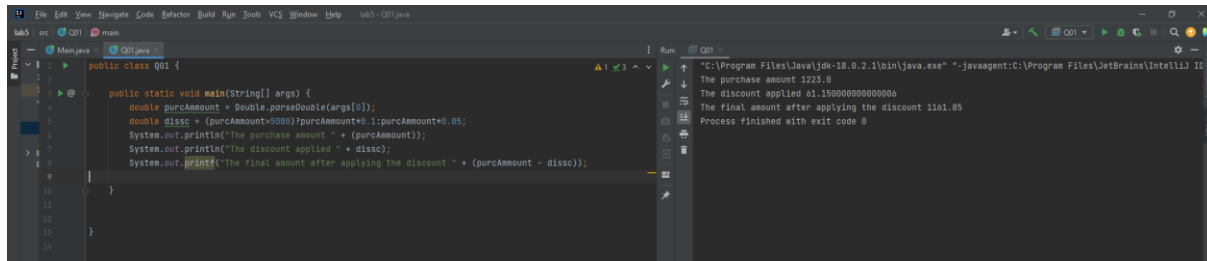


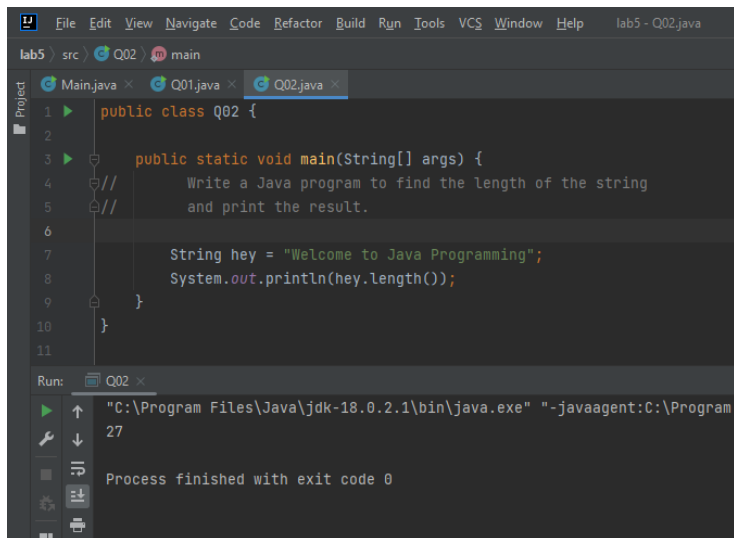
01.



