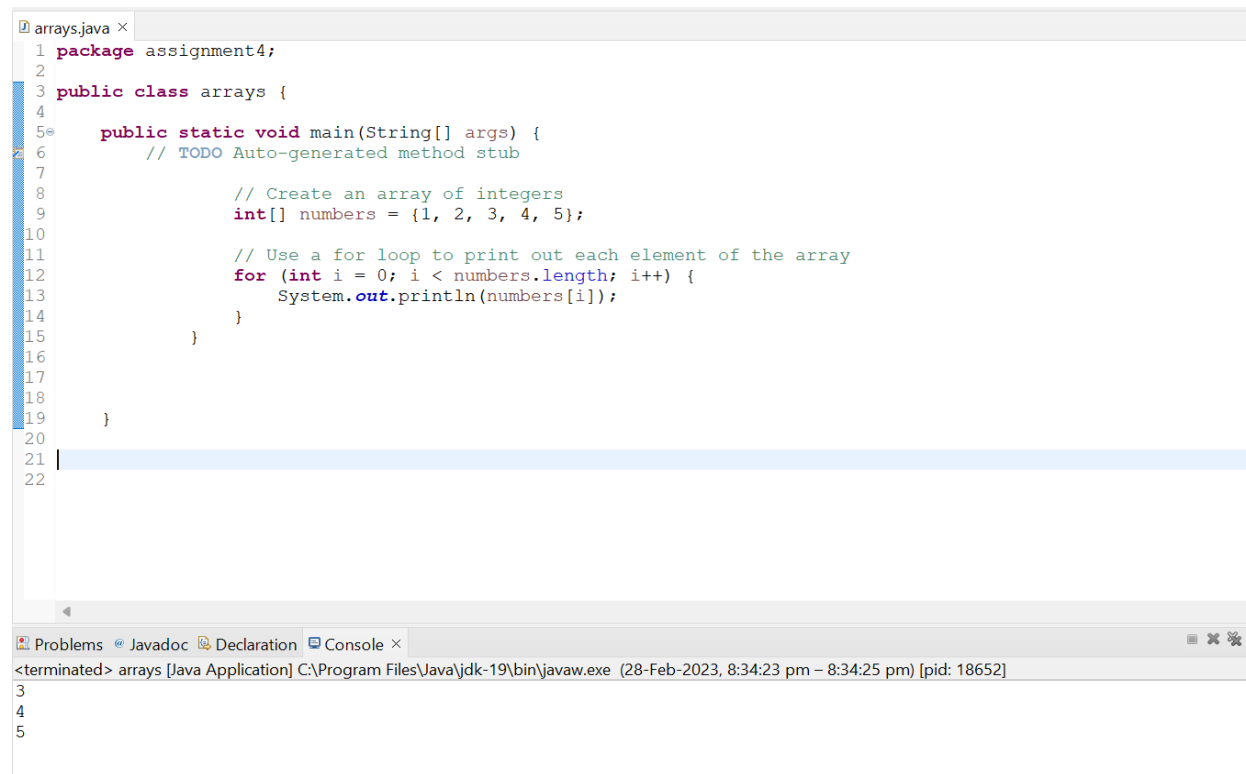# Java Assignment-4
Arrays and String functions

Sanjana K S
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

```java
package assignment4;

public class arrays {

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

            // Create an array of integers
            int[] numbers = {1, 2, 3, 4, 5};

            // Use a for loop to print out each element of the array
            for (int i = 0; i < numbers.length; i++) {
                System.out.println(numbers[i]);
            }
        }

    }
```

Problems @ Javadoc Declaration Console ×

<terminated> arrays [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 8:34:23 pm – 8:34:25 pm) [pid: 18652]

```
3
4
5
```

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

https://codeshare.io/WdE47d

```java
package assignment4;

public class loop2 {

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

            // Create an array of strings
            String[] fruits = {"Apple", "Banana", "Orange", "Mango"};

            // Use a for-each loop to print out each element of the array
            for (String fruit : fruits) {
                System.out.println(fruit);
            }
    }

}
```

Problems @ Javadoc Declaration Console ×
<terminated> loop2 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 8:37:33 pm – 8:37:35 pm) [pid: 11744]
Banana
Orange
Mango

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 elements {

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

            // Create an array of doubles
            double[] prices = {19.99, 29.99, 39.99, 49.99};

            // Use a while loop to print out each element of the array
            int i = 0;
            while (i < prices.length) {
                System.out.println(prices[i]);
                i++;
            }
    }

