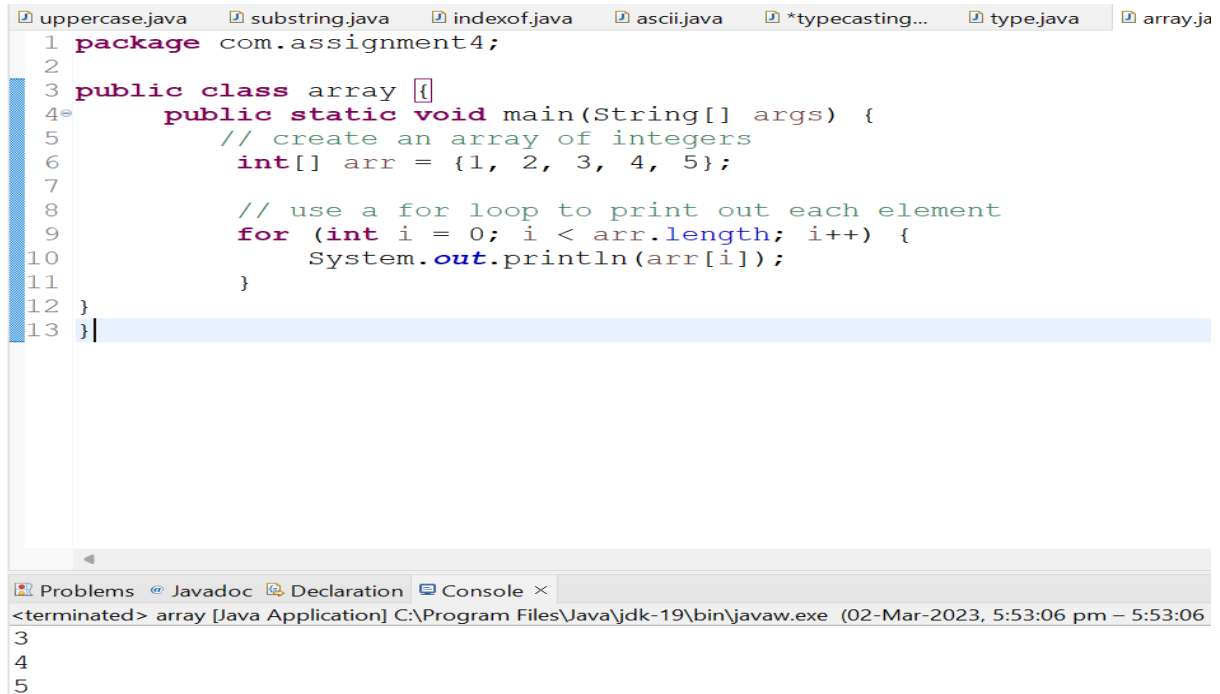


Assignment-4

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

<https://codeshare.io/9OLnx0>



```
1 package com.assignment4;
2
3 public class array {
4     public static void main(String[] args) {
5         // create an array of integers
6         int[] arr = {1, 2, 3, 4, 5};
7
8         // use a for loop to print out each element
9         for (int i = 0; i < arr.length; i++) {
10             System.out.println(arr[i]);
11         }
12     }
13 }
```

Problems Javadoc Declaration Console ×

<terminated> array [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 5:53:06 pm – 5:53:06 pm)

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/9OLnx0>



```
1 package com.assignment4;
2
3 public class arrayofstrings {
4     public static void main(String[] args) {
5         // create an array of strings
6         String[] a = {"2states", "half girl friend", "swami and his friends", "girl in room105"};
7
8         // use a for-each loop to print out each element
9         for (String element : a) {
10             System.out.println(element);
11         }
12     }
13 }
14 }
```


Problems Javadoc Declaration Console ×

<terminated> arrayofstrings [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 5:55:18 pm – 5:55:18 pm) [pid: 7924]

half girl friend
swami and his friends
girl in room105

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

<https://codeshare.io/9OLnx0>



```
1 package com.assignment4;
2
3 public class whileloop {
4     public static void main(String[] args) {
5         double[] myArray = {1.0, 2.5, 3.2, 4.7, 5.3};
6
7         // use a while loop to print out each element
8         int i = 0;
9         while (i < myArray.length) {
10             System.out.println(myArray[i]);
11             i++;
12         }
13     }
14 }
```