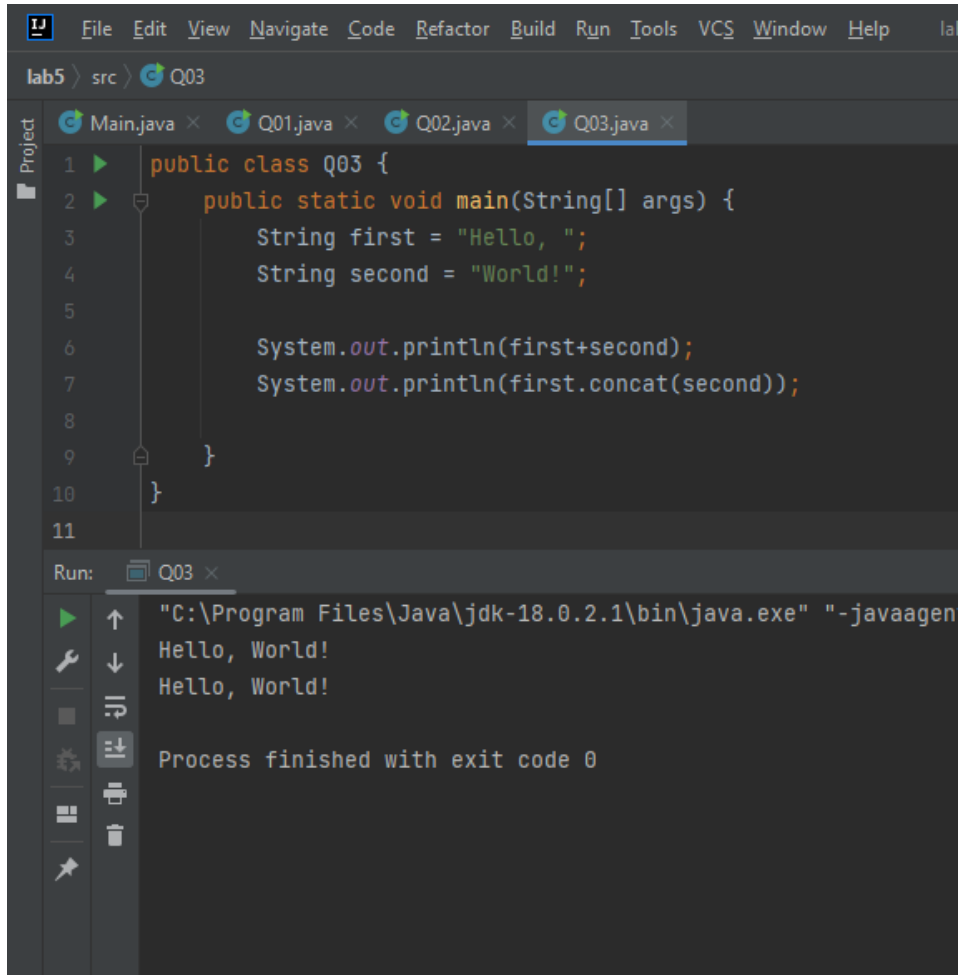
```
public class Q01 {  
    public static void main(String[] args) {  
        double purcAmmount = Double.parseDouble(args[0]);  
        double dissc = (purcAmmount>5000)?purcAmmount*0.1:purcAmmount*0.05;  
        System.out.println("The purchase amount " + (purcAmmount));  
        System.out.println("The discount applied " + dissc);  
        System.out.printf("The final amount after applying the discount " +  
            (purcAmmount - dissc));  
    }  
}
```

02.

```
public class Q02 {  
  
    public static void main(String[] args) {  
        //      Write a Java program to find the length of the string  
        //      and print the result.  
  
        String hey = "Welcome to Java Programming";  
        System.out.println(hey.length());  
    }  
}
```



03.



The screenshot shows an IDE with the following components:

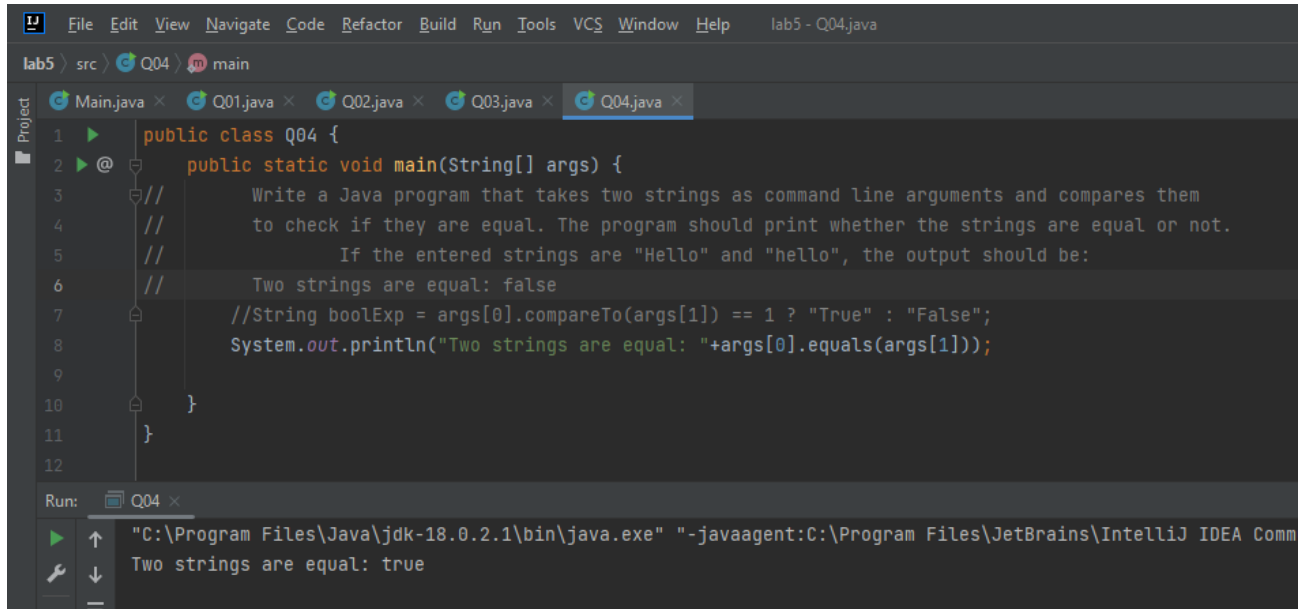
- Project Explorer:** Shows a project named 'lab5' with a source folder 'src' containing files 'Main.java', 'Q01.java', 'Q02.java', and 'Q03.java'.
- Editor:** Displays the code for 'Q03.java':

```
1 public class Q03 {  
2     public static void main(String[] args) {  
3         String first = "Hello, ";  
4         String second = "World!";  
5  
6         System.out.println(first+second);  
7         System.out.println(first.concat(second));  
8     }  
9 }  
10  
11
```
- Run Console:** Shows the execution of 'Q03' with the command:

```
"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagen  
Hello, World!  
Hello, World!  
Process finished with exit code 0
```

```
public class Q03 {  
    public static void main(String[] args) {  
        String first = "Hello, ";  
        String second = "World!";  
  
        System.out.println(first+second);  
        System.out.println(first.concat(second));  
    }  
}
```

