Java Assignment – 4

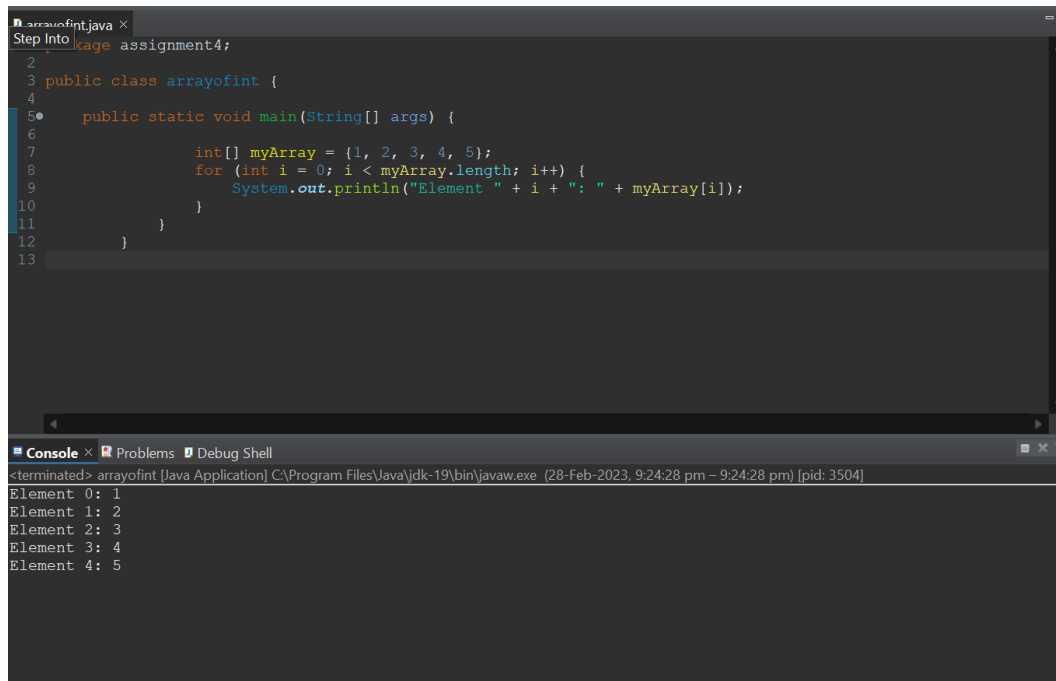**Vishwas Cp**

Engineering Intern

Tecnotree Mysore

1. Create an array of integers and use a for loop to print out each element of the array.
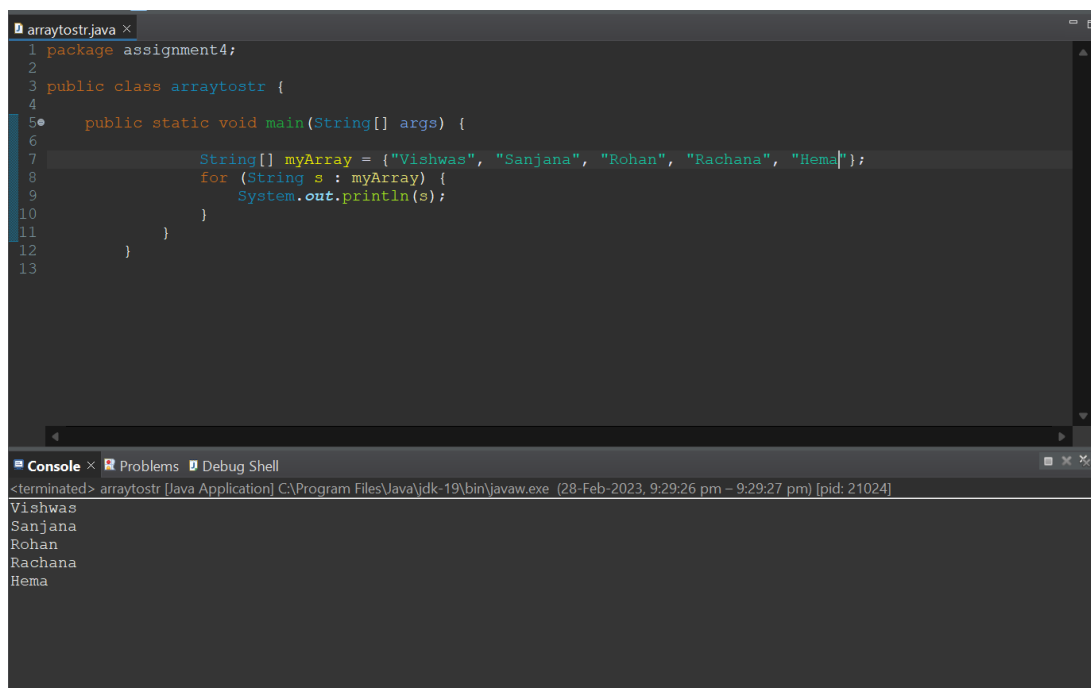
   https://codeshare.io/VZE4rz