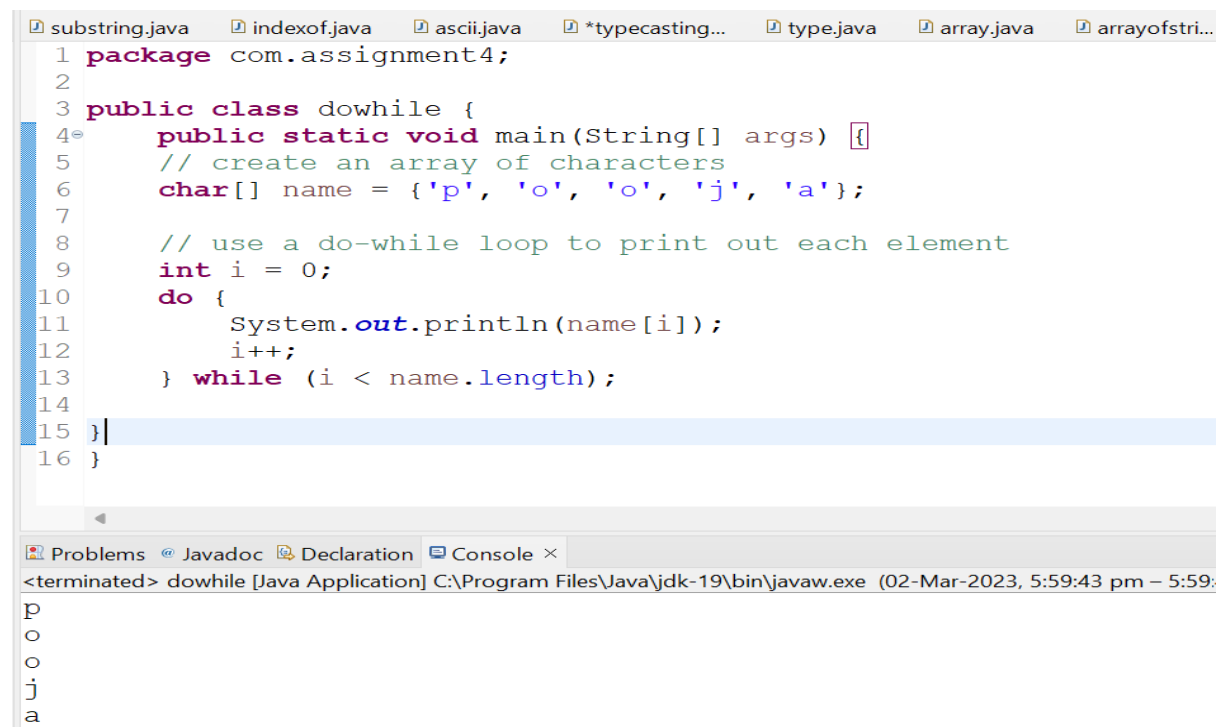
Problems Javadoc Declaration Console ×

<terminated> whileloop (1) [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 5:5:10)

1.0
2.5
3.2
4.7
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/zyAqNW>



```
1 package com.assignment4;
2
3 public class dowhile {
4     public static void main(String[] args) {
5         // create an array of characters
6         char[] name = {'p', 'o', 'o', 'j', 'a'};
7
8         // use a do-while loop to print out each element
9         int i = 0;
10        do {
11            System.out.println(name[i]);
12            i++;
13        } while (i < name.length);
14    }
15 }
16 }
```