04.



The screenshot shows the IntelliJ IDEA IDE with the file 'Q04.java' open. The code defines a public class Q04 with a main method. The main method contains comments explaining the task: to write a Java program that takes two strings as command line arguments and compares them to check if they are equal. It also includes a comment about the expected output for the inputs 'Hello' and 'hello'. The code uses the `compareTo` method to compare the strings and prints the result using `System.out.println`. The Run window at the bottom shows the command executed and the output 'Two strings are equal: true'.

```
1 public class Q04 {
2     @
3     // Write a Java program that takes two strings as command line arguments and compares them
4     // to check if they are equal. The program should print whether the strings are equal or not.
5     // If the entered strings are "Hello" and "hello", the output should be:
6     // Two strings are equal: false
7     //String boolExp = args[0].compareTo(args[1]) == 1 ? "True" : "False";
8     System.out.println("Two strings are equal: "+args[0].equals(args[1]));
9
10 }
11
12 }
```

Run: Q04 x

"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Comm

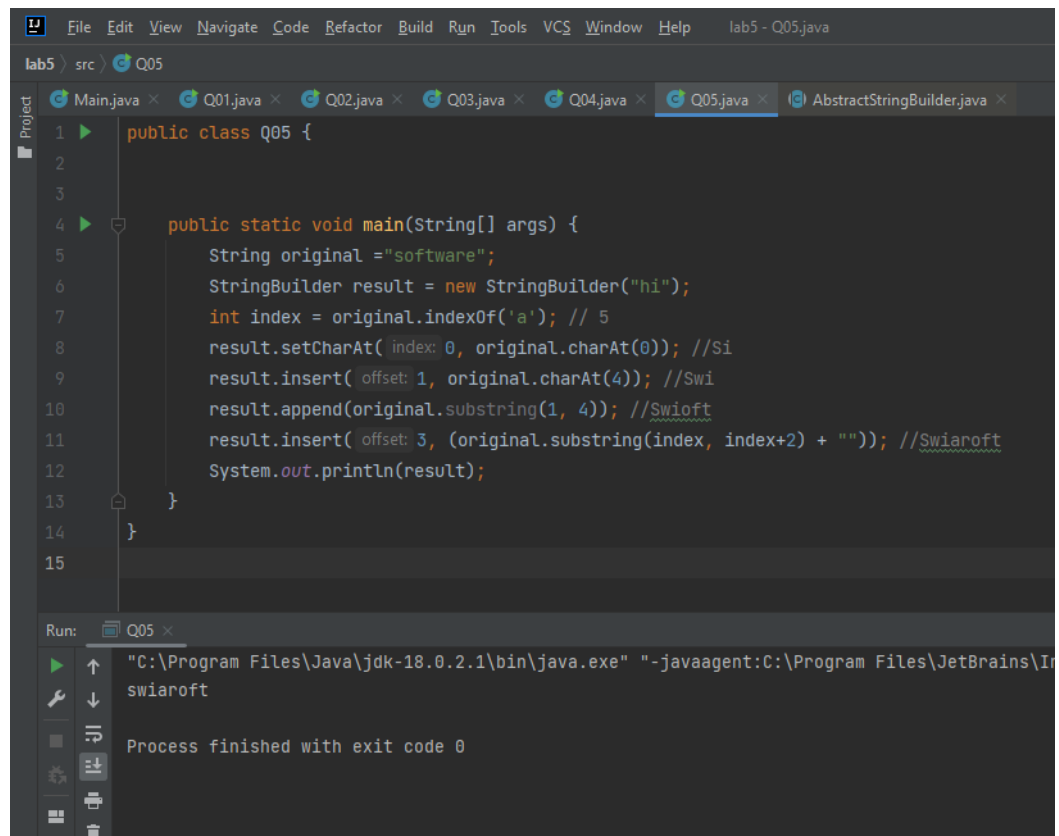
Two strings are equal: true

```
public class Q04 {
    public static void main(String[] args) {
        // Write a Java program that takes two strings as command line
        // Two strings are equal: false
        //String boolExp = args[0].compareTo(args[1]) == 1 ? "True" :
        System.out.println("Two strings are equal:
        "+args[0].equals(args[1]));
    }
}
```

