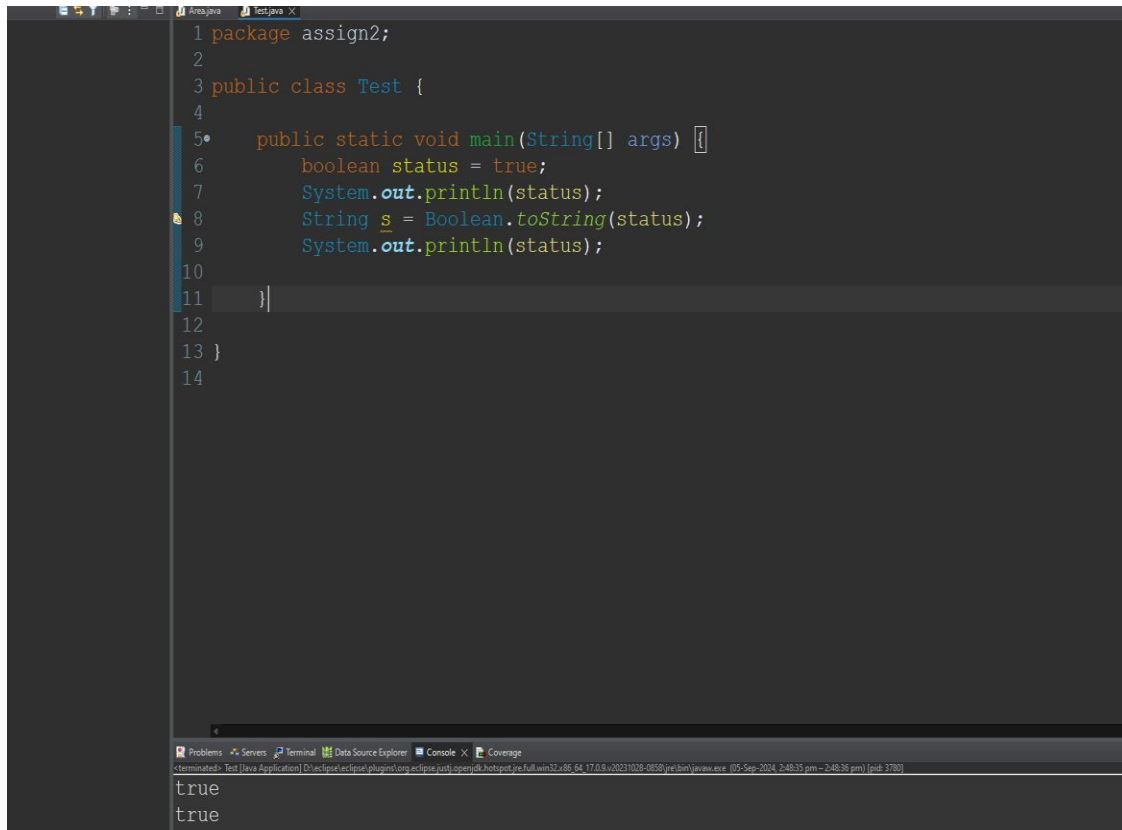Q1] Working with java.lang.Boolean

a) Explore the Java API documentation for java.lang.Boolean and observe its modifiers and super types.

⟹ boolean → booleanValue()

static Boolean → valueOf(boolean b)

b) Declare a method-local variable status of type boolean with the value true and convert it to a String using the toString method. (Hint: UseBoolean.toString(Boolean))

⟹

```java
1 package assign2;
2
3 public class Test {
4
5     public static void main(String[] args) {
6         boolean status = true;
7         System.out.println(status);
8         String s = Boolean.toString(status);
9         System.out.println(status);
10
11     }
12
13 }
14
```

Problems Servers Terminal Data Source Explorer Console × Coverage
<terminated> Test [Java Application] D:\eclipse\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.9.v20231028-0858\jre\bin\javaw.exe (05-Sep-2024, 2:48:35 pm – 2:48:36 pm) [pid: 3780]
```
true
true
```

c) Declare a method-local variable strStatus of type String with the value "true"and convert it to a Boolean using the parseBoolean method (Hint: Use Boolean.parseBoolean (String)).

