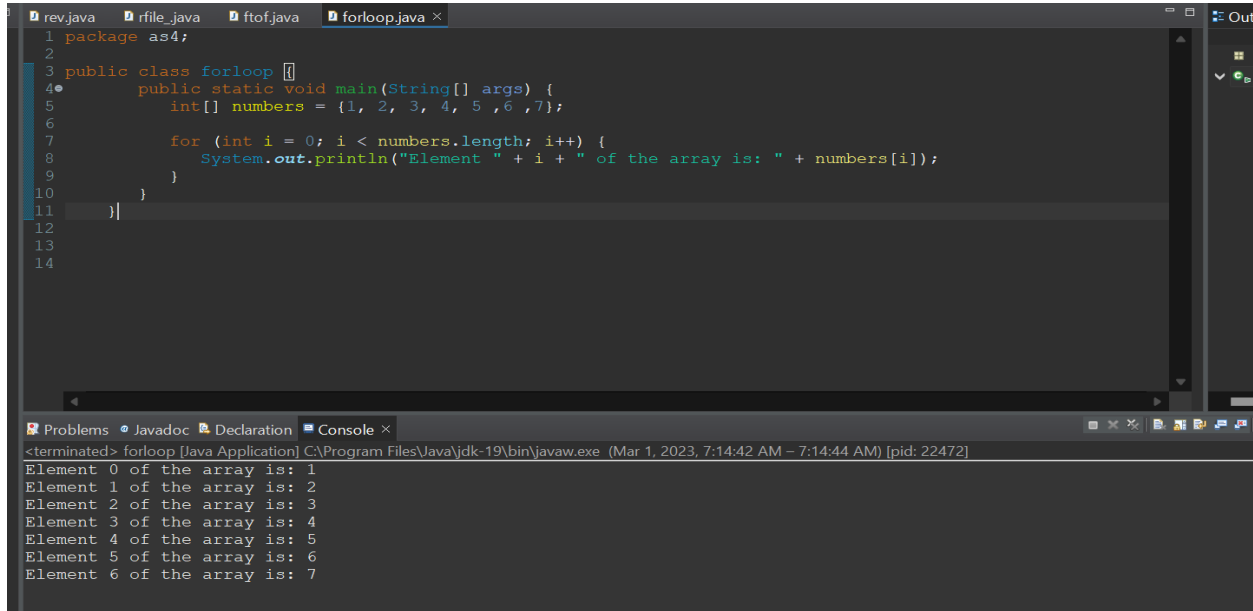


ASSIGNMENT- 04

1.Create an array of integers and use a for loop to print out each element of the array