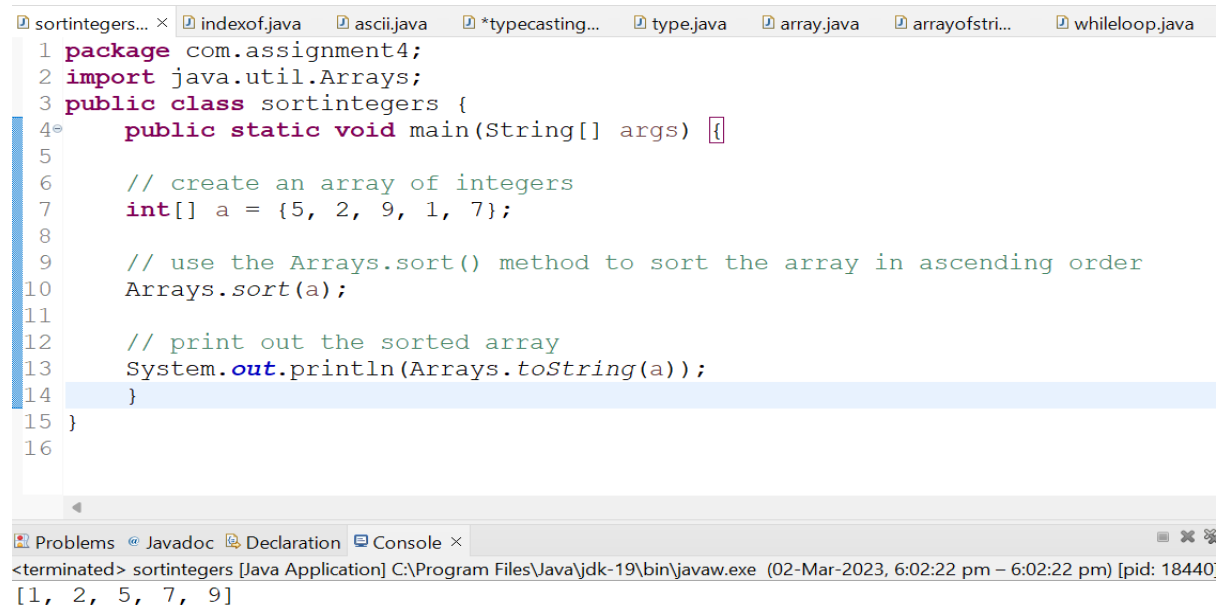
Problems Javadoc Declaration Console ×

<terminated> dowhile [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 5:59:43 pm – 5:59:43)

p
o
o
j
a

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

<https://codeshare.io/zyAqNW>



```
1 package com.assignment4;
2 import java.util.Arrays;
3 public class sortintegers {
4     public static void main(String[] args) {
5
6         // create an array of integers
7         int[] a = {5, 2, 9, 1, 7};
8
9         // use the Arrays.sort() method to sort the array in ascending order
10        Arrays.sort(a);
11
12        // print out the sorted array
13        System.out.println(Arrays.toString(a));
14    }
15 }
16
```