2. Create an array of strings and use a for-each loop to print out each element of the array.
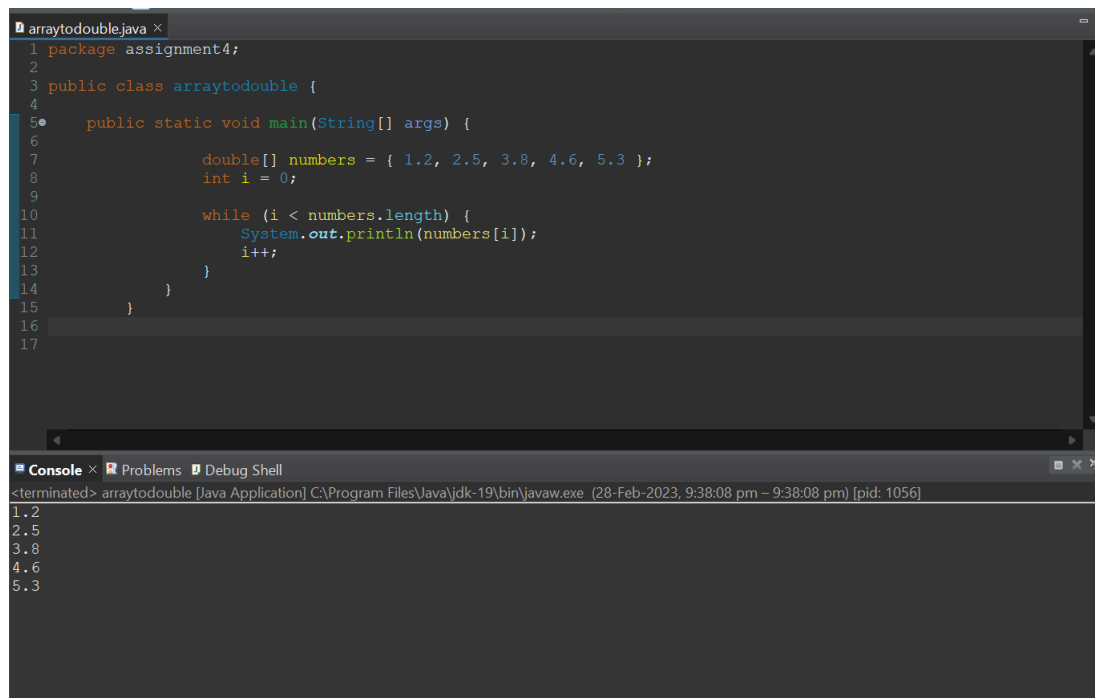
   https://codeshare.io/WdE47d

