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

https://codeshare.io/MNEn6p

```
package assignment4;

public class question1 {

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

        int[] array = {1, 2, 3, 4, 5};

        for (int i = 0; i < array.length; i++) {
            System.out.println(array[i]);
        }
    }

}
```

Problems @ Javadoc Declaration Console ×

<terminated> question1 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-20
```
1
2
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/mpbxl0

```
package assignment4;

public class question2 {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        String[] myArray = {"apple", "banana", "cherry", "date", "elderber

        for (String fruit : myArray) {
            System.out.println(fruit);
        }
    }

}
```
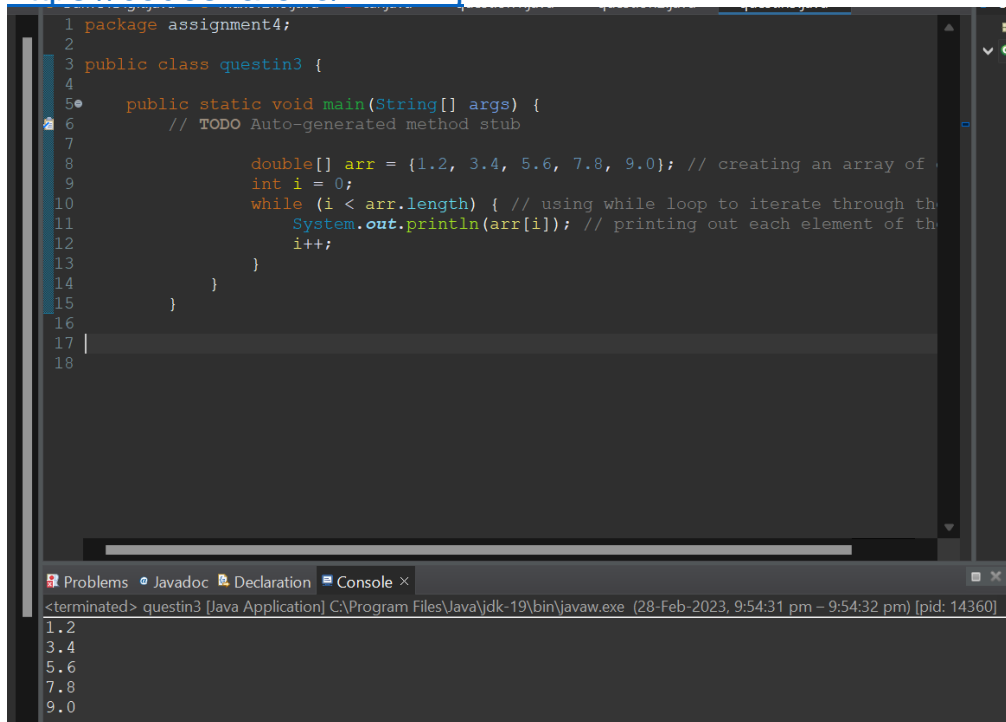
Problems @ Javadoc Declaration Console ×

<terminated> question2 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 9:49:38 pm – 9:49:39 pm) [pid:
```
banana
cherry
date
elderberry
```

3.Create an array of doubles and use a while loop to print out each element of the array.
https://codeshare.io/wnvY7j

