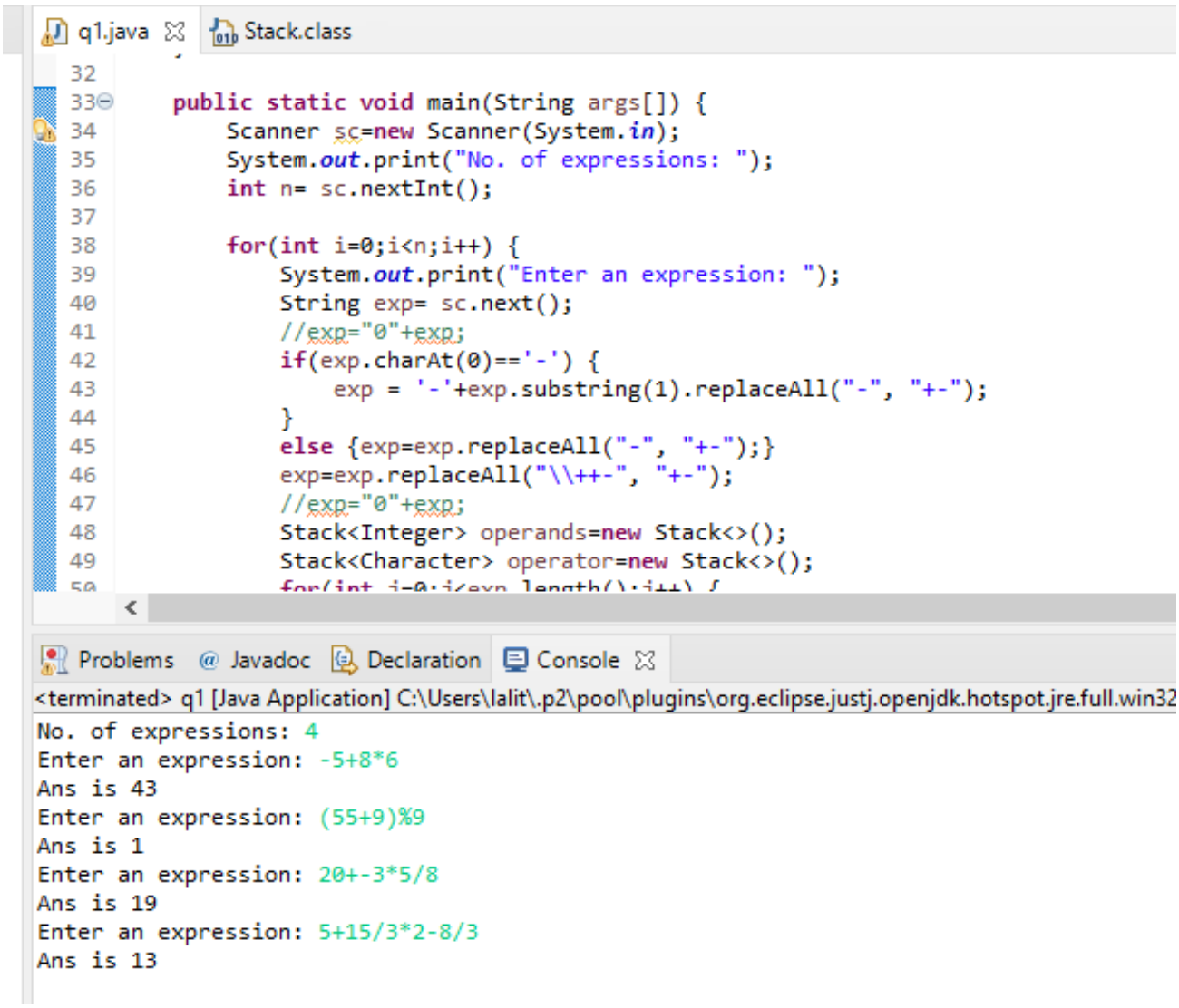