3. Create an array of doubles and use a while loop to print out each element of the array.

https://codeshare.io/eV6xQx
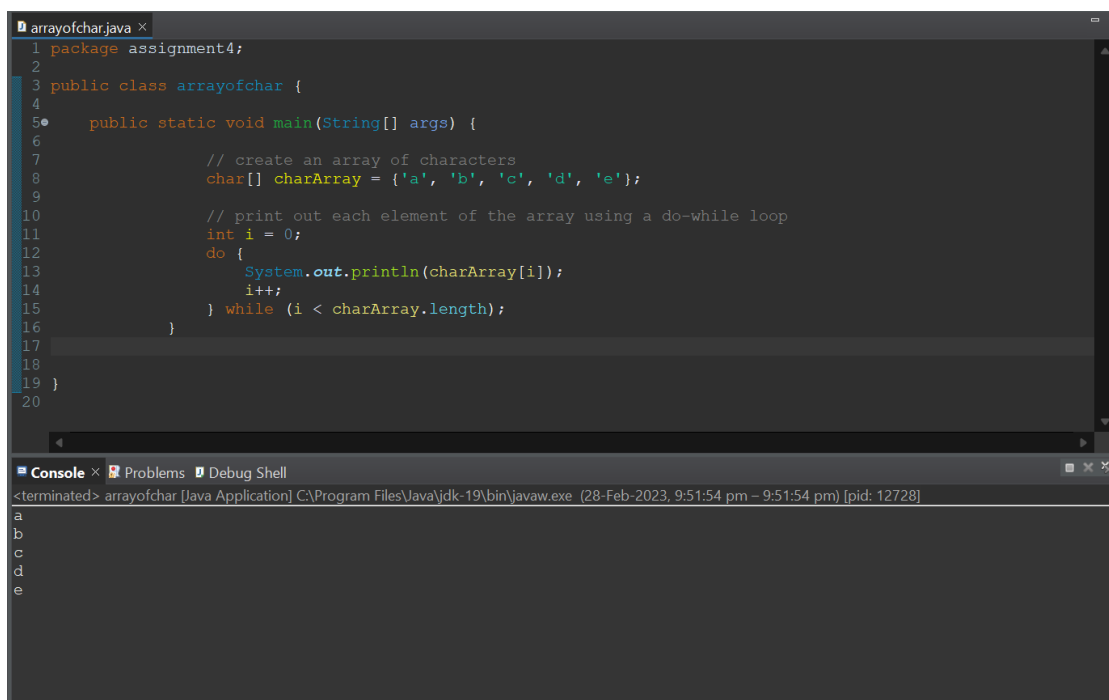
```java
package assignment4;

public class arraytodouble {

    public static void main(String[] args) {

        double[] numbers = { 1.2, 2.5, 3.8, 4.6, 5.3 };
        int i = 0;

        while (i < numbers.length) {
            System.out.println(numbers[i]);
            i++;
        }
    }
}
```

```
Console ×  Problems  Debug Shell
<terminated> arraytodouble [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 9:38:08 pm – 9:38:08 pm) [pid: 1056]
1.2
2.5
3.8
4.6
5.3
```