```java
1 package assignment4;
2
3 public class questin3 {
4
5   public static void main(String[] args) {
6       // TODO Auto-generated method stub
7
8           double[] arr = {1.2, 3.4, 5.6, 7.8, 9.0}; // creating an array of
9           int i = 0;
10          while (i < arr.length) { // using while loop to iterate through th
11              System.out.println(arr[i]); // printing out each element of th
12              i++;
13          }
14      }
15   }
16
17
18
```
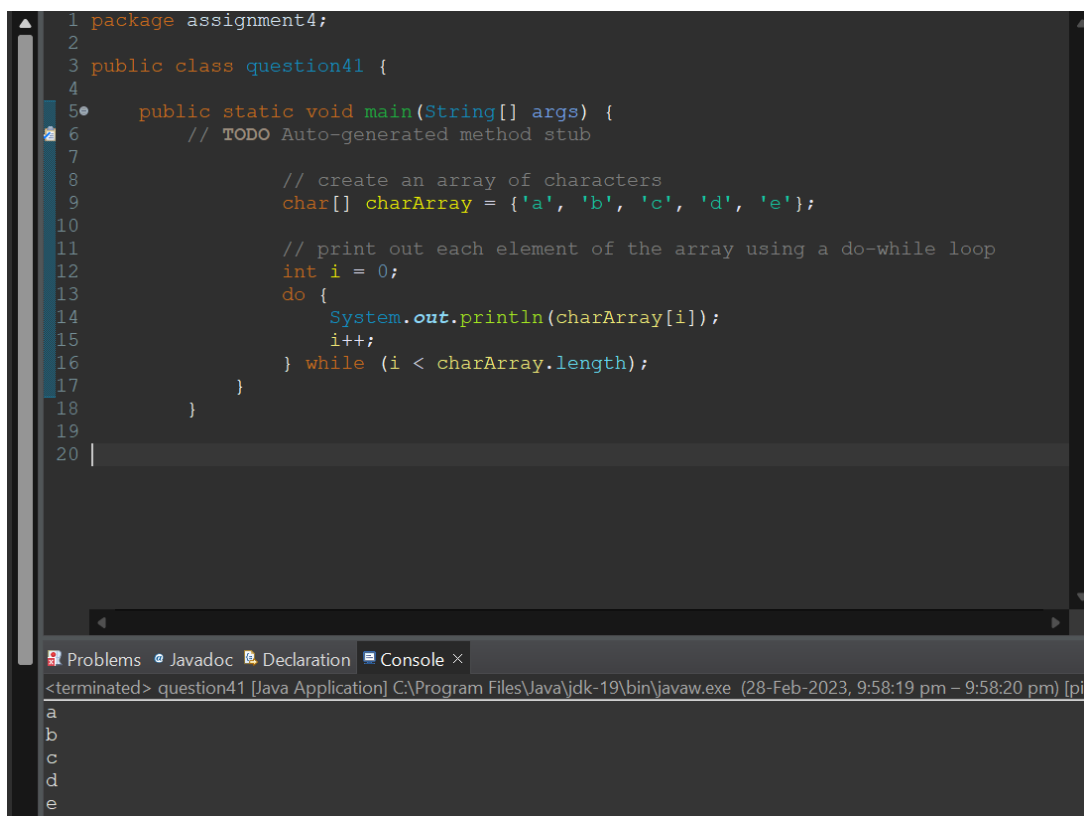
Problems · Javadoc · Declaration · Console ×

<terminated> questin3 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 9:54:31 pm – 9:54:32 pm) [pid: 14360]

```
1.2
3.4
5.6
7.8
9.0
```

4.Create an array of characters and use a do-while loop to print out each element of the array.
https://codeshare.io/LwE8Ne

```java
1 package assignment4;
2
3 public class question41 {
4
5   public static void main(String[] args) {
6       // TODO Auto-generated method stub
7
8           // create an array of characters
9           char[] charArray = {'a', 'b', 'c', 'd', 'e'};
10
11          // print out each element of the array using a do-while loop
12          int i = 0;
13          do {
14              System.out.println(charArray[i]);
15              i++;
16          } while (i < charArray.length);
17      }
18   }
19
20
```

Problems · Javadoc · Declaration · Console ×

<terminated> question41 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 9:58:19 pm – 9:58:20 pm) [pi