Code: <https://codeshare.io/km8qkM>



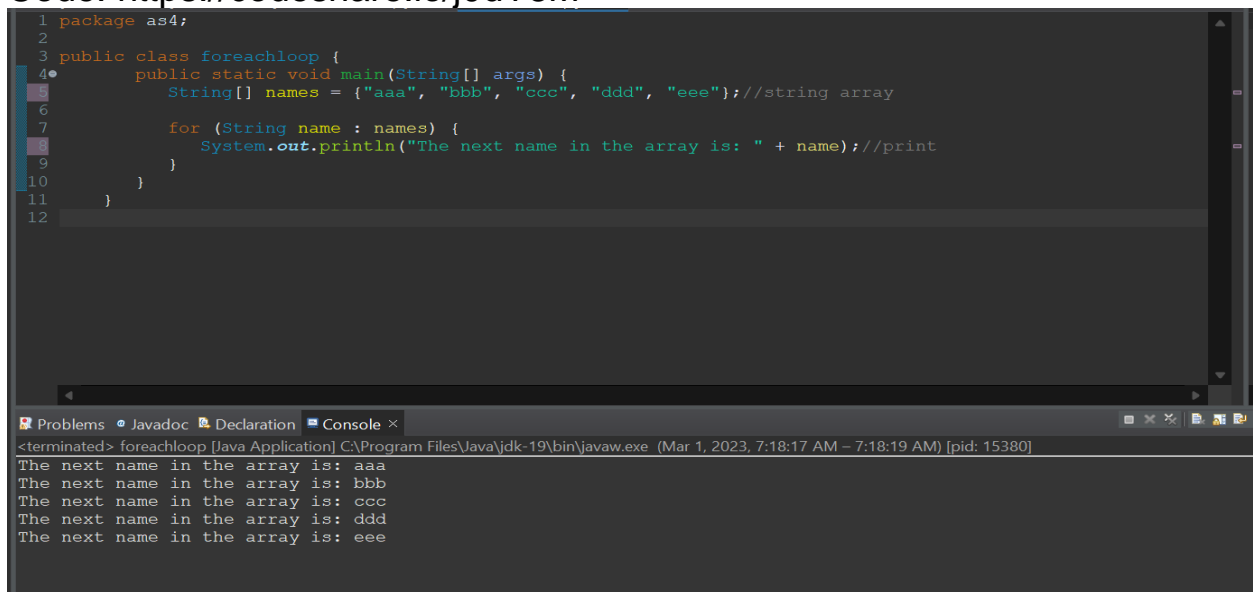
```
1 package as4;
2
3 public class forloop {
4     public static void main(String[] args) {
5         int[] numbers = {1, 2, 3, 4, 5, 6, 7};
6
7         for (int i = 0; i < numbers.length; i++) {
8             System.out.println("Element " + i + " of the array is: " + numbers[i]);
9         }
10    }
11 }
12
13
14
```

Problems • Javadoc • Declaration • Console ×

```
<terminated> forloop [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:14:42 AM – 7:14:44 AM) [pid: 22472]
Element 0 of the array is: 1
Element 1 of the array is: 2
Element 2 of the array is: 3
