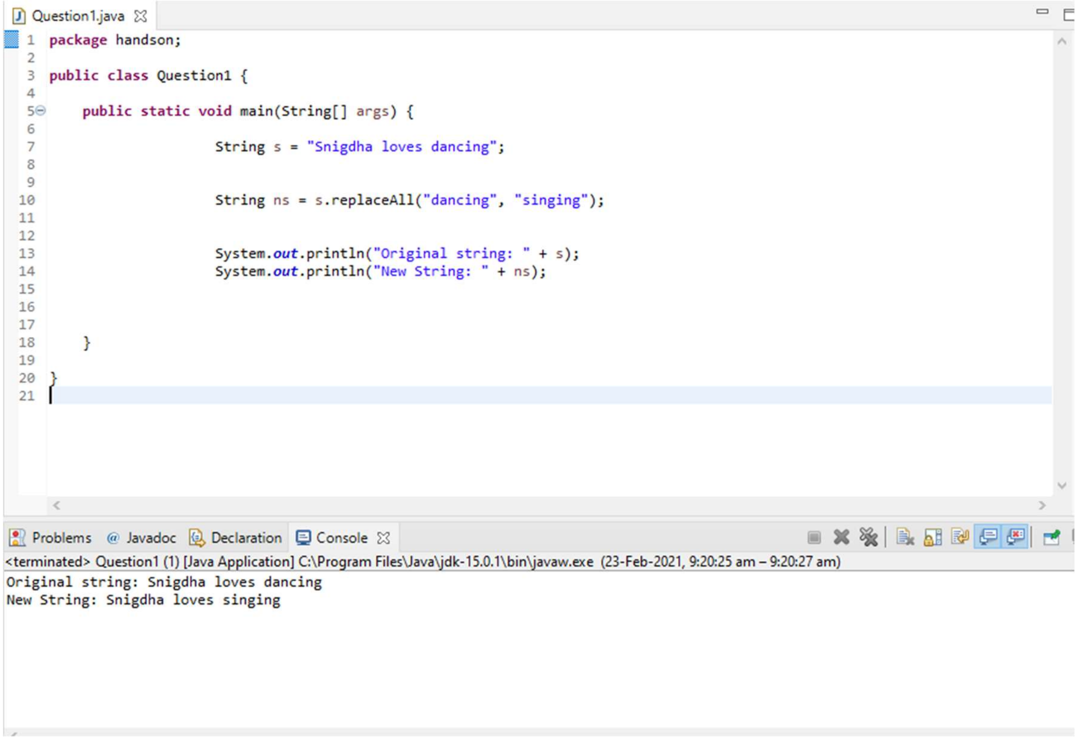
Java Solutions

Hands on Section:

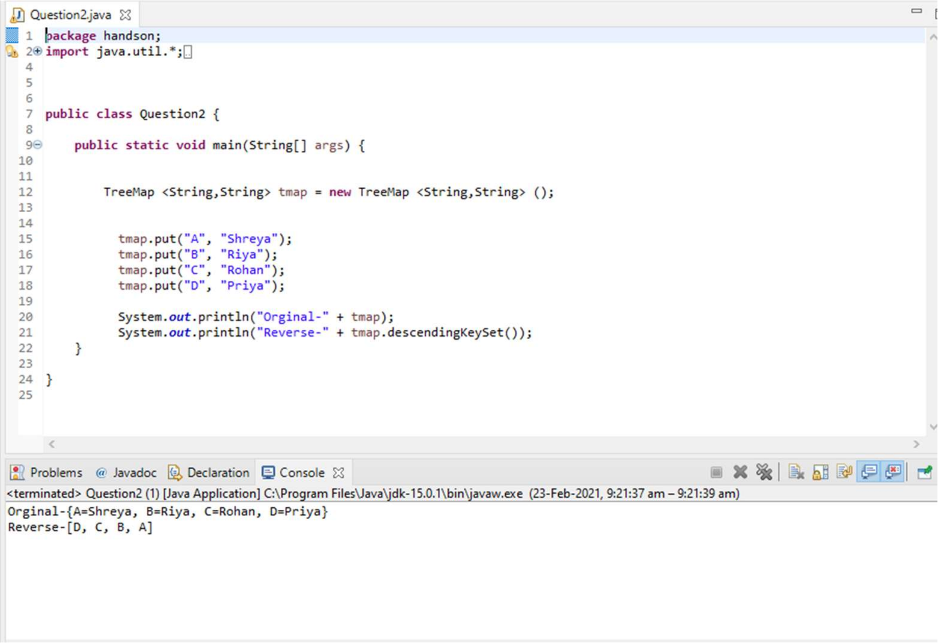
1.



```java
package handson;

public class Question1 {

    public static void main(String[] args) {

                    String s = "Snigdha loves dancing";


                    String ns = s.replaceAll("dancing", "singing");


                    System.out.println("Original string: " + s);
                    System.out.println("New String: " + ns);



    }

}