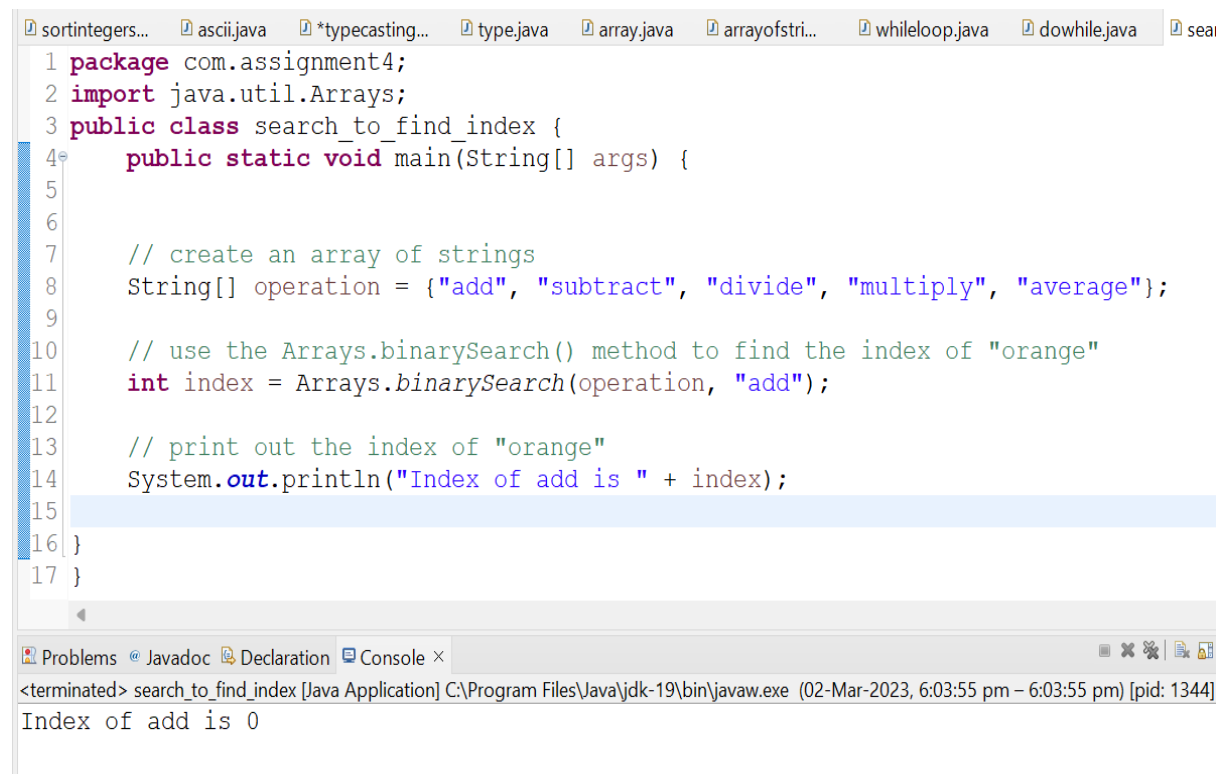
Problems Javadoc Declaration Console ×

<terminated> sortintegers [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 6:02:22 pm – 6:02:22 pm) [pid: 18440]

[1, 2, 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.

<https://codeshare.io/zyAqNW>



```
1 package com.assignment4;
2 import java.util.Arrays;
3 public class search_to_find_index {
4     public static void main(String[] args) {
5
6         // create an array of strings
7         String[] operation = {"add", "subtract", "divide", "multiply", "average"};
8
9         // use the Arrays.binarySearch() method to find the index of "orange"
10        int index = Arrays.binarySearch(operation, "add");
11
12        // print out the index of "orange"
13        System.out.println("Index of add is " + index);
14    }
15 }
16 }
17
```