}
```

Problems @ Javadoc Declaration Console ×
<terminated> elements [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 8:40:36 pm – 8:40:38 pm) [pid: 2932]
29.99
39.99
49.99

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

```java
dowhile.java ×
1 package assignment4;
2
3 public class dowhile {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7
8             // Create an array of characters
9             char[] vowels = {'a', 'e', 'i', 'o', 'u'};
10
11             // Use a do-while loop to print out each element of the array
12             int i = 0;
13             do {
14                 System.out.println(vowels[i]);
15                 i++;
16             } while (i < vowels.length);
17         }
18
19
20
21     }
22
23
```

Problems Javadoc Declaration Console ×

`<terminated> dowhile [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 8:43:45 pm – 8:43:47 pm) [pid: 16696]`

```
a
e
i
o
u
```

5.Create an array of integers and use the Arrays class method sort() to sort the array in ascending order.
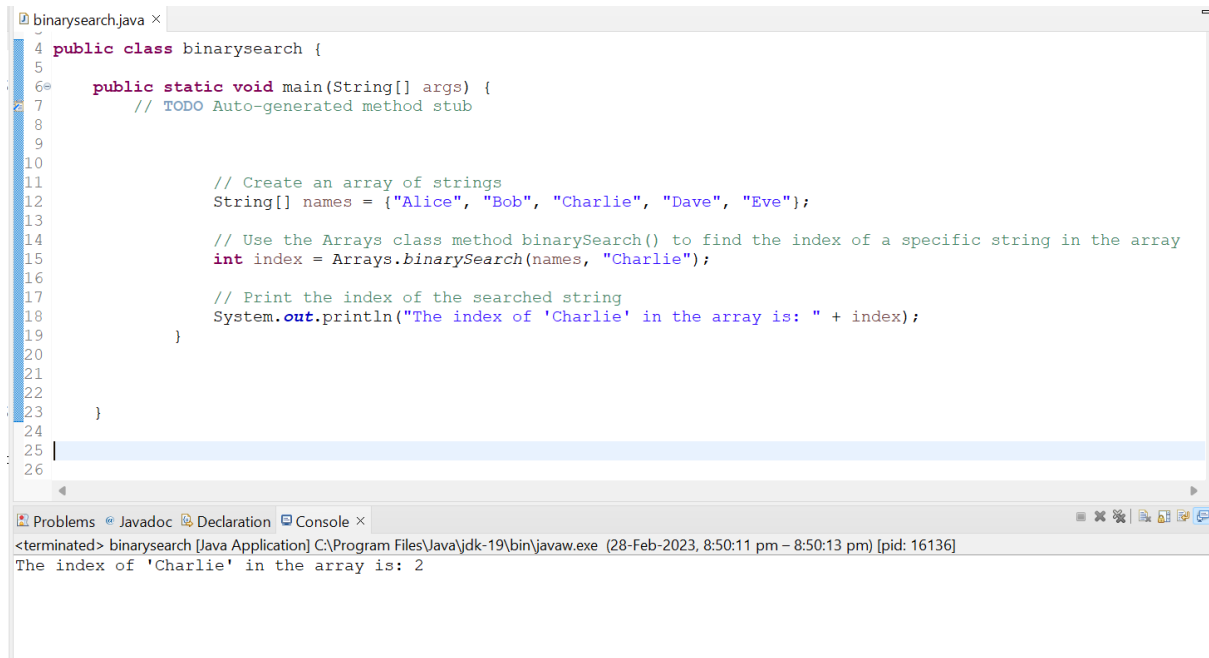
```java
integer.java ×
1 package assignment4;
2 import java.util.Arrays;
3
4
5 public class integer {
6
7     public static void main(String[] args) {
8         // TODO Auto-generated method stub
9
10
11             // Create an array of integers
12             int[] numbers = {5, 3, 1, 4, 2};
13
14             // Use the Arrays class method sort() to sort the array in ascending order
15             Arrays.sort(numbers);
16
17             // Print the sorted array
18             System.out.println(Arrays.toString(numbers));
19         }
20
21
22
23     }
```

Problems Javadoc Declaration Console ×

`<terminated> integer (1) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 8:46:35 pm – 8:46:38 pm) [pid: 7572]`

```
[1, 2, 3, 4, 5]
```

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

https://codeshare.io/LwE8mk