```

```
<terminated> Question1 (1) [Java Application] C:\Program Files\Java\jdk-15.0.1\bin\javaw.exe  (23-Feb-2021, 9:20:25 am – 9:20:27 am)
Original string: Snigdha loves dancing
New String: Snigdha loves singing
```

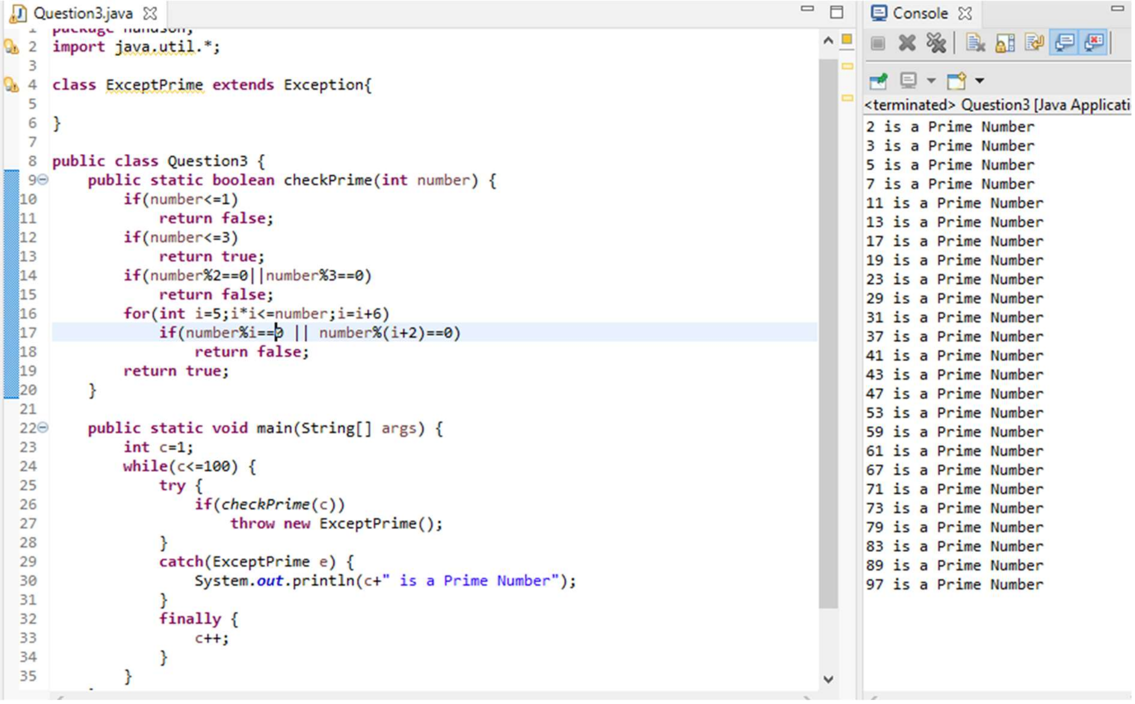
2.



```java
package handson;
import java.util.*;



public class Question2 {

    public static void main(String[] args) {


        TreeMap <String,String> tmap = new TreeMap <String,String> ();


          tmap.put("A", "Shreya");
          tmap.put("B", "Riya");
          tmap.put("C", "Rohan");
          tmap.put("D", "Priya");

          System.out.println("Orginal-" + tmap);
          System.out.println("Reverse-" + tmap.descendingKeySet());
    }

}