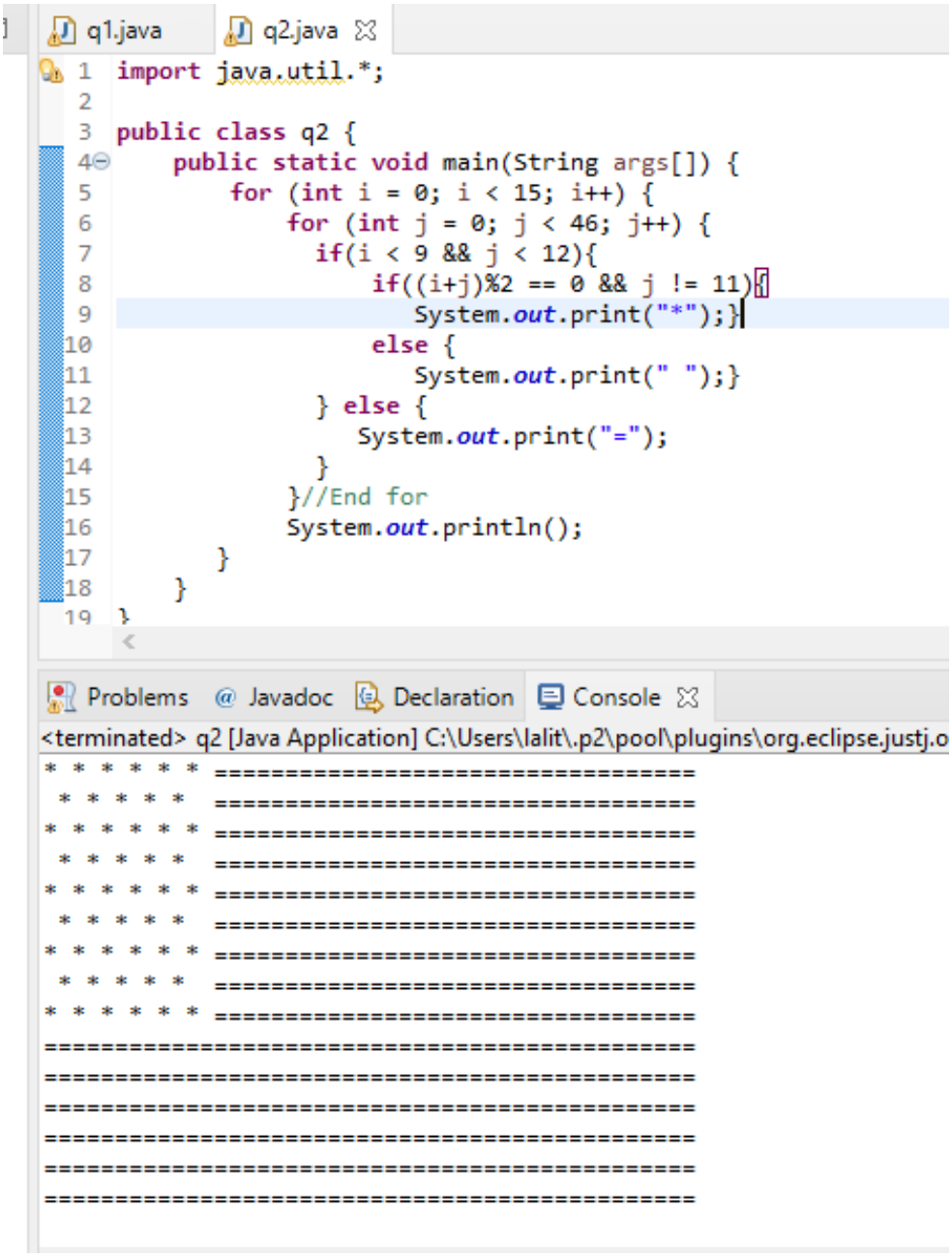
In-Slide Questions:

1.



```
q1.java   Stack.class

32
33      public static void main(String args[]) {
34          Scanner sc=new Scanner(System.in);
35          System.out.print("No. of expressions: ");
36          int n= sc.nextInt();
37
38          for(int i=0;i<n;i++) {
39              System.out.print("Enter an expression: ");
40              String exp= sc.next();
41              //exp="0"+exp;
42              if(exp.charAt(0)=='-') {
43                  exp = '-'+exp.substring(1).replaceAll("-", "+-");
44              }
45              else {exp=exp.replaceAll("-", "+-");}
46              exp=exp.replaceAll("\\++-", "+-");
47              //exp="0"+exp;
48              Stack<Integer> operands=new Stack<>();
49              Stack<Character> operator=new Stack<>();
50              for(int i=0;i<exp.length();i++) {

Problems  Javadoc  Declaration  Console

<terminated> q1 [Java Application] C:\Users\lalit\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32

No. of expressions: 4
Enter an expression: -5+8*6
Ans is 43
Enter an expression: (55+9)%9
Ans is 1
Enter an expression: 20+-3*5/8
Ans is 19
Enter an expression: 5+15/3*2-8/3
Ans is 13
```

2.



```
import java.util.*;

public class q2 {
    public static void main(String args[]) {
        for (int i = 0; i < 15; i++) {
            for (int j = 0; j < 46; j++) {
              if(i < 9 && j < 12){
                  if((i+j)%2 == 0 && j != 11){
                     System.out.print("*");}
                  else {
                     System.out.print(" ");}
              } else {
                 System.out.print("=");
              }
            }//End for
            System.out.println();
        }
    }
}
```

```
<terminated> q2 [Java Application] C:\Users\lalit\.p2\pool\plugins\org.eclipse.justj.o
* * * * * * ==================================
 * * * * *  ==================================
* * * * * * ==================================
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* * * * * * ==================================
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* * * * * * ==================================
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==============================================
```
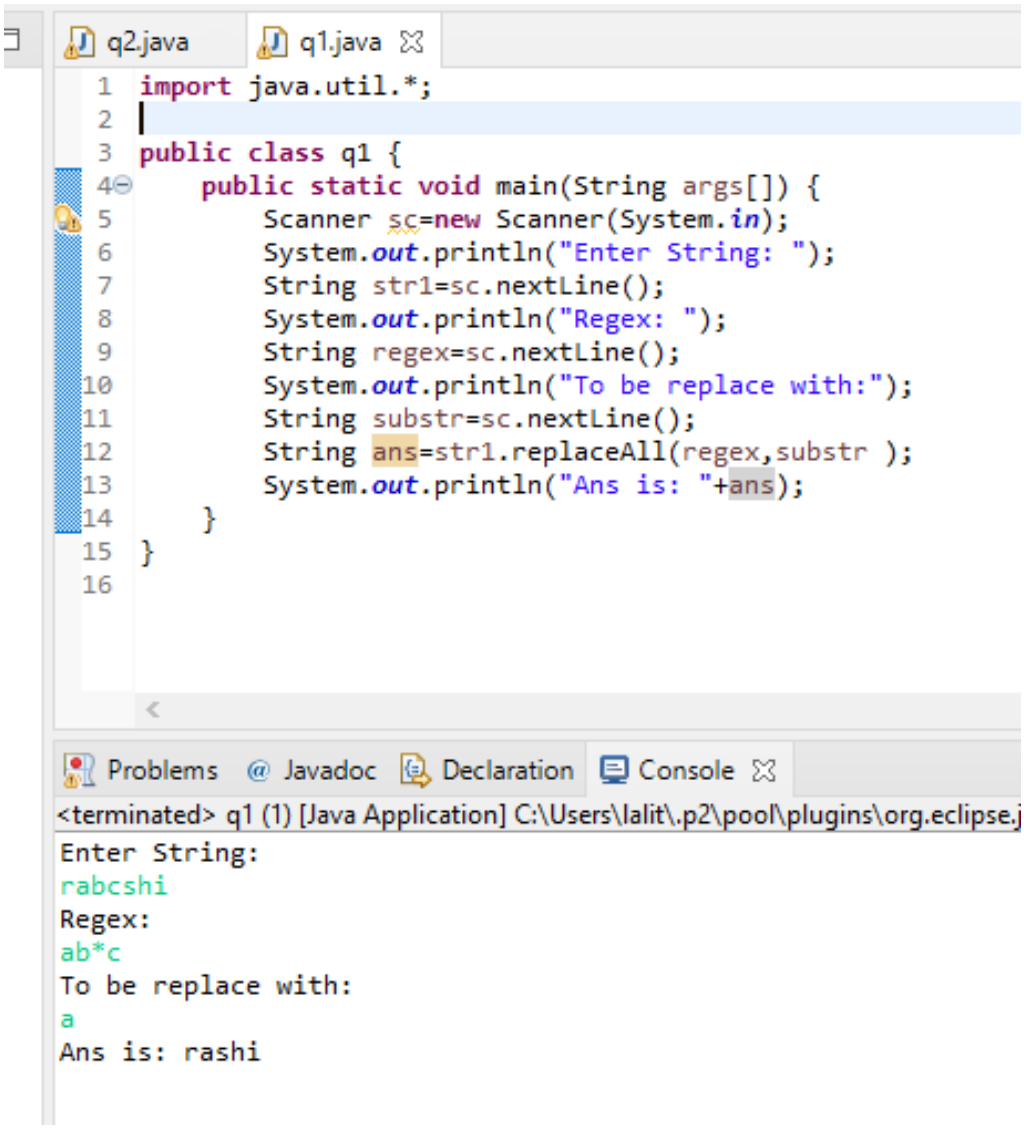