4. Create an array of characters and use a do-while loop to print out each element of the array.

https://codeshare.io/zyAY0W
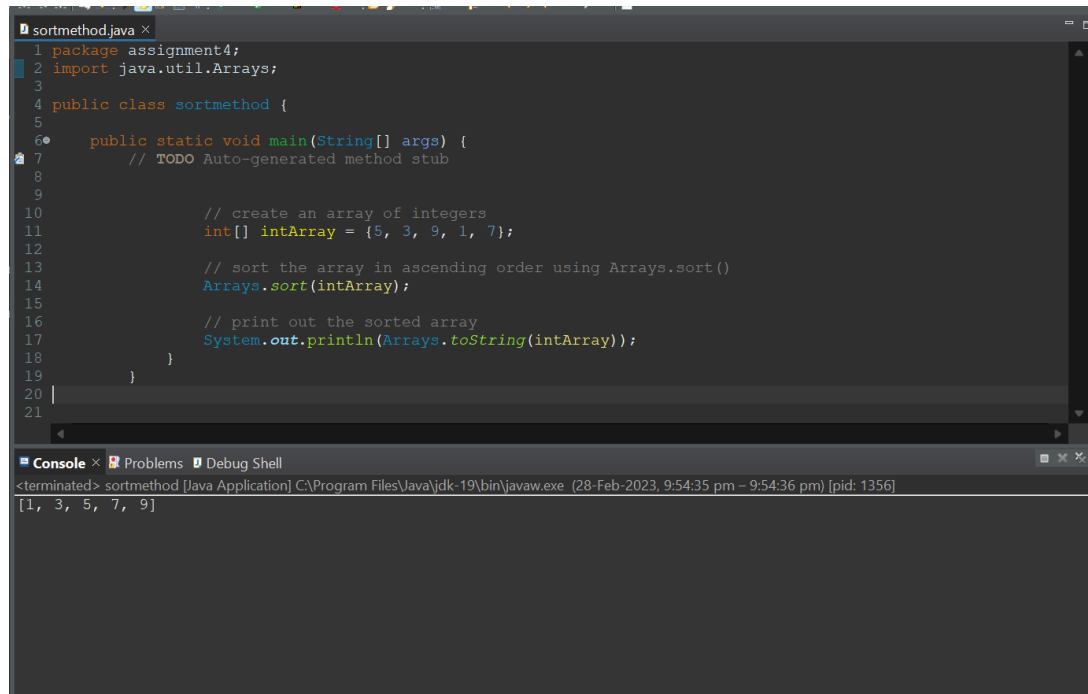
```java
package assignment4;

public class arrayofchar {

    public static void main(String[] args) {

        // create an array of characters
        char[] charArray = {'a', 'b', 'c', 'd', 'e'};

        // print out each element of the array using a do-while loop
        int i = 0;
        do {
            System.out.println(charArray[i]);
            i++;
        } while (i < charArray.length);
    }
}
```

```
Console ×  Problems  Debug Shell
<terminated> arrayofchar [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 9:51:54 pm – 9:51:54 pm) [pid: 12728]
a
b
c
d
e
```

5. Create an array of integers and use the Arrays class method sort() to sort the array in ascending order.

```java
package assignment4;
import java.util.Arrays;

public class sortmethod {

    public static void main(String[] args) {
        // TODO Auto-generated method stub


            // create an array of integers
            int[] intArray = {5, 3, 9, 1, 7};

            // sort the array in ascending order using Arrays.sort()
            Arrays.sort(intArray);

            // print out the sorted array
            System.out.println(Arrays.toString(intArray));
        }
    }
```

Console × Problems Debug Shell
<terminated> sortmethod [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 9:54:35 pm – 9:54:36 pm) [pid: 1356]
```
[1, 3, 5, 7, 9]
```

6. Create an array of strings and use the Arrays class method binarySearch() to find the index of a specific string in the array.

```java
import java.util.Arrays;

public class binarysearch {

    public static void main(String[] args) {
        // TODO Auto-generated method stub


            // create an array of strings
            String[] stringArray = {"Vishwas", "Rachana", "Sanjana", "Hema", "Rohan"};

            // sort the array in ascending order using Arrays.sort()
            Arrays.sort(stringArray);

            // use binarySearch() to find the index of "date" in the array
            int index = Arrays.binarySearch(stringArray, "Sanjana");

            // print out the index of "date" in the array
            System.out.println("Index of "+stringArray[3]+" in the array: " + index);
        }
    }
```

Console × Problems Debug Shell
<terminated> binarysearch [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:00:20 pm – 10:00:21 pm) [pid: 8696]
```
Index of Sanjana in the array: 3
```