```

```
<terminated> Question2 (1) [Java Application] C:\Program Files\Java\jdk-15.0.1\bin\javaw.exe  (23-Feb-2021, 9:21:37 am – 9:21:39 am)
Orginal-{A=Shreya, B=Riya, C=Rohan, D=Priya}
Reverse-[D, C, B, A]
```

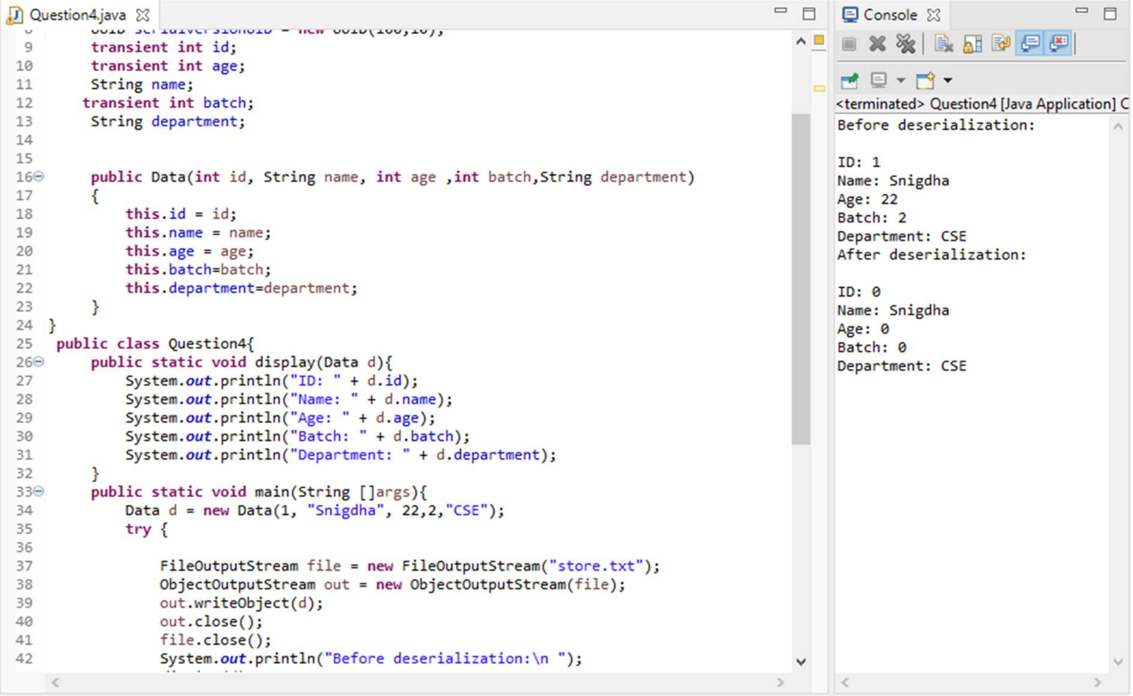
3.



```java
package handson;
import java.util.*;

class ExceptPrime extends Exception{

}

public class Question3 {
    public static boolean checkPrime(int number) {
        if(number<=1)
            return false;
        if(number<=3)
            return true;
        if(number%2==0||number%3==0)
            return false;
        for(int i=5;i*i<=number;i=i+6)
            if(number%i==0 || number%(i+2)==0)
                return false;
        return true;
    }

    public static void main(String[] args) {
        int c=1;
        while(c<=100) {
            try {
                if(checkPrime(c))
                    throw new ExceptPrime();
            }
            catch(ExceptPrime e) {
                System.out.println(c+" is a Prime Number");
            }
            finally {
                c++;
            }
        }
```

```
<terminated> Question3 [Java Applicati
2 is a Prime Number
3 is a Prime Number
5 is a Prime Number
7 is a Prime Number
11 is a Prime Number
13 is a Prime Number
17 is a Prime Number
19 is a Prime Number
23 is a Prime Number
29 is a Prime Number
31 is a Prime Number
37 is a Prime Number
41 is a Prime Number
43 is a Prime Number
47 is a Prime Number
53 is a Prime Number
59 is a Prime Number
61 is a Prime Number
67 is a Prime Number
71 is a Prime Number
73 is a Prime Number
79 is a Prime Number
83 is a Prime Number
89 is a Prime Number
97 is a Prime Number
```

4.

