to read input and a List to store data. It has two main loops: the first reads 'n' integers and adds them to the list; the second reads a series of commands ('Insert', 'Delete', or a number) and performs the corresponding action on the list. The console output shows the execution of the program with the following sequence of inputs and outputs:

```
<terminated> Ques2 [Java Application] C:\Program Files\Java\jdk-11.0.13\bin\javaw.exe (06-Mar-2022, 8:47:38 AM - 8:48:01 AM)
5
12 0 1 78 12
2
Insert
5 23
Delete 0
The final list output =
0 1 78 12 23
```

### 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 –

The screenshot shows the Eclipse IDE with a Java project named 'Java\_MCQ/src/Ques3.java'. The code in the editor is a Java program that reads a list of names and phone numbers into a HashMap and then prints them out. The console output shows the program's execution, including the input data and the resulting output for each entry, as well as a 'Not found' message for a name that was not in the HashMap.

```

eclipse-workspace - Java_MCQ/src/Ques3.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
StreamOpr.java StreamMax.java StreamMaxMarksStudent.java LetterCount.java Stu_Dept_Max.java MonthSorting.java Q8.java TestJoinMethod2.java Ques2.java Ques1.java Ques3.java
4 public class Ques3 {
5
6     public static void main(String[] args) {
7         HashMap<String, Integer> hash = new HashMap<>();
8         Scanner sc = new Scanner(System.in);
9         int n=sc.nextInt();
10        sc.nextLine();
11        for(int i=0;i<n;i++)
12        {
13            String name=sc.nextLine();
14            int phoneNo=sc.nextInt();
15            sc.nextLine();
16            hash.put(name,phoneNo);
17        }
18        while(sc.hasNext())
19        {
20
21            String str=sc.nextLine();
22            try
23            {
24                int out=hash.get(str);

```

Console ×

Ques3 [Java Application] C:\Program Files\Java\jdk-11.0.13\bin\javaw.exe (06-Mar-2022, 9:02:13 AM)

```

3
uncle sam
99912222
tom
11122222
harry
12299933
uncle sam
uncle sam=99912222
uncle tom
Not found
harry
harry=12299933

```

Writable Smart Insert 30 : 14 : 807 09:03 06-03-2022 ENG