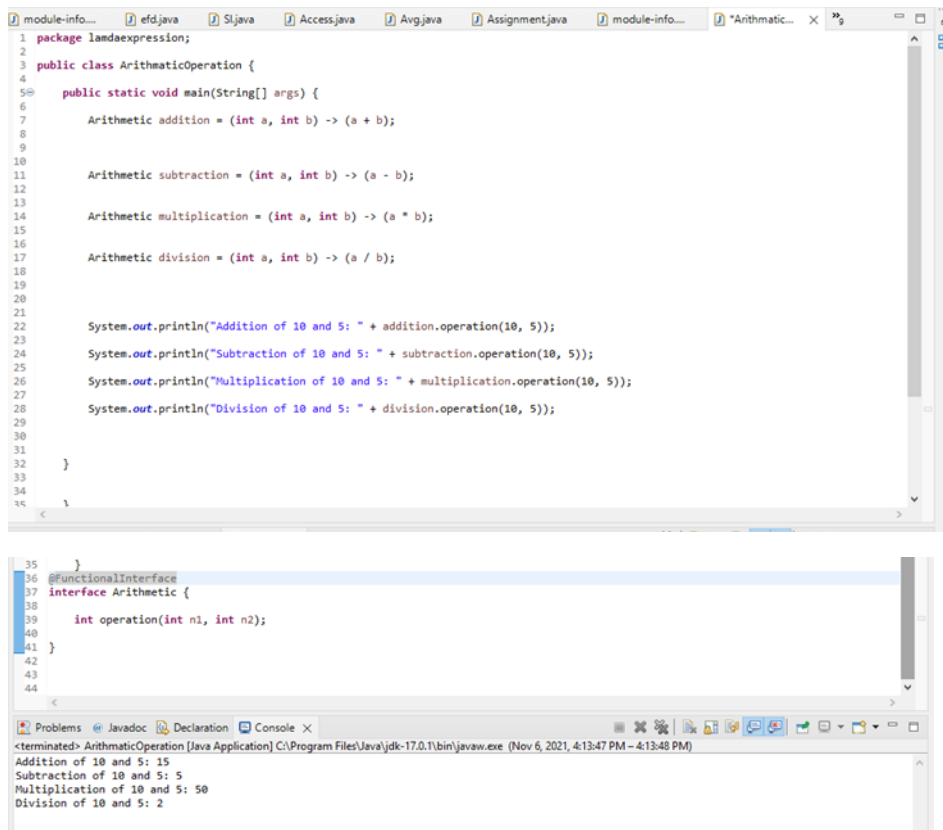


Assignment-8

1.



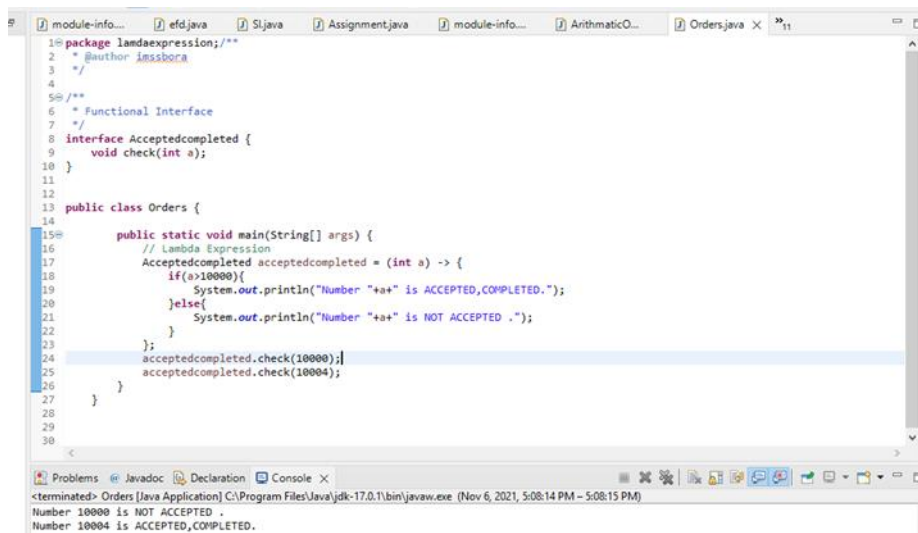
```
1 package lambdaexpression;
2
3 public class ArithmeticOperation {
4
5     public static void main(String[] args) {
6
7         Arithmetic addition = (int a, int b) -> (a + b);
8
9
10
11         Arithmetic subtraction = (int a, int b) -> (a - b);
12
13
14         Arithmetic multiplication = (int a, int b) -> (a * b);
15
16
17         Arithmetic division = (int a, int b) -> (a / b);
18
19
20
21         System.out.println("Addition of 10 and 5: " + addition.operation(10, 5));
22
23         System.out.println("Subtraction of 10 and 5: " + subtraction.operation(10, 5));
24
25         System.out.println("Multiplication of 10 and 5: " + multiplication.operation(10, 5));
26
27         System.out.println("Division of 10 and 5: " + division.operation(10, 5));
28
29
30
31     }
32
33
34
35 }
36
37 @FunctionalInterface
38 interface Arithmetic {
39     int operation(int n1, int n2);
40 }
41
42
43
44
```