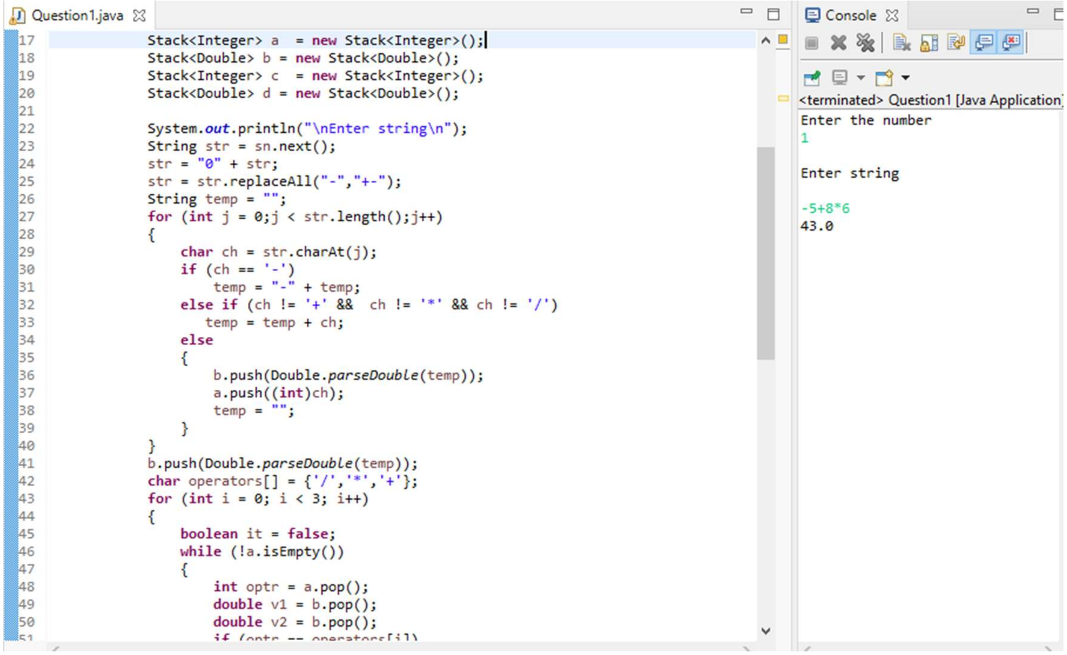


```java
     UUID serialVersionUID = new UUID(100,10);
     transient int id;
     transient int age;
     String name;
    transient int batch;
     String department;


     public Data(int id, String name, int age ,int batch,String department)
     {
         this.id = id;
         this.name = name;
         this.age = age;
         this.batch=batch;
         this.department=department;
     }
}
 public class Question4{
     public static void display(Data d){
         System.out.println("ID: " + d.id);
         System.out.println("Name: " + d.name);
         System.out.println("Age: " + d.age);
         System.out.println("Batch: " + d.batch);
         System.out.println("Department: " + d.department);
     }
     public static void main(String []args){
         Data d = new Data(1, "Snigdha", 22,2,"CSE");
         try {

             FileOutputStream file = new FileOutputStream("store.txt");
             ObjectOutputStream out = new ObjectOutputStream(file);
             out.writeObject(d);
             out.close();
             file.close();
             System.out.println("Before deserialization:\n ");
```

```
<terminated> Question4 [Java Application] C
Before deserialization:

ID: 1
Name: Snigdha
Age: 22
Batch: 2
Department: CSE
After deserialization:

ID: 0
Name: Snigdha
Age: 0
Batch: 0
Department: CSE
```

Questions on Slides:

1.