7. Create a string and use the String class method split() to split the string into an array of substrings.

https://codeshare.io/j0dxK3
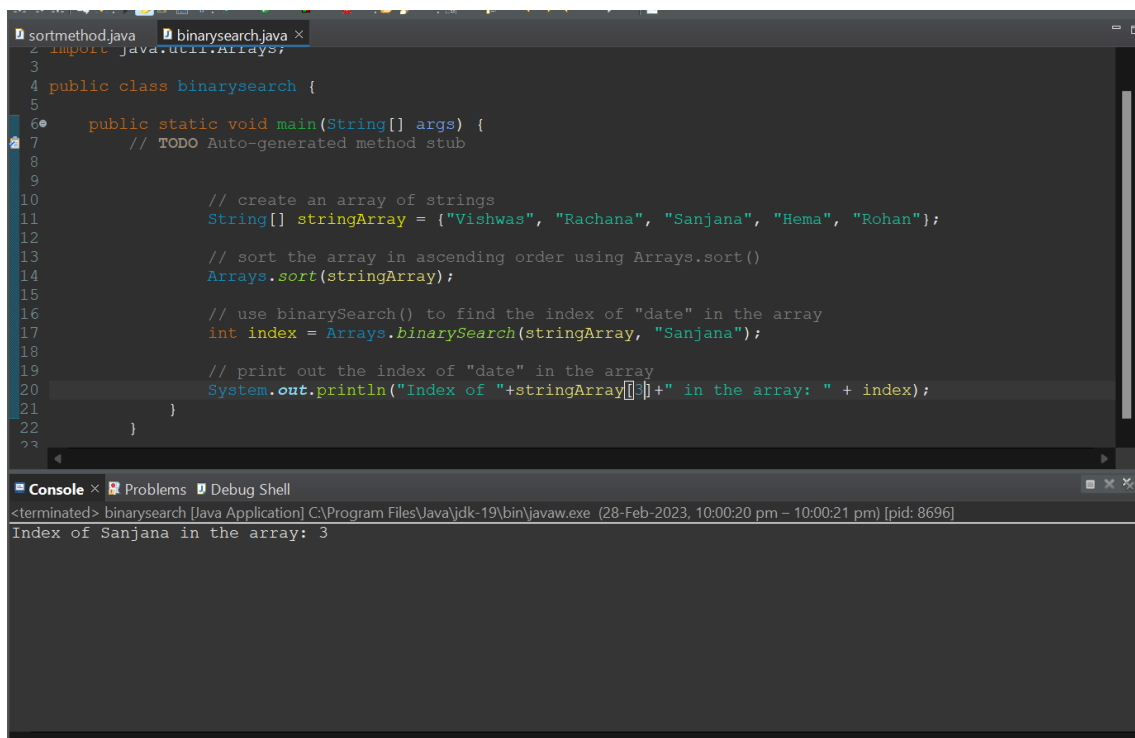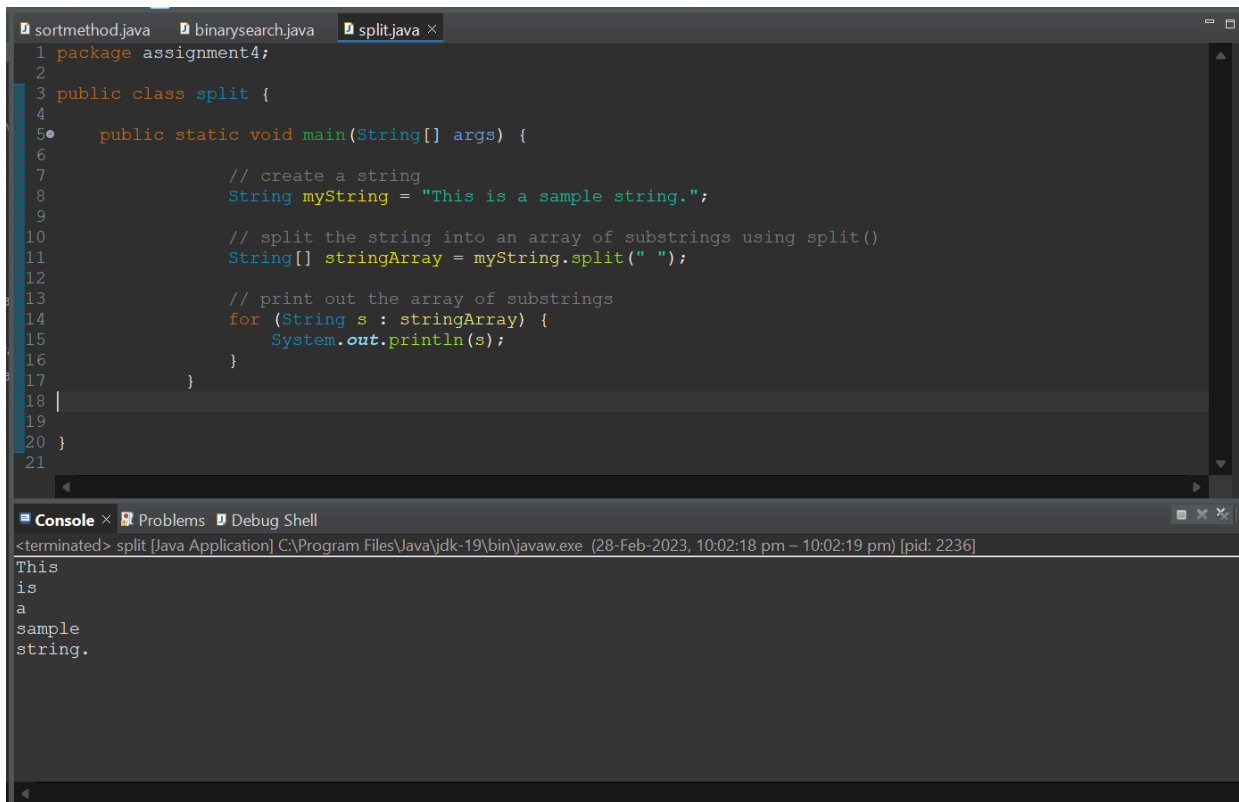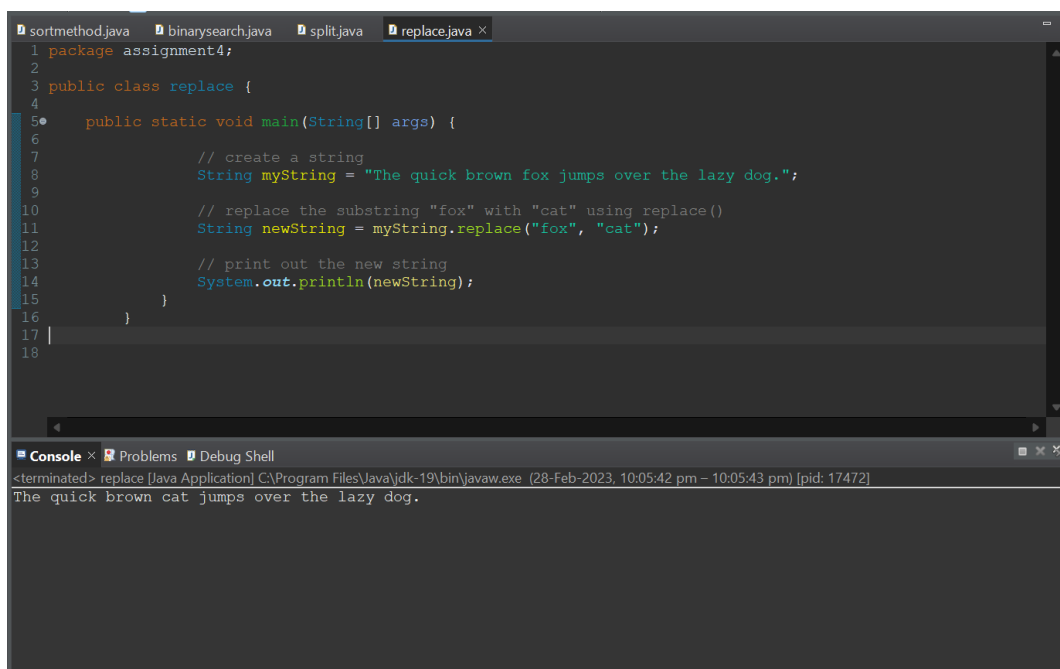
```java
package assignment4;

public class split {

    public static void main(String[] args) {

        // create a string
        String myString = "This is a sample string.";

        // split the string into an array of substrings using split()
        String[] stringArray = myString.split(" ");

        // print out the array of substrings
        for (String s : stringArray) {
            System.out.println(s);
        }
    }
}
```

```
<terminated> split [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 10:02:18 pm – 10:02:19 pm) [pid: 2236]
This
is
a
sample
string.
```