Hands-On Questions

1.



q2.java | q1.java

```
1  import java.util.*;
2
3  public class q1 {
4      public static void main(String args[]) {
5          Scanner sc=new Scanner(System.in);
6          System.out.println("Enter String: ");
7          String str1=sc.nextLine();
8          System.out.println("Regex: ");
9          String regex=sc.nextLine();
10         System.out.println("To be replace with:");
11         String substr=sc.nextLine();
12         String ans=str1.replaceAll(regex,substr );
13         System.out.println("Ans is: "+ans);
14     }
15 }
16
```

Problems | Javadoc | Declaration | Console

<terminated> q1 (1) [Java Application] C:\Users\lalit\.p2\pool\plugins\org.eclipse.j

```
Enter String:
rabcshi
Regex:
ab*c
To be replace with:
a
Ans is: rashi
```

2.

q2.java q1.java q2.java

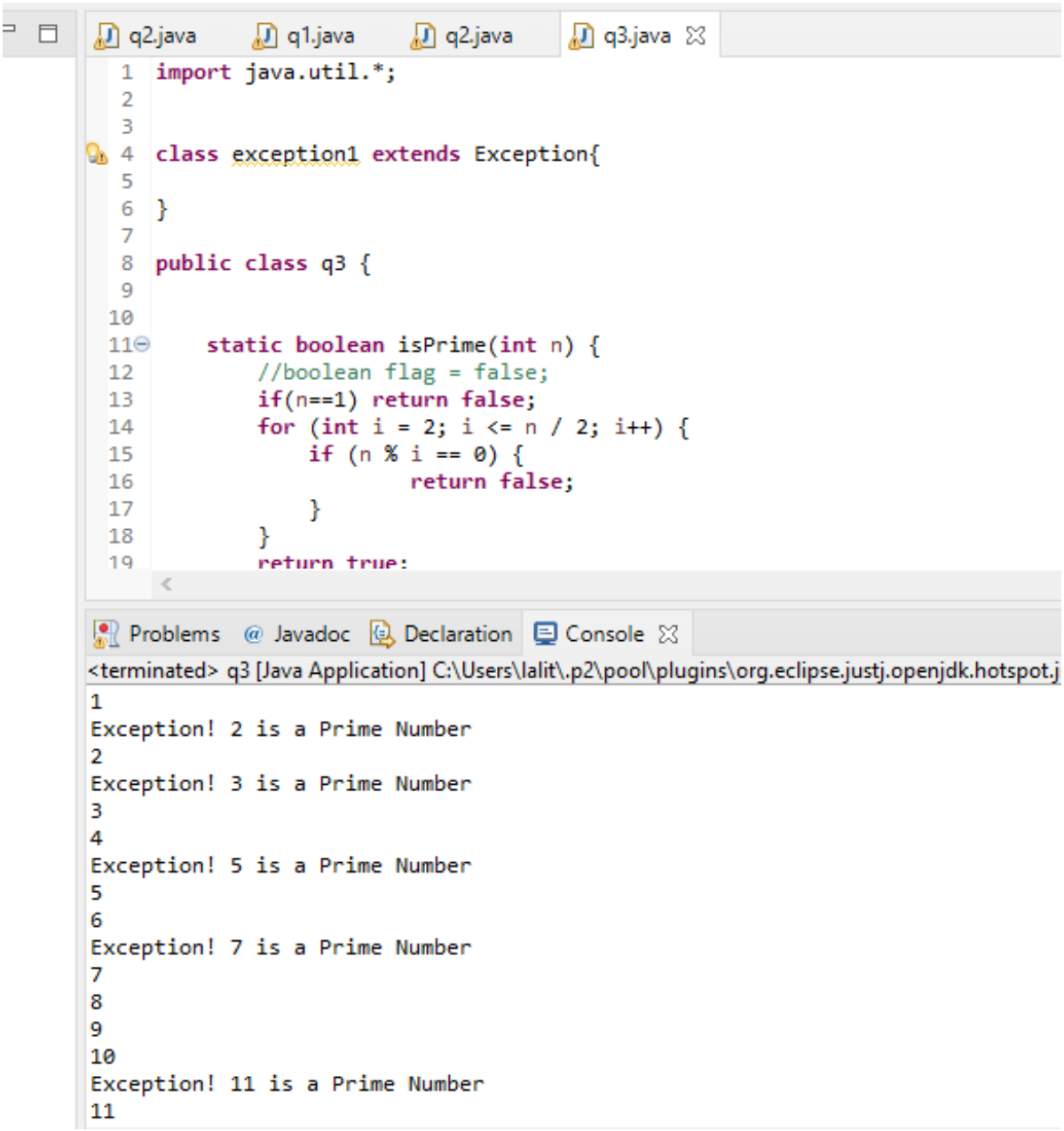
```
1  import java.util.*;
2
3  public class q2 {
4      public static void main(String[] args) {
5          Scanner sc=new Scanner(System.in);
6          Map<Integer,String> map1= new TreeMap<>();
7          System.out.println("Enter number of elems: ");
8          int n=sc.nextInt();
9          for(int i=0;i<n;i++)
10         {
11             Integer k=sc.nextInt();
12             String v=sc.next();
13             map1.put(k, v);
14         }
15         System.out.println("Original Map: "+map1.keySet());
16         System.out.println("Reversed Map: "+ ((TreeMap<Integer, String>) map1).descendingKeySet());
17     }
18 }
19
```