Problems Javadoc Declaration Console X

<terminated> ArithmeticOperation [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Nov 6, 2021, 4:13:47 PM - 4:13:48 PM)

Addition of 10 and 5: 15
Subtraction of 10 and 5: 5
Multiplication of 10 and 5: 50
Division of 10 and 5: 2

2.



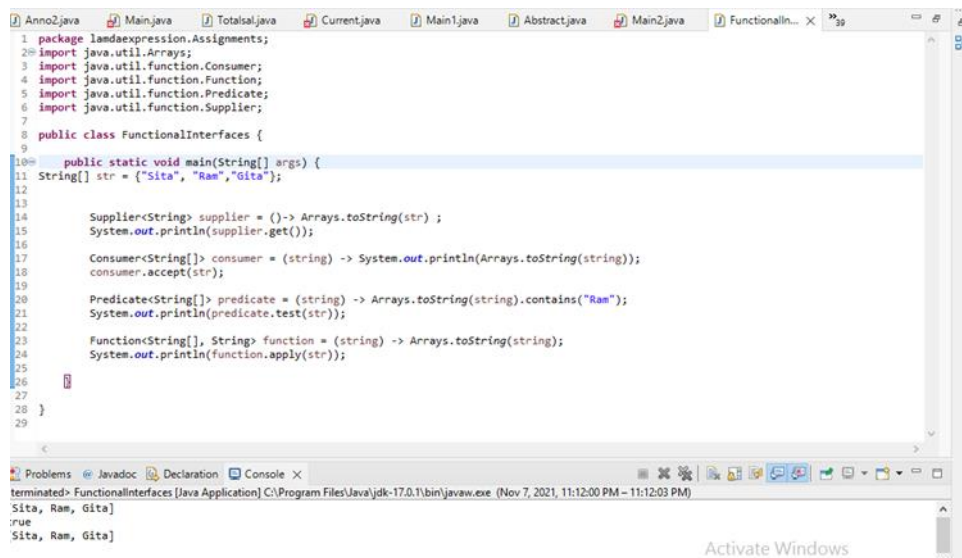
```
1 package lambdaexpression;
2
3 /**
4
5  * Functional Interface
6  */
7
8 interface AcceptedCompleted {
9     void check(int a);
10 }
11
12
13 public class Orders {
14
15     public static void main(String[] args) {
16         // Lambda Expression
17         AcceptedCompleted acceptedCompleted = (int a) -> {
18             if(a>10000){
19                 System.out.println("Number "+a+" is ACCEPTED,COMPLETED.");
20             }else{
21                 System.out.println("Number "+a+" is NOT ACCEPTED .");
22             }
23         };
24         acceptedCompleted.check(10000);
25         acceptedCompleted.check(10004);
26     }
27
28
29
30
```

Problems Javadoc Declaration Console X

<terminated> Orders [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Nov 6, 2021, 5:08:14 PM - 5:08:15 PM)

Number 10000 is NOT ACCEPTED .
Number 10004 is ACCEPTED,COMPLETED.