```java
public class binarysearch {

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


            // Create an array of strings
            String[] names = {"Alice", "Bob", "Charlie", "Dave", "Eve"};

            // Use the Arrays class method binarySearch() to find the index of a specific string in the array
            int index = Arrays.binarySearch(names, "Charlie");

            // Print the index of the searched string
            System.out.println("The index of 'Charlie' in the array is: " + index);
        }

    }
```
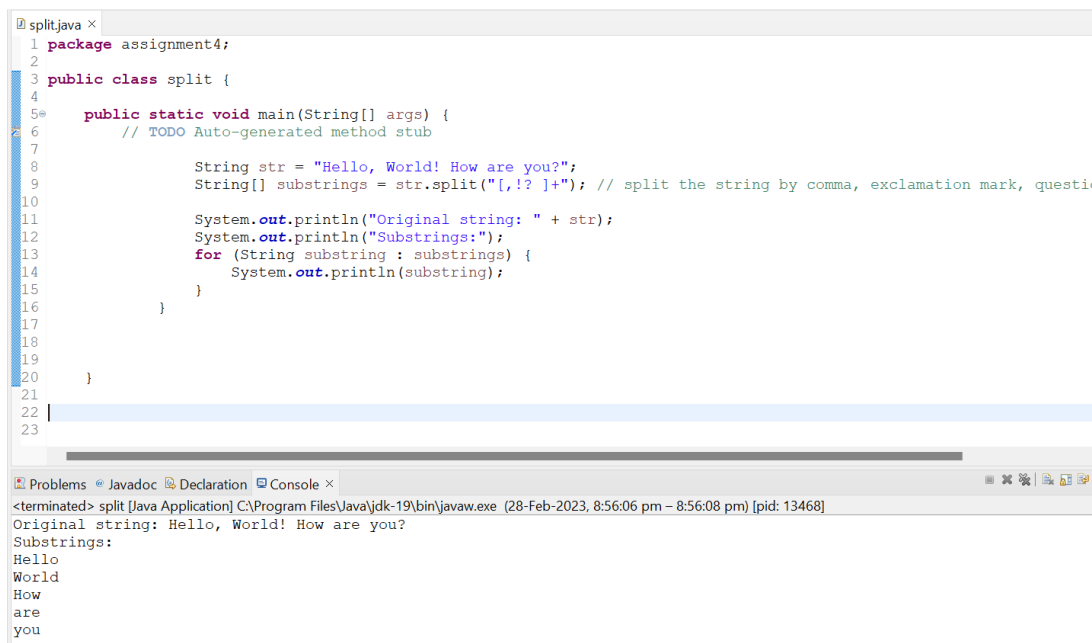
Problems @ Javadoc 🕮 Declaration 🖳 Console ×
<terminated> binarysearch [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 8:50:11 pm – 8:50:13 pm) [pid: 16136]
The index of 'Charlie' in the array is: 2

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) {
        // TODO Auto-generated method stub

            String str = "Hello, World! How are you?";
            String[] substrings = str.split("[,!? ]+"); // split the string by comma, exclamation mark, questi

            System.out.println("Original string: " + str);
            System.out.println("Substrings:");
            for (String substring : substrings) {
                System.out.println(substring);
            }
        }

    }
```

Problems @ Javadoc 🕮 Declaration 🖳 Console ×
<terminated> split [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 8:56:06 pm – 8:56:08 pm) [pid: 13468]
Original string: Hello, World! How are you?
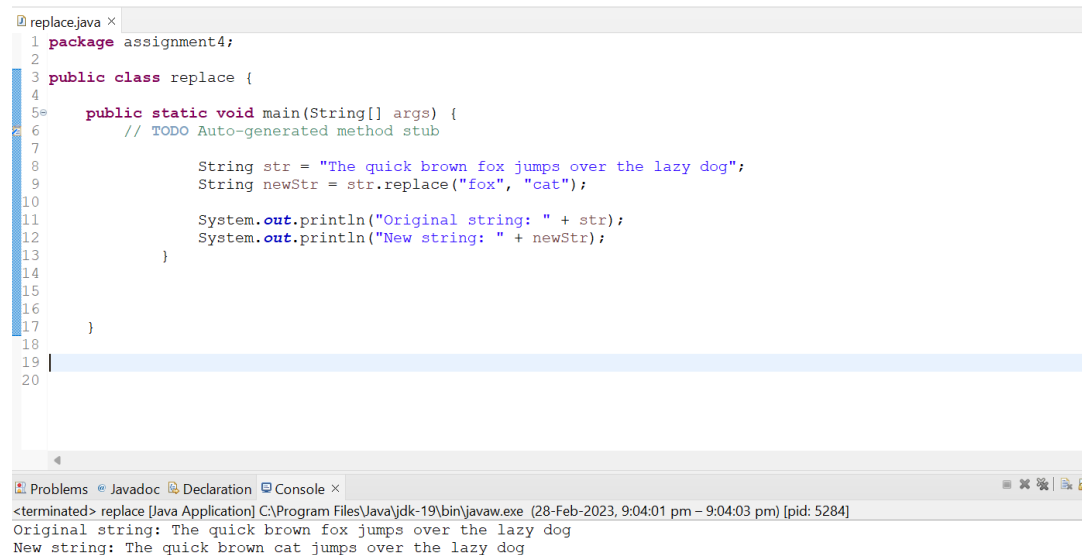Substrings:
Hello
World
How
are
you