Element 3 of the array is: 4
Element 4 of the array is: 5
Element 5 of the array is: 6
Element 6 of the array is: 7
```

2.Create an array of strings and use a for-each loop to print out each element of the array.

Code: <https://codeshare.io/j0dY3M>



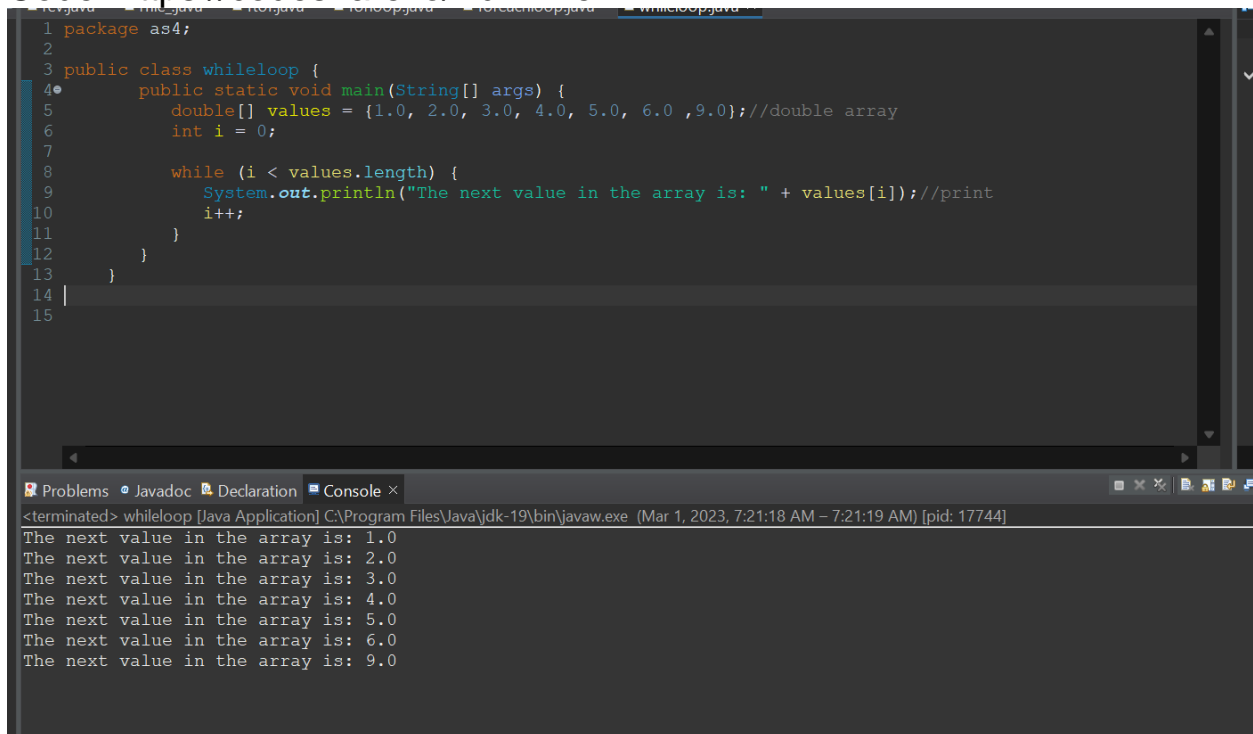
```
1 package as4;
2
3 public class foreachloop {
4     public static void main(String[] args) {
5         String[] names = {"aaa", "bbb", "ccc", "ddd", "eee"}; //string array
6
7         for (String name : names) {
8             System.out.println("The next name in the array is: " + name); //print
9         }
10    }
11 }
12
```