Problems Javadoc Declaration Console

<terminated> q2 (1) [Java Application] C:\Users\lalit\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_15.0.2.v202102

```
Enter number of elems:
4
1 one
2 two
3 three
4 four
Original Map: [1, 2, 3, 4]
Reversed Map: [4, 3, 2, 1]
```

3.


q2.java
q1.java
q2.java
q3.java
1 import java.util.*;
2
3
4 class exception1 extends Exception{
5
6 }
7
8 public class q3 {
9
10
11 static boolean isPrime(int n) {
12 //boolean flag = false;
13 if(n==1) return false;
14 for (int i = 2; i <= n / 2; i++) {
15 if (n % i == 0) {
16 return false;
17 }
18 }
19 return true;
Problems
Javadoc
Declaration
Console
<terminated> q3 [Java Application] C:\Users\lalit\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.j
1
Exception! 2 is a Prime Number
2
Exception! 3 is a Prime Number
3
4
Exception! 5 is a Prime Number
5
6
Exception! 7 is a Prime Number
7
8
9
10
Exception! 11 is a Prime Number
11

4.

q2.java | q1.java | q2.java | q3.java | *q4.java

```
1  import java.io.*;
2
3  class Emp implements Serializable {
4
5      private static final long serialversionUID = 129348938L;
6          transient int a;
7          int roll;
8          String fname;
9          String lname;
10         int age;
11
12
13     public Emp(String fname, String lname, int age, int roll, int a)
14     {
15             this.fname = fname;
16             this.lname=lname;
17             this.age = age;
18             this.roll=roll;
19             this.a = a;
```

Problems | Javadoc | Declaration | Console

<terminated> q4 [Java Application] C:\Users\lalit\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x8

```
Object has been serialized
Data before Deserialization.
Fname = Rashi
Lname = Chhajer
age = 20
roll = 2
a = 1000
Object has been deserialized
Data after Deserialization.
Fname = Rashi
Lname = Chhajer
age = 20
roll = 2
a = 0
```