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
replace.java ×
1 package assignment4;
2
3 public class replace {
4
5⊖    public static void main(String[] args) {
6          // TODO Auto-generated method stub
7
8              String str = "The quick brown fox jumps over the lazy dog";
9              String newStr = str.replace("fox", "cat");
10
11             System.out.println("Original string: " + str);
12             System.out.println("New string: " + newStr);
13         }
14
15
16
17    }
18
19 |
20
```
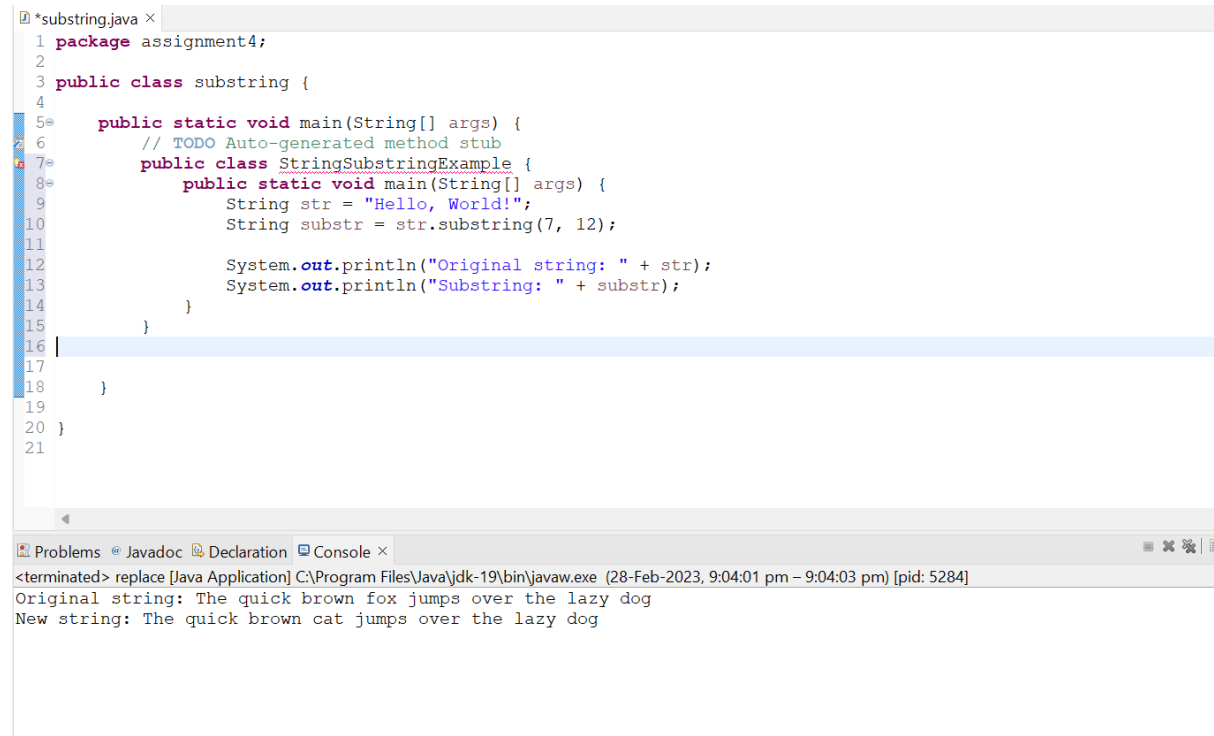
Problems @ Javadoc Declaration Console ×
<terminated> replace [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 9:04:01 pm – 9:04:03 pm) [pid: 5284]
Original string: The quick brown fox jumps over the lazy dog
New string: The quick brown cat jumps over the lazy dog

9.Create a string and use the String class method substring() to extract a portion of the string.
https://codeshare.io/DZEzer