Problems • Javadoc • Declaration • Console ×

```
<terminated> foreachloop [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:18:17 AM – 7:18:19 AM) [pid: 15380]
The next name in the array is: aaa
The next name in the array is: bbb
The next name in the array is: ccc
The next name in the array is: ddd
The next name in the array is: eee
```

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

Code: <https://codeshare.io/Ad1Wke>



```
1 package as4;
2
3 public class whileloop {
4     public static void main(String[] args) {
5         double[] values = {1.0, 2.0, 3.0, 4.0, 5.0, 6.0, 9.0}; //double array
6         int i = 0;
7
8         while (i < values.length) {
9             System.out.println("The next value in the array is: " + values[i]); //print
10            i++;
11        }
12    }
13 }
14
15
```

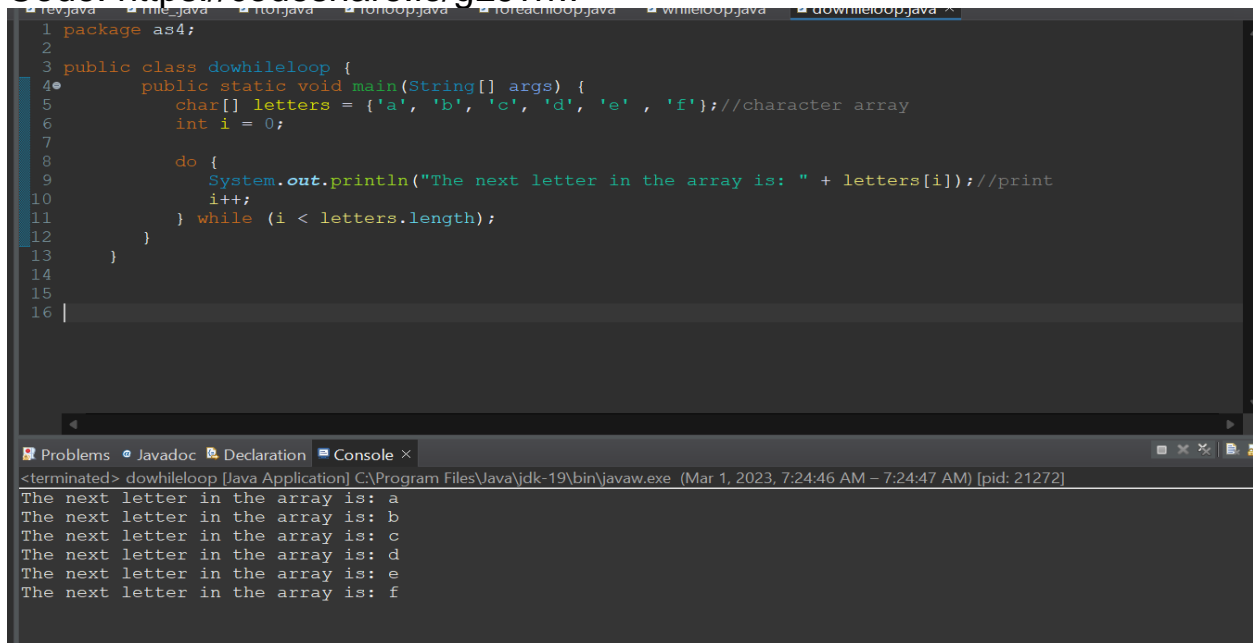
Problems Javadoc Declaration Console ×

<terminated> whileloop [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:21:18 AM – 7:21:19 AM) [pid: 17744]

The next value in the array is: 1.0
The next value in the array is: 2.0
The next value in the array is: 3.0
The next value in the array is: 4.0
The next value in the array is: 5.0
The next value in the array is: 6.0
The next value in the array is: 9.0

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

Code: <https://codeshare.io/gL9vnw>



```
1 package as4;
2
3 public class dowhileloop {
4     public static void main(String[] args) {
5         char[] letters = {'a', 'b', 'c', 'd', 'e', 'f'}; //character array
6         int i = 0;
7
8         do {
9             System.out.println("The next letter in the array is: " + letters[i]); //print
10            i++;
11        } while (i < letters.length);
12    }
13 }
14
15
16
```

Problems Javadoc Declaration Console ×

<terminated> dowhileloop [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:24:46 AM – 7:24:47 AM) [pid: 21272]

The next letter in the array is: a
The next letter in the array is: b
The next letter in the array is: c
The next letter in the array is: d
The next letter in the array is: e
The next letter in the array is: f

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

Code: <https://codeshare.io/QnE9P7>

```
1 package as4;
2
3 import java.util.Arrays;
4 public class arraysort {
5     public static void main(String[] args) {
6         int[] numbers = {7, 2, 3, 55, 6, 5, 7}; // unsorted array
7
8         Arrays.sort(numbers); // sort
9
10        System.out.println(Arrays.toString(numbers)); // print
11    }
12 }
13
14 |
```

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

Code: <https://codeshare.io/nzoO6M>

```
1 package as4;
2
3 import java.util.Arrays;
4 public class binarysearch {
5     public static void main(String[] args) {
6         String[] names = {"aaa", "bbb", "ccc", "ddd", "eee"};
7
8         int index = Arrays.binarySearch(names, "eee");
9
10        System.out.println("The index of 'eee' is: " + index);
11    }
12 }
13
14
15
```