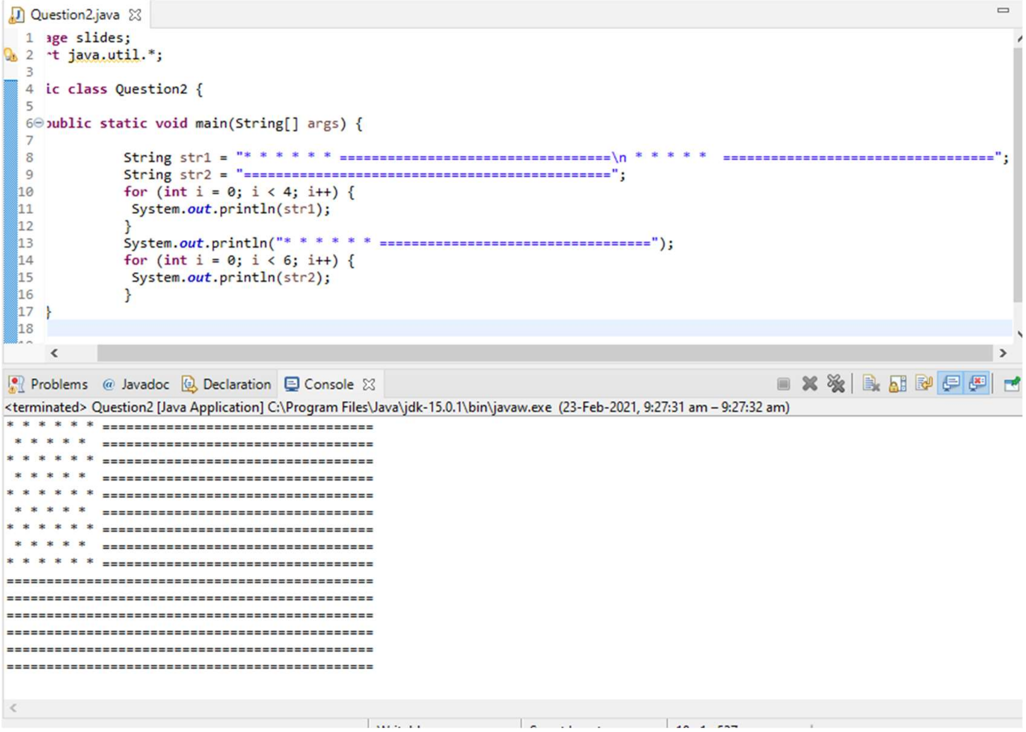


```java
                Stack<Integer> a  = new Stack<Integer>();
                Stack<Double> b = new Stack<Double>();
                Stack<Integer> c  = new Stack<Integer>();
                Stack<Double> d = new Stack<Double>();

                System.out.println("\nEnter string\n");
                String str = sn.next();
                str = "0" + str;
                str = str.replaceAll("-","+-");
                String temp = "";
                for (int j = 0;j < str.length();j++)
                {
                    char ch = str.charAt(j);
                    if (ch == '-')
                        temp = "-" + temp;
                    else if (ch != '+' &&  ch != '*' && ch != '/')
                       temp = temp + ch;
                    else
                    {
                        b.push(Double.parseDouble(temp));
                        a.push((int)ch);
                        temp = "";
                    }
                }
                b.push(Double.parseDouble(temp));
                char operators[] = {'/','*','+'};
                for (int i = 0; i < 3; i++)
                {
                    boolean it = false;
                    while (!a.isEmpty())
                    {
                        int optr = a.pop();
                        double v1 = b.pop();
                        double v2 = b.pop();
                        if (optr == operators[i])
```

<terminated> Question1 [Java Application]

```
Enter the number
1

Enter string

-5+8*6
43.0
```

2.



```java
age slides;
t java.util.*;

ic class Question2 {

ublic static void main(String[] args) {

         String str1 = "* * * * * * ==================================\n * * * * *  ==================================";
         String str2 = "==============================================";
         for (int i = 0; i < 4; i++) {
          System.out.println(str1);
         }
         System.out.println("* * * * * * ==================================");
         for (int i = 0; i < 6; i++) {
          System.out.println(str2);
         }
}
```

<terminated> Question2 [Java Application] C:\Program Files\Java\jdk-15.0.1\bin\javaw.exe (23-Feb-2021, 9:27:31 am – 9:27:32 am)

```
* * * * * * ==================================
 * * * * *  ==================================
* * * * * * ==================================
 * * * * *  ==================================
* * * * * * ==================================
 * * * * *  ==================================
* * * * * * ==================================
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* * * * * * ==================================
==============================================
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==============================================
==============================================
==============================================
==============================================
```