⟹

```java
1 package assign2;
2
3 public class Test {
4
5    public static void main(String[] args) {
6        String strStatus = "true";
7        System.out.println(strStatus);
8        boolean b = Boolean.parseBoolean(strStatus);
9        System.out.println(b);
10
11    }
12
13 }
14
```

```
true
true
```

d) Declare a method-local variable strStatus of type String with the value "1" or "0" and attempt to convert it to a boolean.
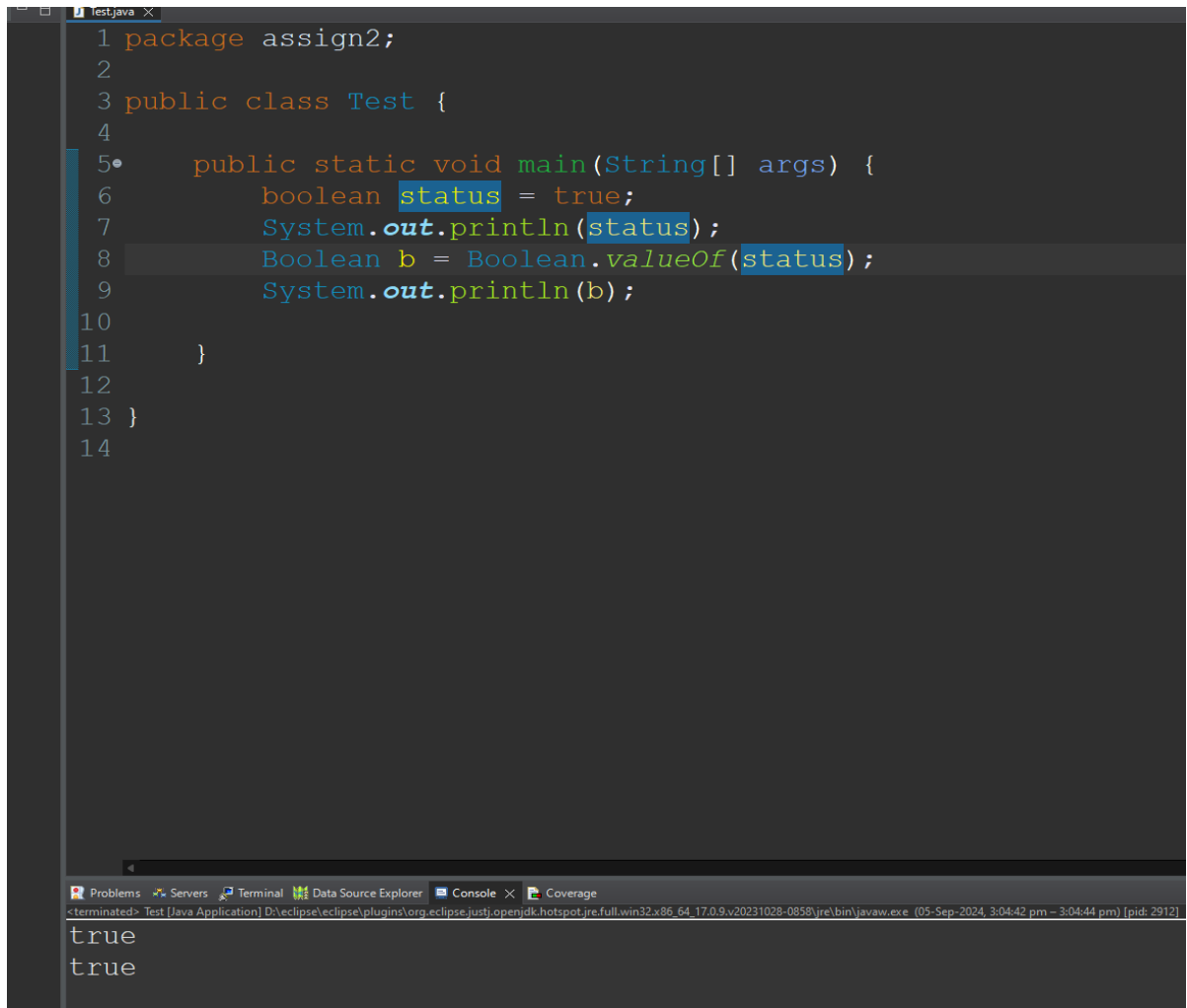
⟹

```java
1 package assign2;
2
3 public class Test {
4
5    public static void main(String[] args) {
6        String strStatus = "0";
7        System.out.println(strStatus);
8        boolean b = Boolean.parseBoolean(strStatus);
9        System.out.println(b);
10
11    }
12
13 }
14
```

```
0
false
```

e) Declare a method-local variable status of type boolean with the value true and convert it to the corresponding wrapper class using Boolean.valueOf(). (Hint: Use Boolean.valueOf(boolean)).

