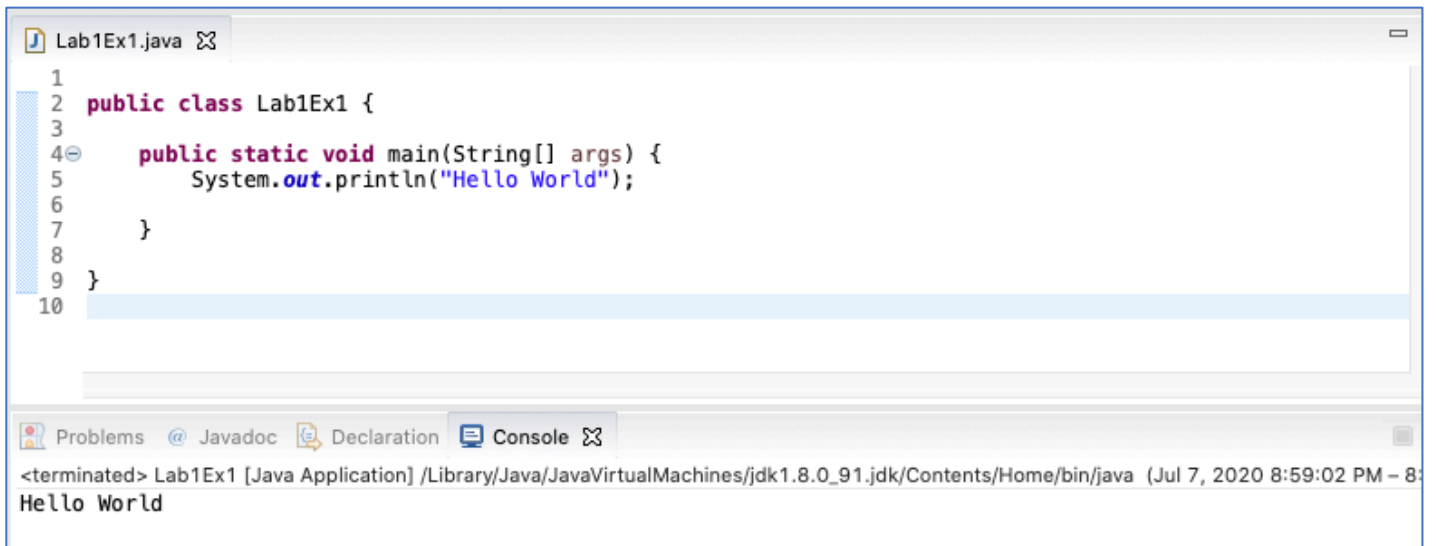


Exercise 1

HelloWorld application:



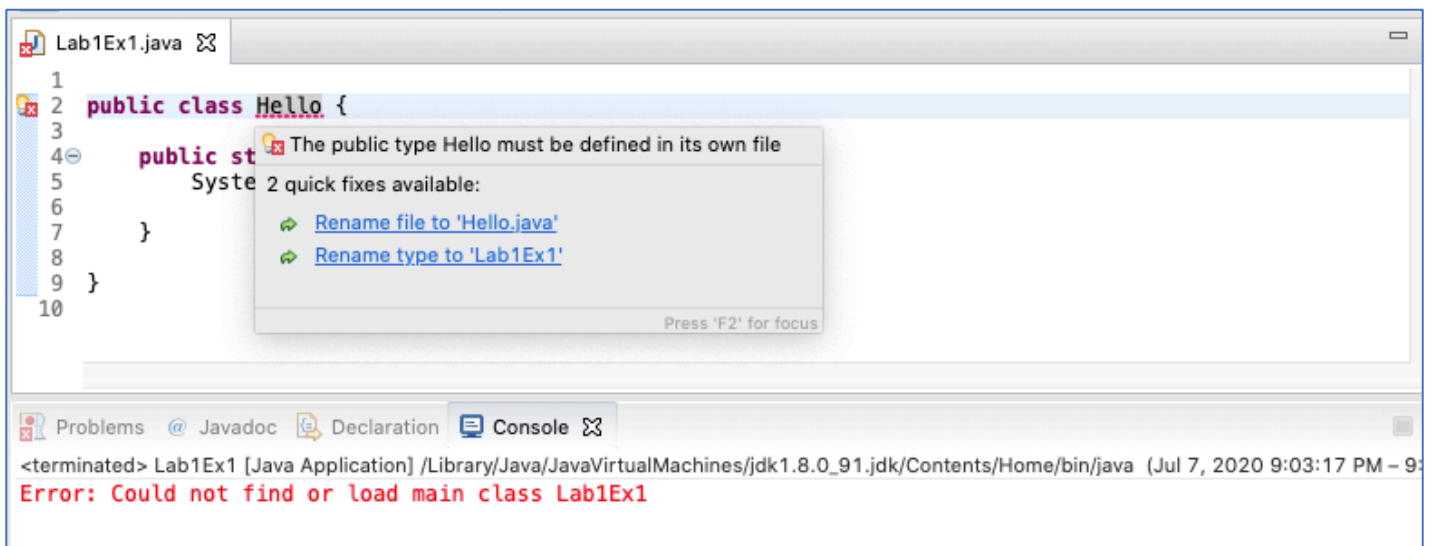
```
1
2 public class Lab1Ex1 {
3
4     public static void main(String[] args) {
5         System.out.println("Hello World");
6     }
7 }
8
9
10
```