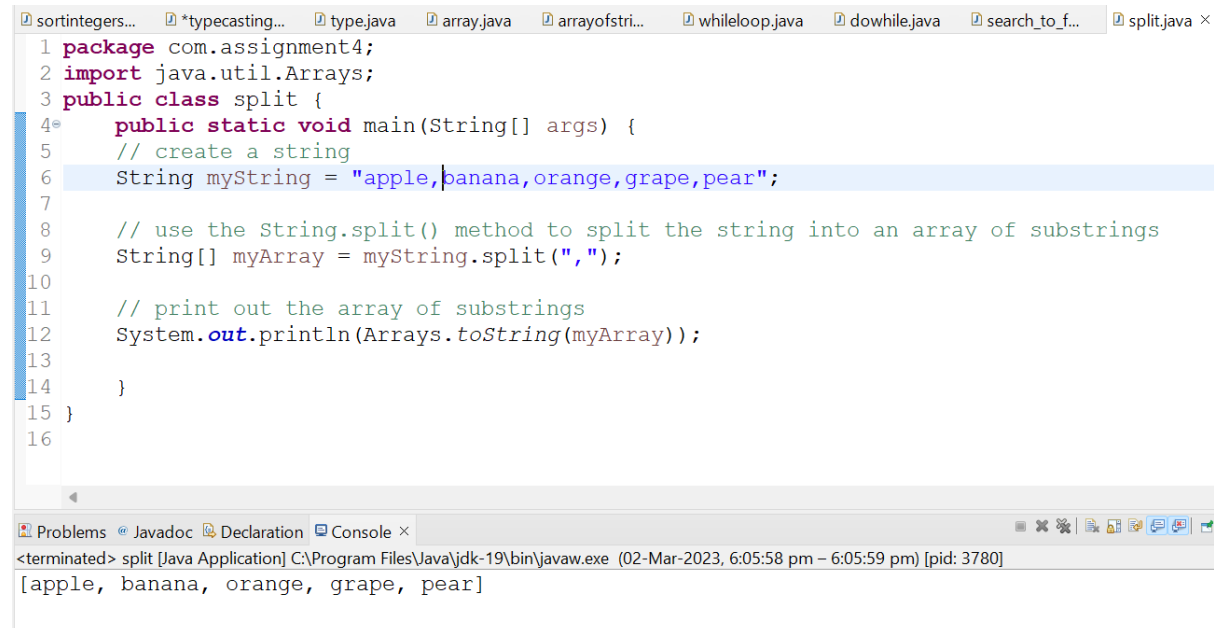
Problems Javadoc Declaration Console ×

<terminated> search_to_find_index [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 6:03:55 pm – 6:03:55 pm) [pid: 1344]

Index of add is 0

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

<https://codeshare.io/zyAqNW>



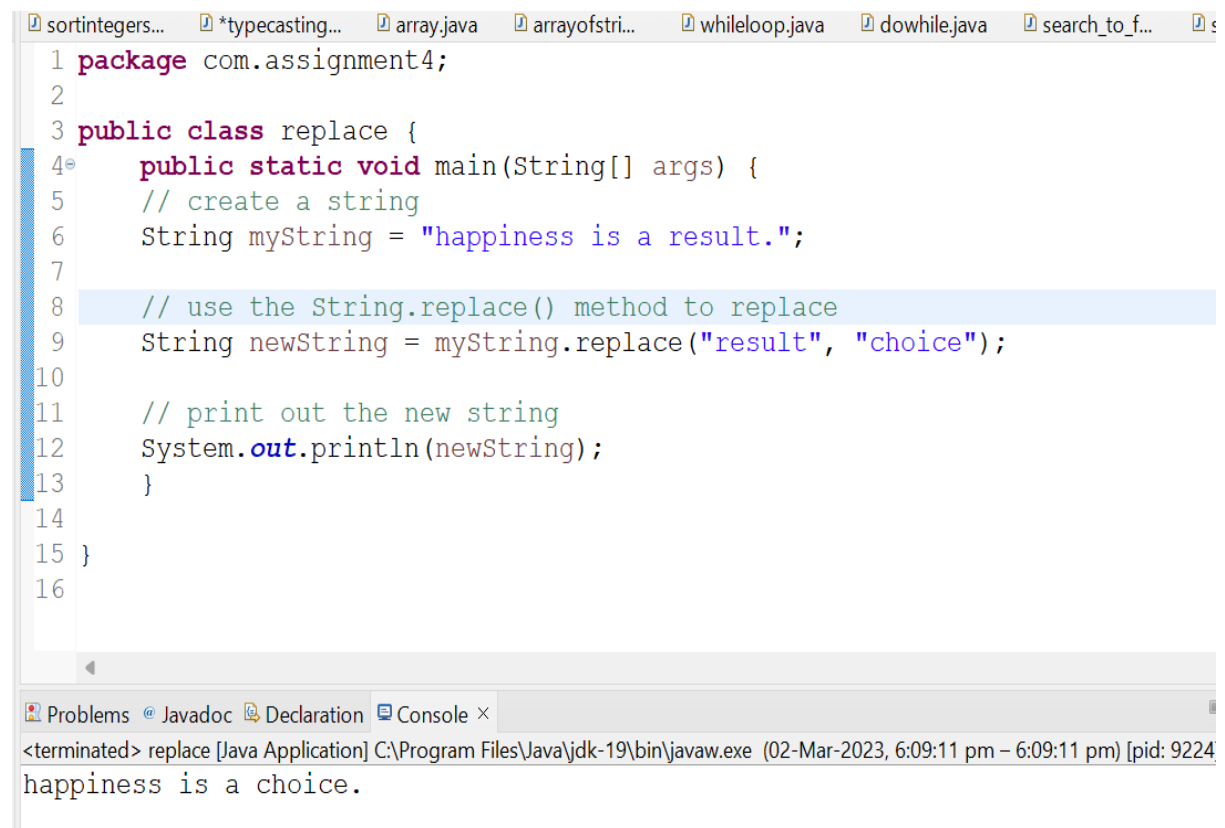
```
1 package com.assignment4;
2 import java.util.Arrays;
3 public class split {
4     public static void main(String[] args) {
5         // create a string
6         String myString = "apple,banana,orange,grape,pear";
7
8         // use the String.split() method to split the string into an array of substrings
9         String[] myArray = myString.split(",");
10
11        // print out the array of substrings
12        System.out.println(Arrays.toString(myArray));
13    }
14 }
15 }
16
```