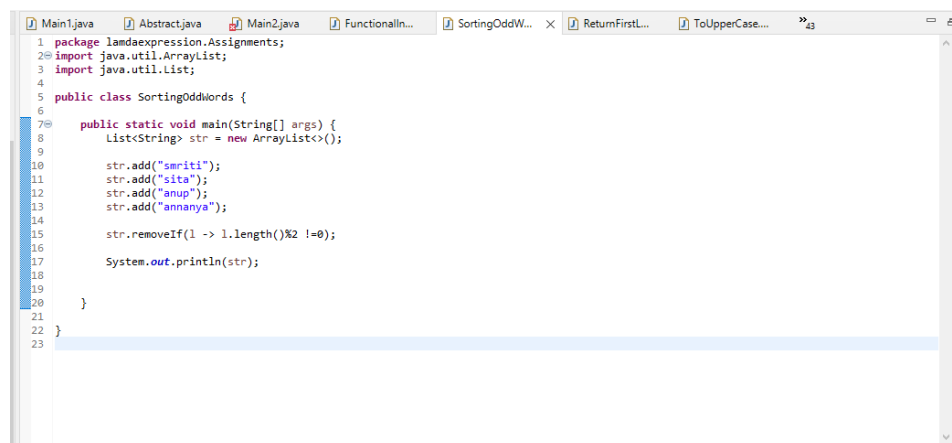
3.



```
1 package lambdaexpression.Assignments;
2 import java.util.Arrays;
3 import java.util.function.Consumer;
4 import java.util.function.Function;
5 import java.util.function.Predicate;
6 import java.util.function.Supplier;
7
8 public class FunctionalInterfaces {
9
10     public static void main(String[] args) {
11         String[] str = {"Sita", "Ram", "Gita"};
12
13
14         Supplier<String> supplier = () -> Arrays.toString(str);
15         System.out.println(supplier.get());
16
17         Consumer<String[]> consumer = (string) -> System.out.println(Arrays.toString(string));
18         consumer.accept(str);
19
20         Predicate<String[]> predicate = (string) -> Arrays.toString(string).contains("Ram");
21         System.out.println(predicate.test(str));
22
23         Function<String[], String> function = (string) -> Arrays.toString(string);
24         System.out.println(function.apply(str));
25
26     }
27 }
28
29
```

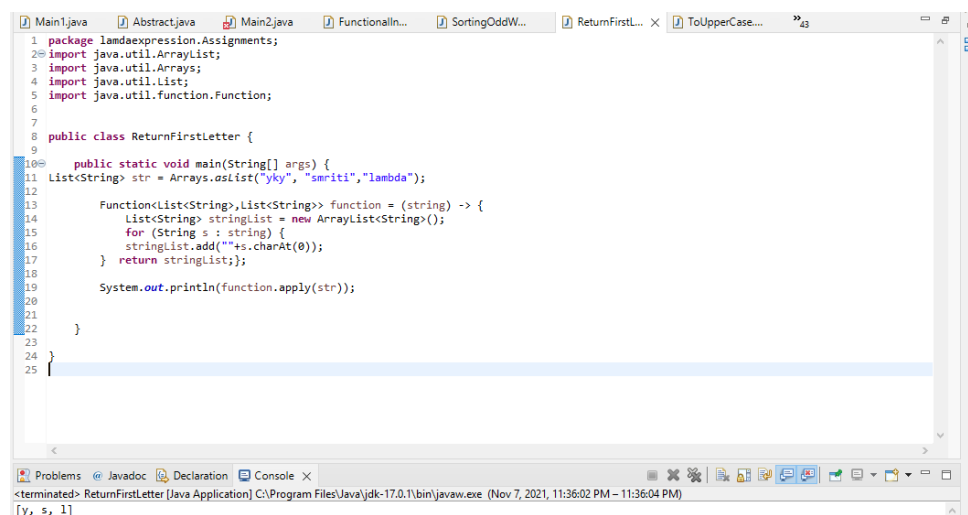
Problems Javadoc Declaration Console X
terminated- FunctionalInterfaces [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Nov 7, 2021, 11:12:00 PM – 11:12:03 PM)
Sita, Ram, Gita]
true
Sita, Ram, Gita]

4.



```
1 package lambdaexpression.Assignments;
2 import java.util.ArrayList;
3 import java.util.List;
4
5 public class SortingOddWords {
6
7     public static void main(String[] args) {
8         List<String> str = new ArrayList<>();
9
10         str.add("smriti");
11         str.add("sita");
12         str.add("anup");
13         str.add("annanya");
14
15         str.removeIf(l -> l.length() % 2 != 0);
16
17         System.out.println(str);
18
19     }
20 }
21
22
23
```

5.



```
1 package lambdaexpression.Assignments;
2 import java.util.ArrayList;
3 import java.util.Arrays;
4 import java.util.List;
5 import java.util.function.Function;
6
7 public class ReturnFirstLetter {
8
9     public static void main(String[] args) {
10         List<String> str = Arrays.asList("ky", "smriti", "lambda");
11
12         Function<List<String>, List<String>> function = (string) -> {
13             List<String> stringList = new ArrayList<String>();
14             for (String s : string) {
15                 stringList.add(s + ".charAt(0)");
16             }
17             return stringList;
18         }
19
20         System.out.println(function.apply(str));
21
22     }
23 }
24
25
```

Problems Javadoc Declaration Console X
<terminated> ReturnFirstLetter [Java Application] C:\Program Files\Java\jdk-17.0.1\bin\javaw.exe (Nov 7, 2021, 11:36:02 PM – 11:36:04 PM)
[y, s, l]

8.