Problems @ Javadoc Declaration Console

<terminated> Lab1Ex1 [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 7, 2020 8:59:02 PM – 8:59:02 PM)
Hello World

a) Change Lab1Ex1 to Hello

- **Prediction:** It won't run because it won't recognize the class name. I didn't go through the whole process of assigning "Hello" as the class name as I did with "Lab1Ex1" so even though I changed the name in the editor space, it still has "Lab1Ex1" stored as the proper class name.
- **Result:**



```
1
2 public class Hello {
3
4     public static void main(String[] args) {
5         System.out.println("Hello World");
6     }
7 }
8
9
10
```

The public type Hello must be defined in its own file

2 quick fixes available:

- [Rename file to 'Hello.java'](#)
- [Rename type to 'Lab1Ex1'](#)

Press 'F2' for focus

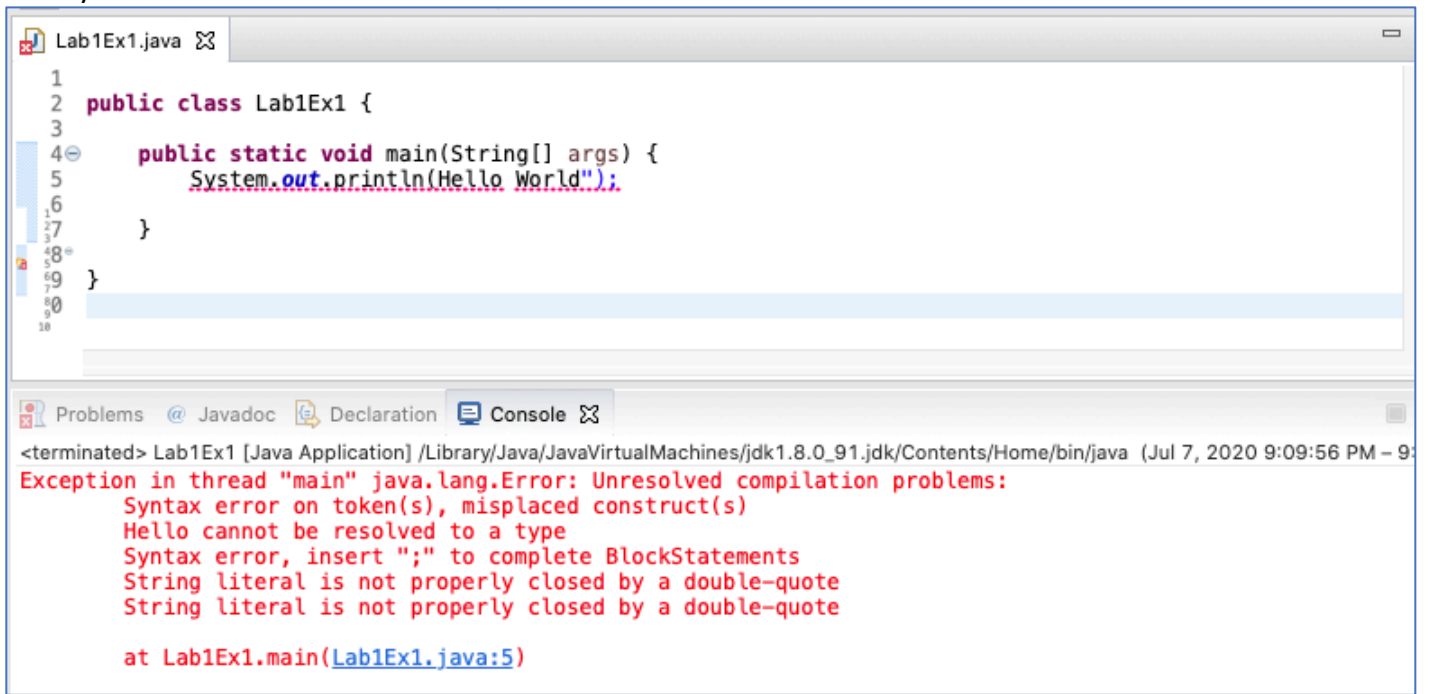
Problems @ Javadoc Declaration Console

<terminated> Lab1Ex1 [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 7, 2020 9:03:17 PM – 9:03:17 PM)
Error: Could not find or load main class Lab1Ex1