Problems Javadoc Declaration Console ×

<terminated> split [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 6:05:58 pm – 6:05:59 pm) [pid: 3780]
[apple, banana, orange, grape, pear]

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/zyAqNW>



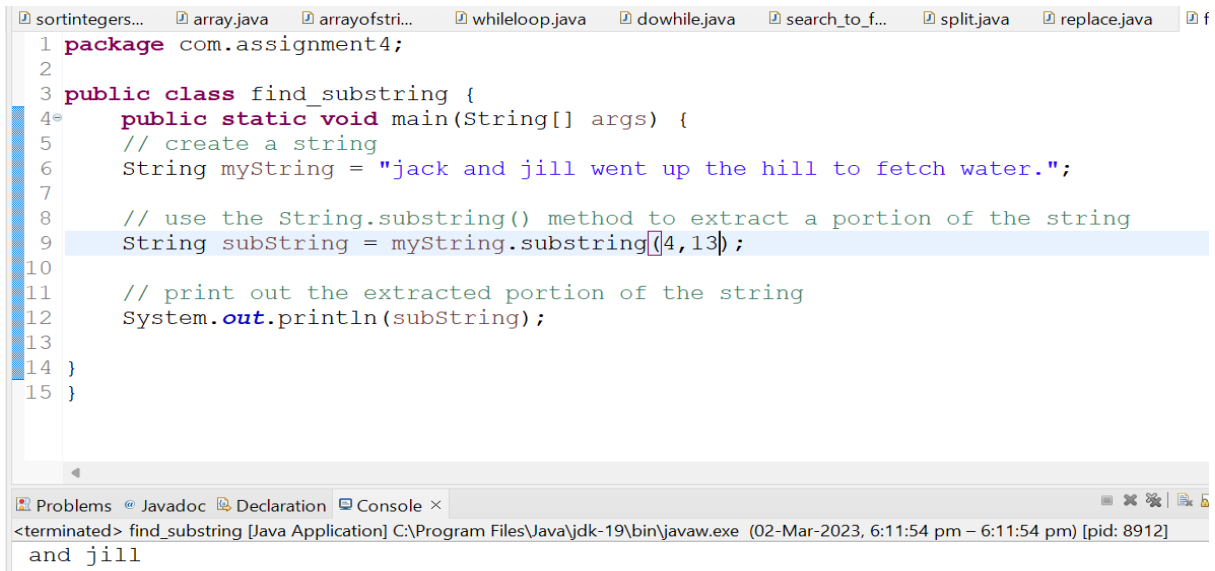
```
1 package com.assignment4;
2
3 public class replace {
4     public static void main(String[] args) {
5         // create a string
6         String myString = "happiness is a result.";
7
8         // use the String.replace() method to replace
9         String newString = myString.replace("result", "choice");
10
11        // print out the new string
12        System.out.println(newString);
13    }
14 }
15 }
16
```

Problems Javadoc Declaration Console ×

<terminated> replace [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 6:09:11 pm – 6:09:11 pm) [pid: 9224]
happiness is a choice.