```
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
1 package assignment4;
2 import java.util.Arrays;
3 public class question5 {
4
5●     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7
8             int[] myArray = { 5, 2, 9, 1, 3 };
9
10            // sort the array in ascending order
11            Arrays.sort(myArray);
12
13            // print the sorted array
14            for (int i = 0; i < myArray.length; i++) {
15                System.out.print(myArray[i] + " ");
16            }
17        }
18    }
19 |
20
```

Problems  Javadoc  Declaration  Console ×
<terminated> question5 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 10:02:13 pm – 10:02:1
```
1 2 3 5 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
1 package assignment4;
2 import java.util.Arrays;
3 public class question6 {
4
5●     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7             // Create an array of strings
8             String[] stringArray = {"apple", "banana", "cherry", "date", "elderber
9
10            // Sort the array
11            Arrays.sort(stringArray);
12
13            // Search for the index of "cherry" using binarySearch()
14            int index = Arrays.binarySearch(stringArray, "cherry");
15
16            // Print the result
17            if (index >= 0) {
18              System.out.println("The index of 'cherry' in the array is: " + index
19            } else {
20              System.out.println("The array does not contain 'cherry'");
21            }
22        }
23
24 }
25
```

Problems  Javadoc  Declaration  Console ×
<terminated> question6 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 10:07:59 pm – 10:08:00 pm) [pid: 1317
```
The index of 'cherry' 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/bvOqvM

```java
1 package assignment4;
2
3 public class question7 {
4
5    public static void main(String[] args) {
6        // TODO Auto-generated method stub
7
8            // Create a string
9            String str = "The quick brown fox jumps over the lazy dog";
10
11           // Split the string into an array of substrings
12           String[] words = str.split(" ");
13
14           // Print the substrings
15           for (String word : words) {
16               System.out.println(word);
17           }
18       }
19   }
20
```

Problems @ Javadoc Declaration Console ×

<terminated> question7 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:13:07 pm – 10:13:08
```
The
quick
brown
fox
jumps
over
the
lazy
dog
```

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/zyAol4

question41.java    question5.java    question6.java    question7.java    question8.java ×

```java
1 package assignment4;
2
3 public class question8 {
4
5    public static void main(String[] args) {
6        // TODO Auto-generated method stub
7
8            // create a string
9            String originalString = "Hello world, welcome to Java programming!
10
11           // replace substring using the replace() method
12           String newString = originalString.replace("Java", "Python");
13
14           // print the original string and the new string
15           System.out.println("Original string: " + originalString);
16           System.out.println("New string: " + newString);
17
18       }
19
20 }
```
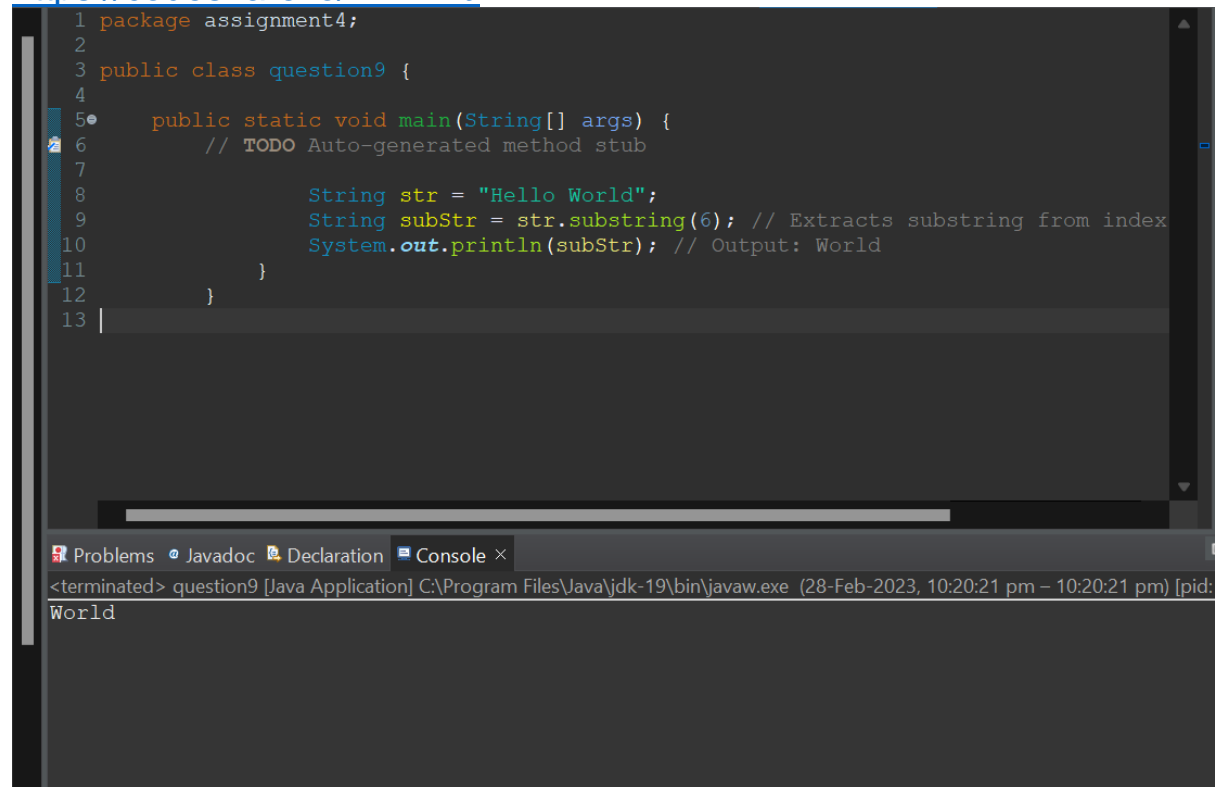
Problems @ Javadoc Declaration Console ×