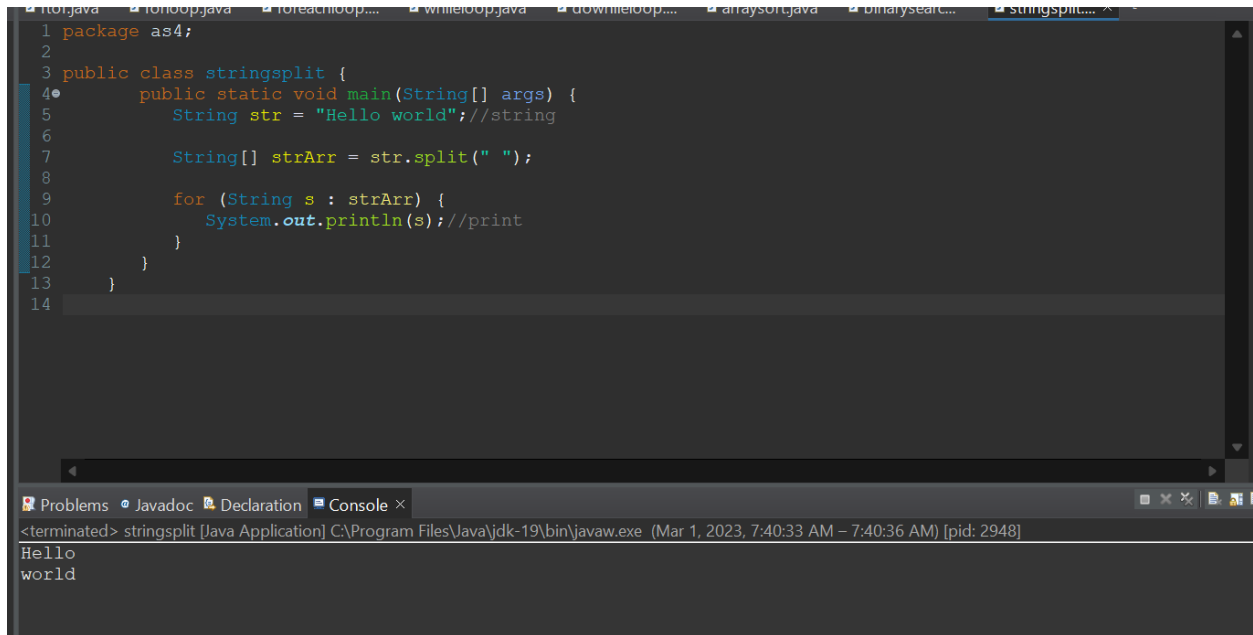
Problems Javadoc Declaration Console ×

<terminated> binarysearch [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:34:04 AM – 7:34:06 AM) [pid: 17664]

The index of 'eee' is: 4

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

Code: <https://codeshare.io/0gvedD>



```
1 package as4;
2
3 public class stringsplit {
4     public static void main(String[] args) {
5         String str = "Hello world";//string
6
7         String[] strArr = str.split(" ");
8
9         for (String s : strArr) {
10             System.out.println(s);//print
11         }
12     }
13 }
14
```

Problems Javadoc Declaration Console x

<terminated> stringsplit [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:40:33 AM – 7:40:36 AM) [pid: 2948]

Hello
world

8. Create a string and use the String class method `replace()` to replace a specific substring in the string with a new substring.

Code: <https://codeshare.io/78m34k>

```
1 package as4;
2
3 public class replace {
4     public static void main(String[] args) {
5         // Create a string
6         String ogString = "this taptop";
7
8         // Replace a substring in the string with a new substring
9         String newString = ogString.replace("taptop", "laptop");
10
11         // Print the original and new strings
12         System.out.println("Original string: " + ogString);
13         System.out.println("New string: " + newString);
14     }
15 }
16
```

Problems Javadoc Declaration Console ×

<terminated> replace [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:43:20 AM – 7:43:23 AM) [pid: 21884]

Original string: this taptop
New string: this laptop

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

Code: <https://codeshare.io/pqkj06>

```
1 package as4;
2 public class Substringclass {
3     public static void main(String[] args) {
4         String str = "Hello world!"; // string
5         String substr = str.substring(6, 11); // extract "world"
6         System.out.println(substr);
7     }
8 }
9
10
```

Problems Javadoc Declaration Console ×

<terminated> Substringclass [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:45:49 AM – 7:45:51 AM) [pid: 22176]

world

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

Code: <https://codeshare.io/zyAxdb>

```
1 package as4;
2
3 public class length{
4     public static void main(String[] args) {
5         String str = "Hello world!"; //string
6         int length = str.length();
7         System.out.println("The length of the string is: " + length); //print length
8     }
9 }
10
```

Problems Javadoc Declaration Console ×

<terminated> length [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (Mar 1, 2023, 7:48:26 AM – 7:48:28 AM) [pid: 18456]

The length of the string is: 12