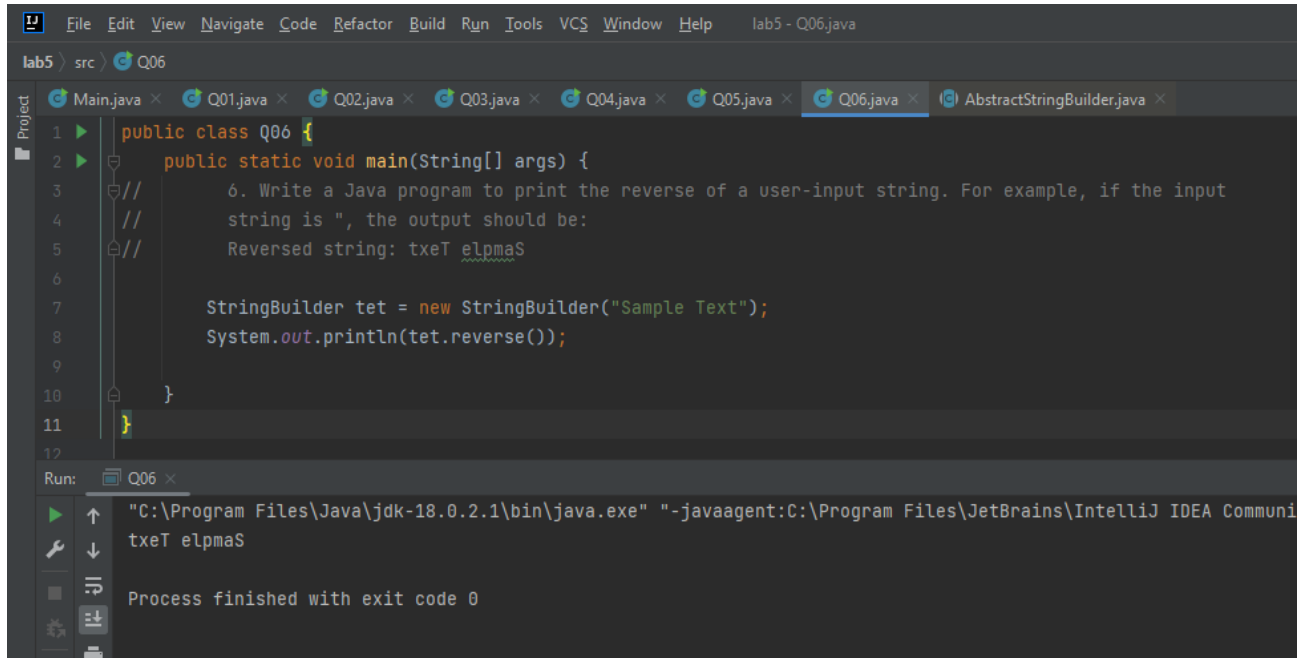
5.

```
public class Q05 {

    public static void main(String[] args) {
        String original = "software";
        StringBuilder result = new StringBuilder("hi");
        int index = original.indexOf('a'); // 5
        result.setCharAt(0, original.charAt(0)); //Si
        result.insert(1, original.charAt(4)); //Swi
        result.append(original.substring(1, 4)); //Swioft
        result.insert(3, (original.substring(index, index+2) + "")); //Swiaroft
        System.out.println(result);
    }
}
```