<terminated> question8 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Feb-2023, 10:16:10 pm – 10:16:11 pm)
```
Original string: Hello world, welcome to Java programming!
New string: Hello world, welcome to Python programming!
```

9.Create a string and use the String class method substring() to extract a portion of the string.
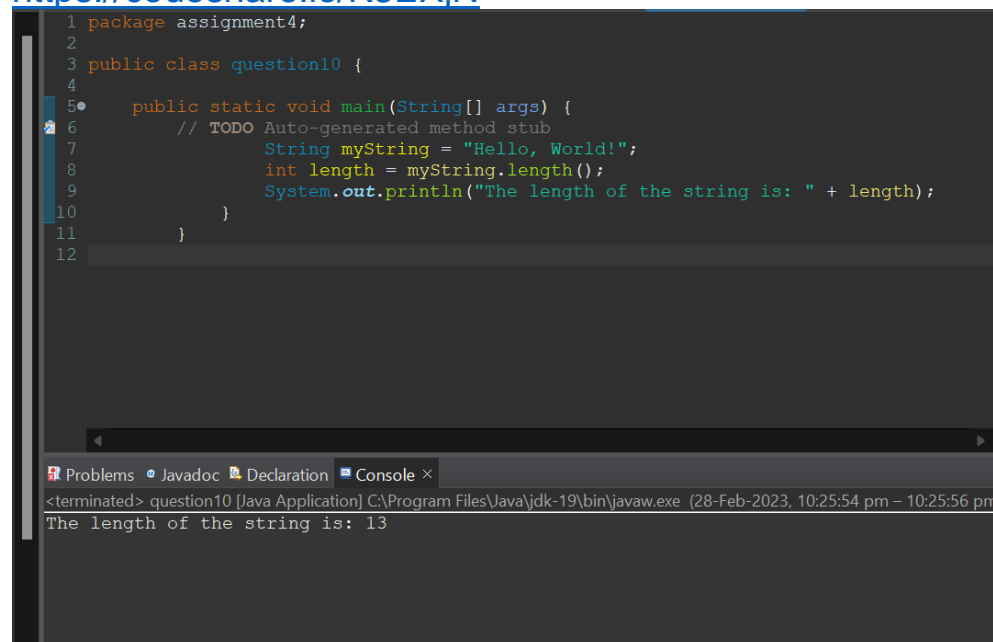https://codeshare.io/BA7lMb

```java
1 package assignment4;
2
3 public class question9 {
4
5   public static void main(String[] args) {
6       // TODO Auto-generated method stub
7
8           String str = "Hello World";
9           String subStr = str.substring(6); // Extracts substring from index
10          System.out.println(subStr); // Output: World
11      }
12  }
13 |
```

Problems  @ Javadoc  Declaration  Console ×
<terminated> question9 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 10:20:21 pm – 10:20:21 pm) [pid:
World

10.Create a string and use the String class method length() to find the length of the string.
https://codeshare.io/K8EXjN

```java
1 package assignment4;
2
3 public class question10 {
4
5   public static void main(String[] args) {
6       // TODO Auto-generated method stub
7           String myString = "Hello, World!";
8           int length = myString.length();
9           System.out.println("The length of the string is: " + length);
10      }
11  }
12
```

Problems  @ Javadoc  Declaration  Console ×
<terminated> question10 [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe  (28-Feb-2023, 10:25:54 pm – 10:25:56 pm
The length of the string is: 13