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

<https://codeshare.io/zyAqNW>

A screenshot of an IDE window showing a Java file named `find_substring.java`. The code defines a package `com.assignment4` and a public class `find_substring` with a `main` method. Inside `main`, a string `myString` is created with the value "jack and jill went up the hill to fetch water.". The `substring(4, 13)` method is used to extract a portion of the string, stored in `subString`. Finally, `System.out.println(subString)` is used to print the result. The console output shows "and jill".

```
1 package com.assignment4;
2
3 public class find_substring {
4     public static void main(String[] args) {
5         // create a string
6         String myString = "jack and jill went up the hill to fetch water.";
7
8         // use the String.substring() method to extract a portion of the string
9         String subString = myString.substring(4, 13);
10
11        // print out the extracted portion of the string
12        System.out.println(subString);
13    }
14 }
15 }
```

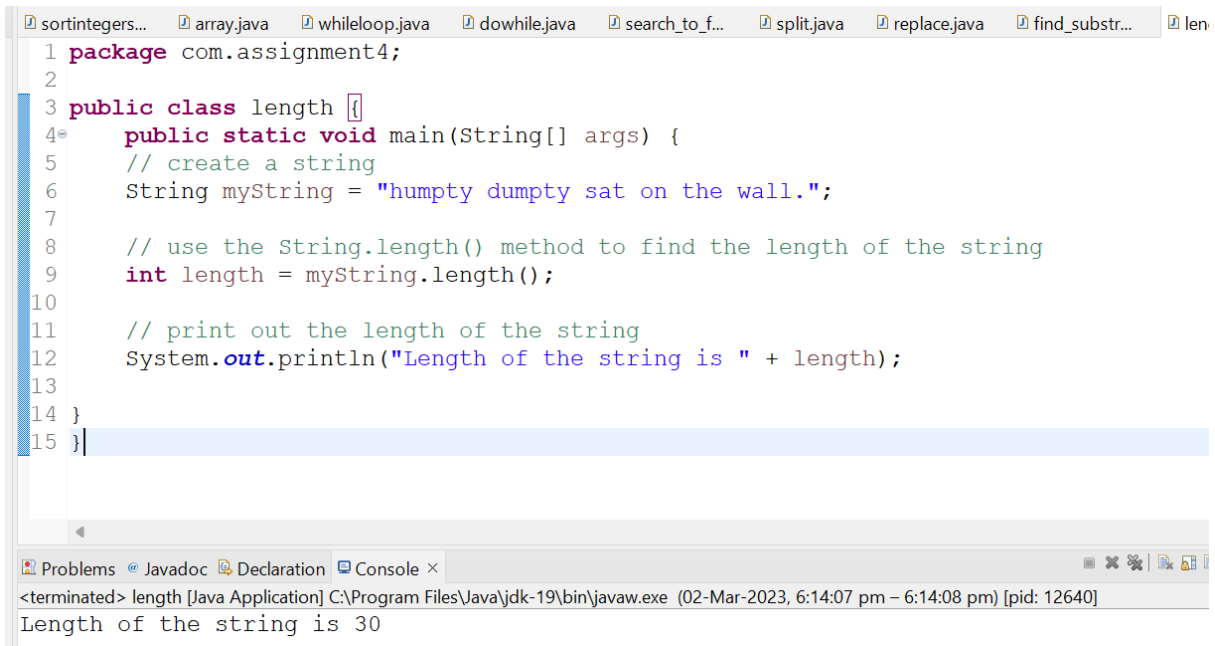
Problems Javadoc Declaration Console ×

<terminated> find_substring [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 6:11:54 pm – 6:11:54 pm) [pid: 8912]

and jill

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

<https://codeshare.io/zyAqNW>

A screenshot of an IDE window showing a Java file named `length.java`. The code defines a package `com.assignment4` and a public class `length` with a `main` method. Inside `main`, a string `myString` is created with the value "humpty dumpty sat on the wall.". The `length()` method is used to find the length of the string, stored in an `int` variable `length`. Finally, `System.out.println("Length of the string is " + length)` is used to print the result. The console output shows "Length of the string is 30".

```
1 package com.assignment4;
2
3 public class length {
4     public static void main(String[] args) {
5         // create a string
6         String myString = "humpty dumpty sat on the wall.";
7
8         // use the String.length() method to find the length of the string
9         int length = myString.length();
10
11        // print out the length of the string
12        System.out.println("Length of the string is " + length);
13    }
14 }
15 }
```

Problems Javadoc Declaration Console ×

<terminated> length [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (02-Mar-2023, 6:14:07 pm – 6:14:08 pm) [pid: 12640]

Length of the string is 30