06.



```
public class Q06 {  
    public static void main(String[] args) {  
        // 6. Write a Java program to print the reverse of a user-input  
        // string. For example, if the input  
        // string is "Sample Text", the output should be:  
        // Reversed string: txeT elpmaS  
  
        StringBuilder tet = new StringBuilder("Sample Text");  
        System.out.println(tet.reverse());  
    }  
}
```

07.

```

1 public class Q07 {
2     public static void main(String[] args) {
3         // A password for a student will be generated as follows. It takes
4         //
5         //     First Name: Kamala
6         //     Middle Name: Sugarcane
7         //     Last Name: Perera
8         //     Age: 20
9         //     Password: ksuer2000
10        // Your program should work for any input NOT ONLY this given example
11        String fname = args[0];
12        String mname = args[1];
13        String lname = args[2];
14        int age = Integer.parseInt(args[3]);
15        StringBuffer password = new StringBuffer();
16        password.append(fname.charAt(0));
17        password.append(mname.substring(0,2));
18        int lengthOf = lname.length();
19        password.append(lname.substring(lengthOf-3,lengthOf-1));
20        password.append(age*100);
21
22        System.out.println(password);
23    }
24 }

```

Run: Q07

"C:\Program Files\Java\jdk-18.0.2.1\bin\java.exe" "-javaagent:C:\Program F
KSuer2000

Process finished with exit code 0

```

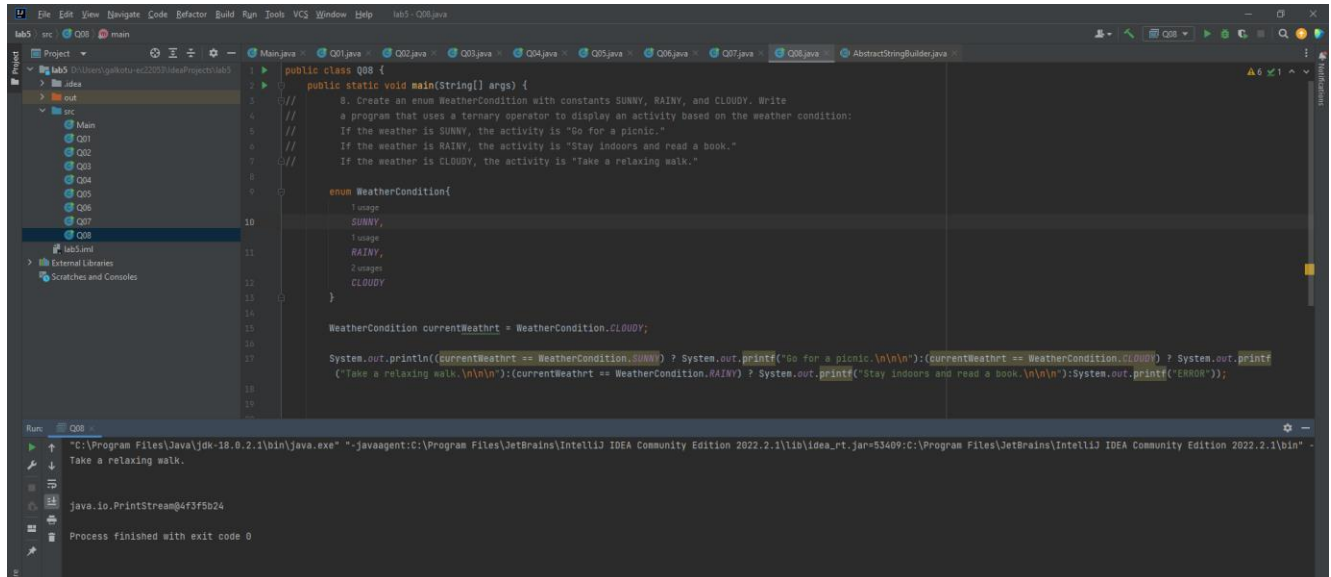
public class Q07 {
    public static void main(String[] args) {
        // A password for a student will be generated as follows. It takes the
        // first letter from the first

        //     First Name: Kamala
        //     Middle Name: Sugarcane
        //     Last Name: Perera
        //     Age: 20
        //     Password: ksuer2000z
        // Your program should work for any input NOT ONLY this given example
        // in the exercise.
        String fname = args[0];
        String mname = args[1];
        String lname = args[2];
        int age = Integer.parseInt(args[3]);
        StringBuffer password = new StringBuffer();
        password.append(fname.charAt(0));
        password.append(mname.substring(0,2));
        int lengthOf = lname.length();
        password.append(lname.substring(lengthOf-3,lengthOf-1));
        password.append(age*100);

        System.out.println(password);
    }
}