⟹

```java
package assign2;

public class Test {

    public static void main(String[] args) {
        boolean status = true;
        System.out.println(status);
        Boolean b = Boolean.valueOf(status);
        System.out.println(b);

    }

}
```

Problems   Servers   Terminal   Data Source Explorer   Console ×   Coverage
<terminated> Test [Java Application] D:\eclipse\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.9.v20231028-0858\jre\bin\javaw.exe (05-Sep-2024, 3:04:42 pm – 3:04:44 pm) [pid: 2912]

```
true
true
```

f) Declare a method-local variable strStatus of type String with the value "true" and convert it to the corresponding wrapper class using Boolean.valueOf(). (Hint:Use Boolean.valueOf(String)).
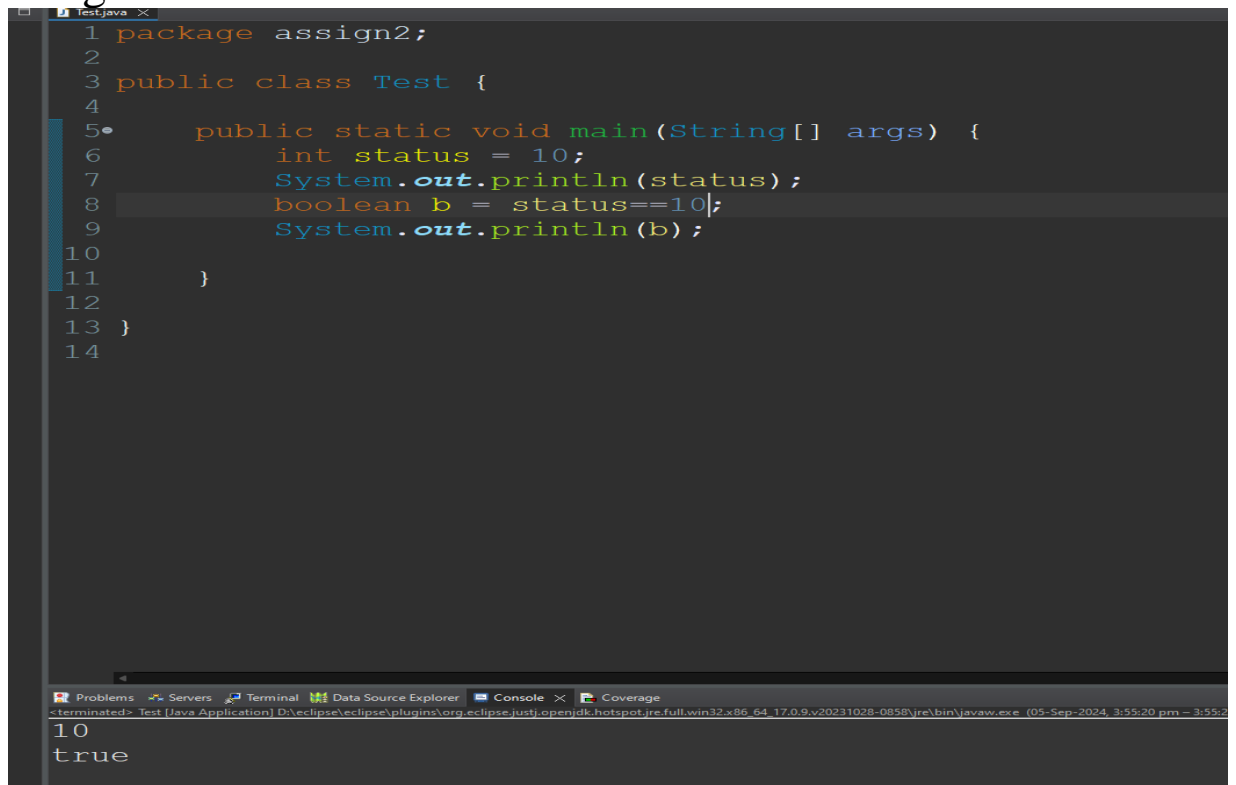
$\Rightarrow$

```java
package assign2;

public class Test {

    public static void main(String[] args) {
        String strStatus = "true";
        System.out.println(strStatus);
        Boolean b = Boolean.valueOf(strStatus);
        System.out.println(b);

    }

}
```

```
true
true
```

g) Experiment with converting a boolean value into other primitive types or vice versa and observe the results.

⟹

Integer converted to boolean

```java
1 package assign2;
2
3 public class Test {
4
5•     public static void main(String[] args) {
6         int status = 10;
7         System.out.println(status);
8         boolean b = status==10;
9         System.out.println(b);
10
11     }
12
13 }
14
```

Problems Servers Terminal Data Source Explorer Console ✕ Coverage
<terminated> Test [Java Application] D:\eclipse\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.9.v20231028-0858\jre\bin\javaw.exe (05-Sep-2024, 3:55:20 pm – 3:55:2

```
10
true
```