```java
*substring.java ×
1 package assignment4;
2
3 public class substring {
4
5⊖    public static void main(String[] args) {
6          // TODO Auto-generated method stub
7⊖        public class StringSubstringExample {
8⊖            public static void main(String[] args) {
9                String str = "Hello, World!";
10               String substr = str.substring(7, 12);
11
12               System.out.println("Original string: " + str);
13               System.out.println("Substring: " + substr);
14           }
15        }
16 |
17
18    }
19
20 }
21
```
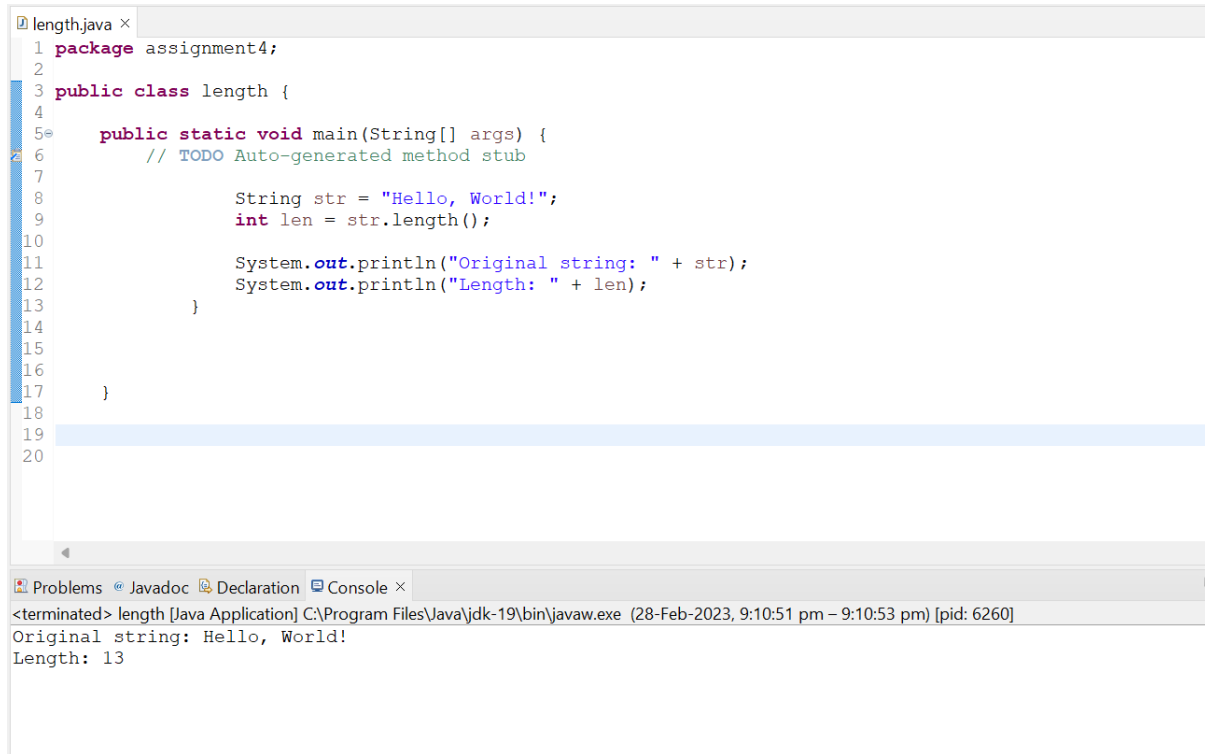
Problems @ Javadoc Declaration Console ×
<terminated> replace [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 9:04:01 pm – 9:04:03 pm) [pid: 5284]
Original string: The quick brown fox jumps over the lazy dog
New string: The quick brown cat jumps over the lazy dog

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) {
        // TODO Auto-generated method stub

                String str = "Hello, World!";
                int len = str.length();

                System.out.println("Original string: " + str);
                System.out.println("Length: " + len);
            }


    }
```

Problems @ Javadoc Declaration Console ×
<terminated> length [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 9:10:51 pm – 9:10:53 pm) [pid: 6260]
```
Original string: Hello, World!
Length: 13
```

---------------------------------------THANK YOU------------------------------