```

08.



```

public class Q08 {
    public static void main(String[] args) {
        // 8. Create an enum WeatherCondition with constants SUNNY, RAINY, and
        CLOUDY. Write
        // a program that uses a ternary operator to display an activity based
        on the weather condition:
        // If the weather is SUNNY, the activity is "Go for a picnic."
        // If the weather is RAINY, the activity is "Stay indoors and read a
        book."
        // If the weather is CLOUDY, the activity is "Take a relaxing walk."

        enum WeatherCondition {
            SUNNY,
            RAINY,
            CLOUDY
        }

        WeatherCondition currentWeather = WeatherCondition.RAINY;

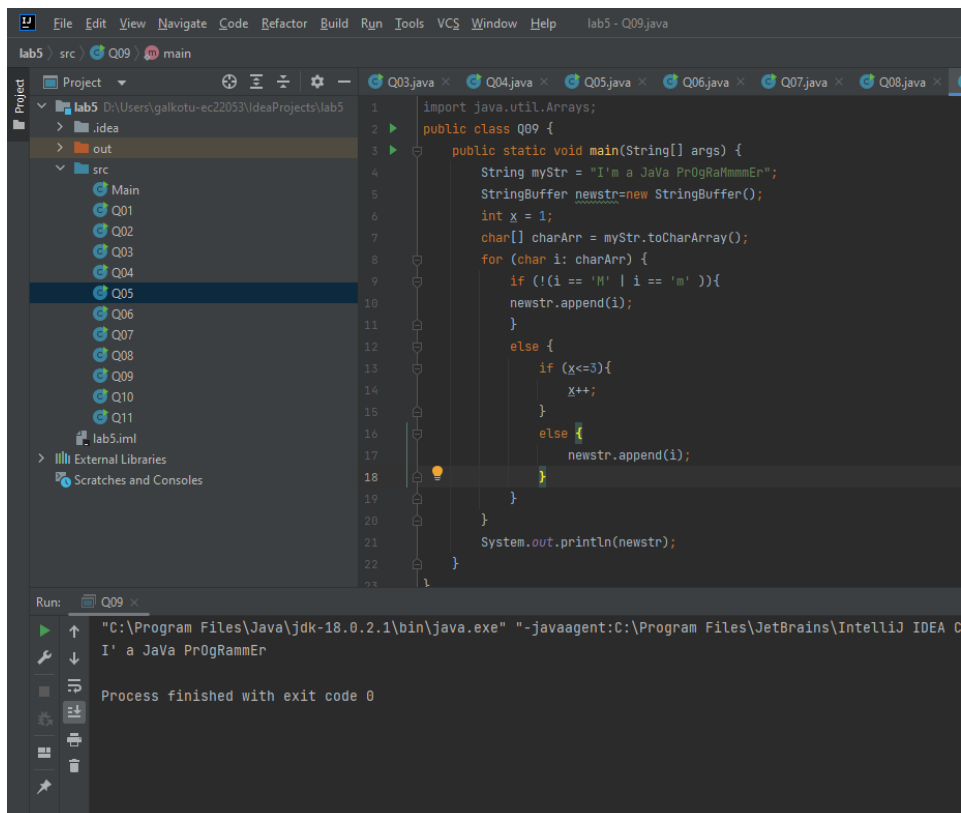
        System.out.println((currentWeather == WeatherCondition.SUNNY) ?
        System.out.printf("Go for a picnic.\n\n") : (currentWeather ==
        WeatherCondition.CLOUDY) ? System.out.printf("Take a relaxing
        walk.\n\n") : (currentWeather == WeatherCondition.RAINY) ?
        System.out.printf("Stay indoors and read a
        book.\n\n") : System.out.printf("ERROR"));
    }
}