8. Create a string and use the String class method replace() to replace a specific substring in the string with a new substring.
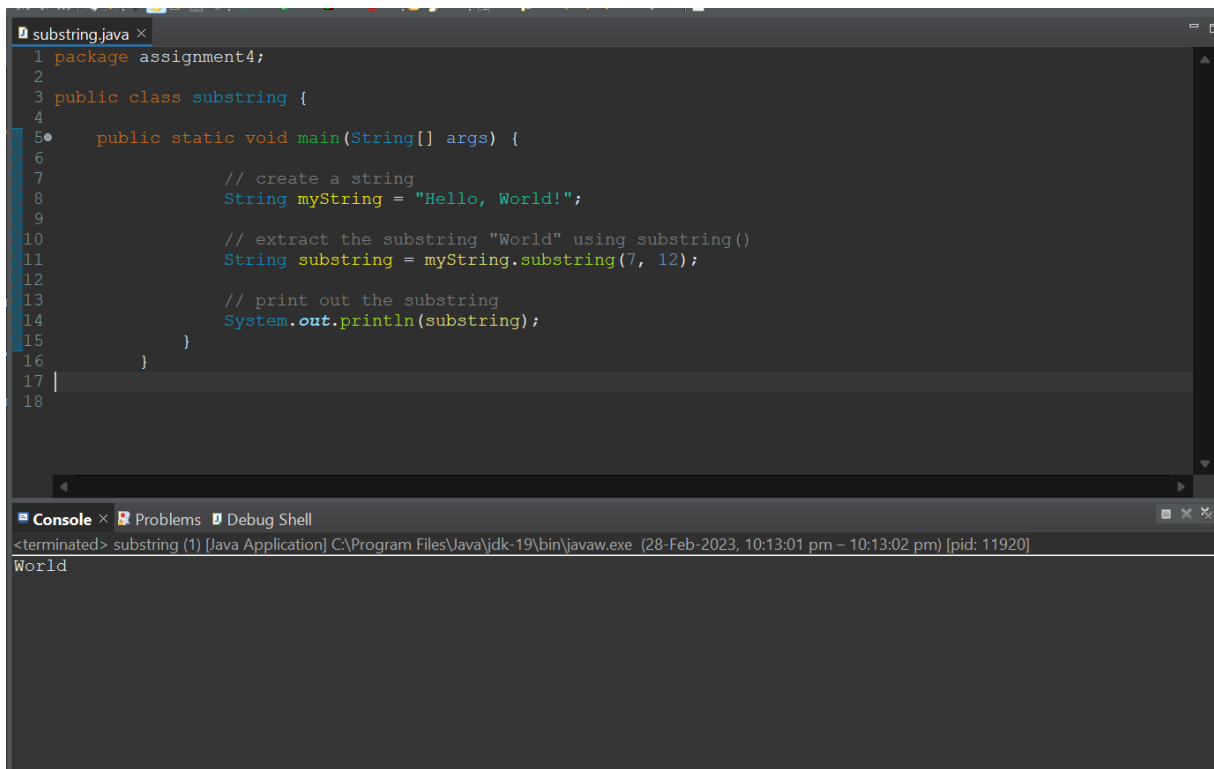
https://codeshare.io/4eo4Z7

```java
package assignment4;

public class replace {

    public static void main(String[] args) {

        // create a string
        String myString = "The quick brown fox jumps over the lazy dog.";

        // replace the substring "fox" with "cat" using replace()
        String newString = myString.replace("fox", "cat");

        // print out the new string
        System.out.println(newString);
    }
}
```

```
<terminated> replace [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 10:05:42 pm – 10:05:43 pm) [pid: 17472]
The quick brown cat jumps over the lazy dog.
```