```


09.

a.

```
import java.util.Arrays;
public class Q09 {
    public static void main(String[] args) {
        String myStr = "I'm a JaVa PrOgRaMmmEr";
        StringBuffer newstr=new StringBuffer();
        int x = 1;
        char[] charArr = myStr.toCharArray();
        for (char i: charArr) {
            if (!(i == 'M' | i == 'm' )){
                newstr.append(i);
            }
            else {
                if (x<=3){
                    x++;
                }
                else {
                    newstr.append(i);
                }
            }
        }
        System.out.println(newstr);
    }
}
```

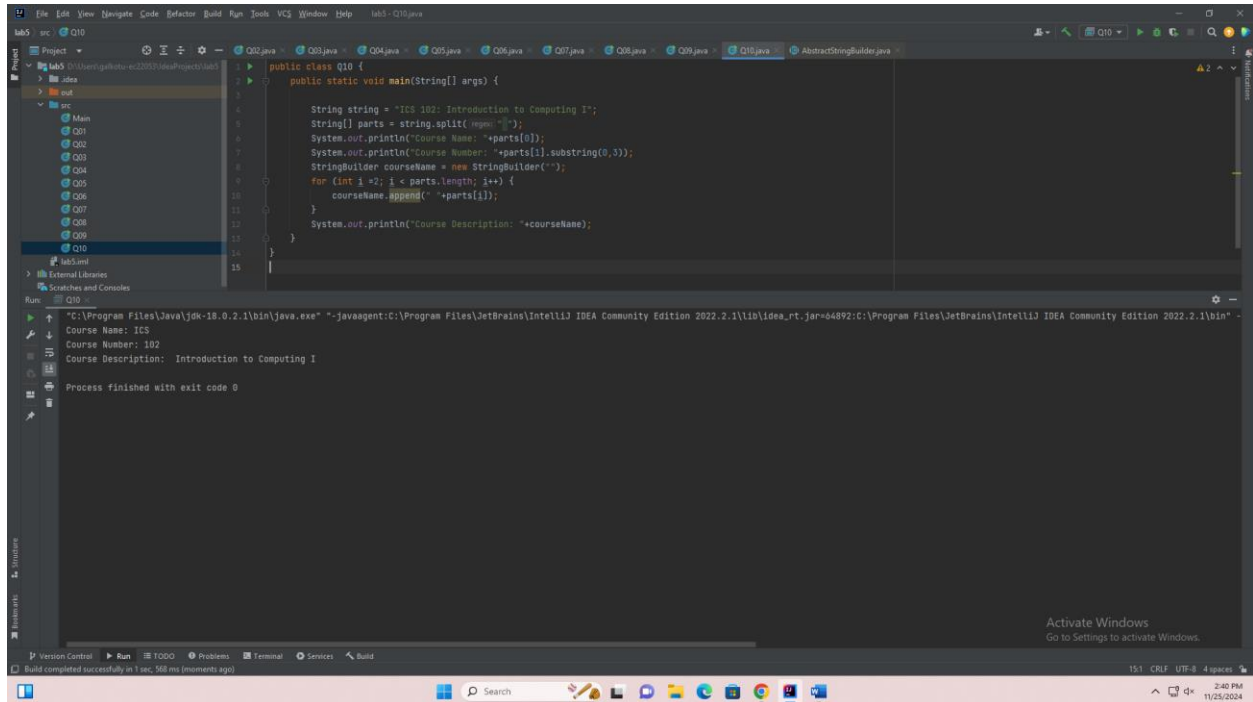


BECS 12243 - Object Oriented Programming

Tutorial 05

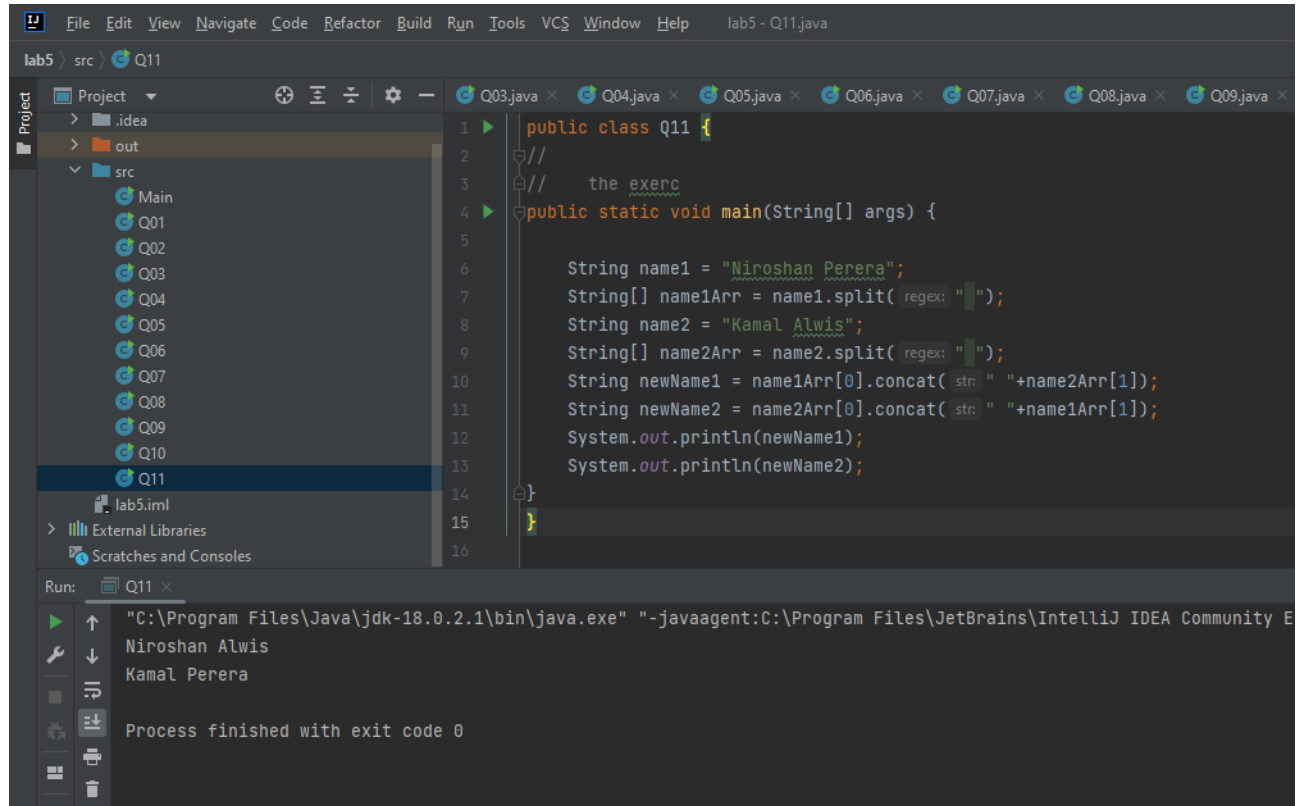
EC/2022/053

b.



```
public class Q10 {  
    public static void main(String[] args) {  
  
        String string = "ICS 102: Introduction to Computing I";  
        String[] parts = string.split(" ");  
        System.out.println("Course Name: "+parts[0]);  
        System.out.println("Course Number: "+parts[1].substring(0,3));  
        StringBuilder courseName = new StringBuilder("");  
        for (int i =2; i < parts.length; i++) {  
            courseName.append(" "+parts[i]);  
        }  
        System.out.println("Course Description: "+courseName);  
    }  
}
```

09. c



```
public class Q11 {
//
// the exerc
public static void main(String[] args) {

    String name1 = "Niroshan Perera";
    String[] name1Arr = name1.split(" ");
    String name2 = "Kamal Alwis";
    String[] name2Arr = name2.split(" ");
    String newName1 = name1Arr[0].concat(" " + name2Arr[1]);
    String newName2 = name2Arr[0].concat(" " + name1Arr[1]);
    System.out.println(newName1);
    System.out.println(newName2);
}
}
```