9. Create a string and use the String class method substring() to extract a portion of the
   string.

https://codeshare.io/DZEzer

```java
package assignment4;

public class substring {

    public static void main(String[] args) {

        // create a string
        String myString = "Hello, World!";

        // extract the substring "World" using substring()
        String substring = myString.substring(7, 12);

        // print out the substring
        System.out.println(substring);
    }
}
```
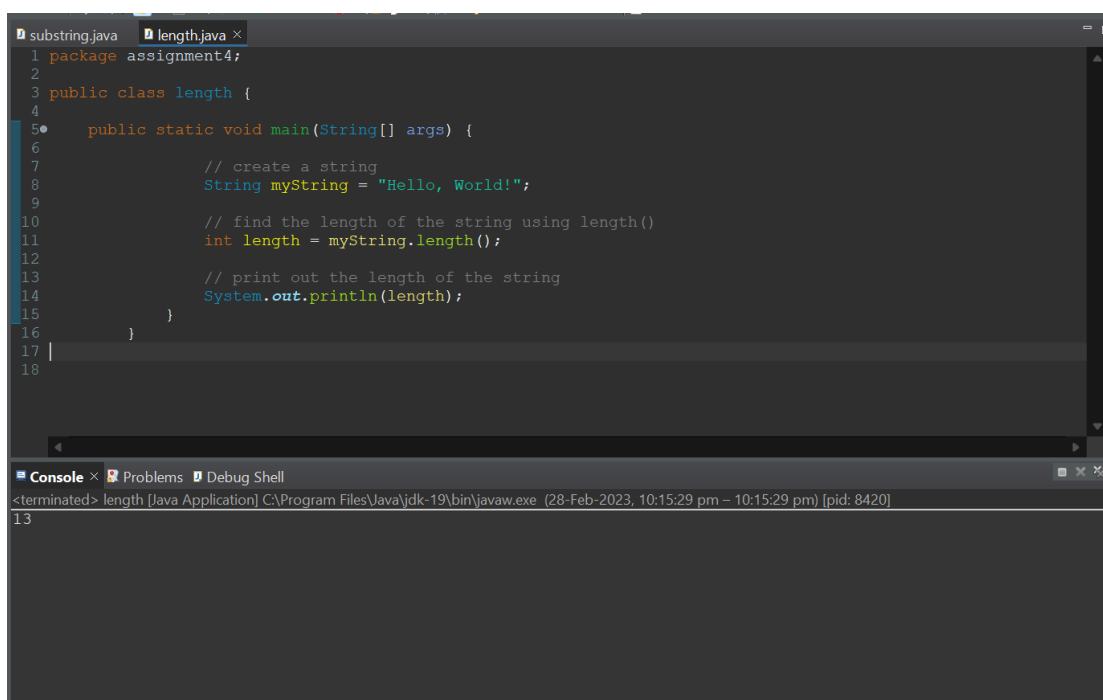
Console × Problems Debug Shell
<terminated> substring (1) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:13:01 pm – 10:13:02 pm) [pid: 11920]
World

10. Create a string and use the String class method length() to find the length of the string.

https://codeshare.io/PdE3rP

```java
package assignment4;

public class length {

    public static void main(String[] args) {

        // create a string
        String myString = "Hello, World!";

        // find the length of the string using length()
        int length = myString.length();

        // print out the length of the string
        System.out.println(length);
    }
}
```

Console × Problems Debug Shell
<terminated> length [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:15:29 pm – 10:15:29 pm) [pid: 8420]
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