b) Remove the first quotation mark in the String

- **Prediction:** Without the first quotation mark indicating that this is where the string starts, it won't recognize the text as a string type and so won't be able to run.
- **Result:**

Shirley Ramirez – Week 1: Lab

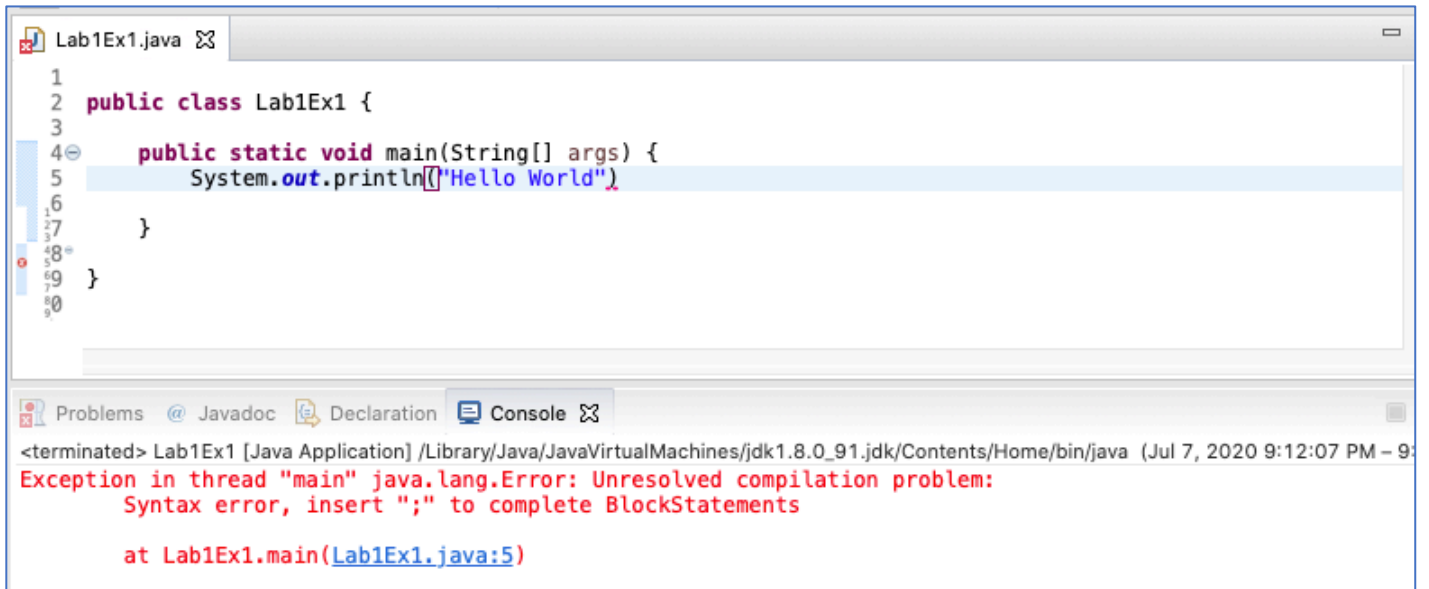


```
1
2 public class Lab1Ex1 {
3
4     public static void main(String[] args) {
5         System.out.println(Hello World");
6     }
7 }
8
```

<terminated> Lab1Ex1 [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 7, 2020 9:09:56 PM - 9:09:56 PM)
Exception in thread "main" java.lang.Error: Unresolved compilation problems:
Syntax error on token(s), misplaced construct(s)
Hello cannot be resolved to a type
Syntax error, insert ";" to complete BlockStatements
String literal is not properly closed by a double-quote
String literal is not properly closed by a double-quote
at Lab1Ex1.main(Lab1Ex1.java:5)

c) Remove the semicolon

- **Prediction:** It won't recognize the end of the statement without the semicolon. Without a clear indicator that the statement has come to an end, it'll be unable to run.
- **Result:**



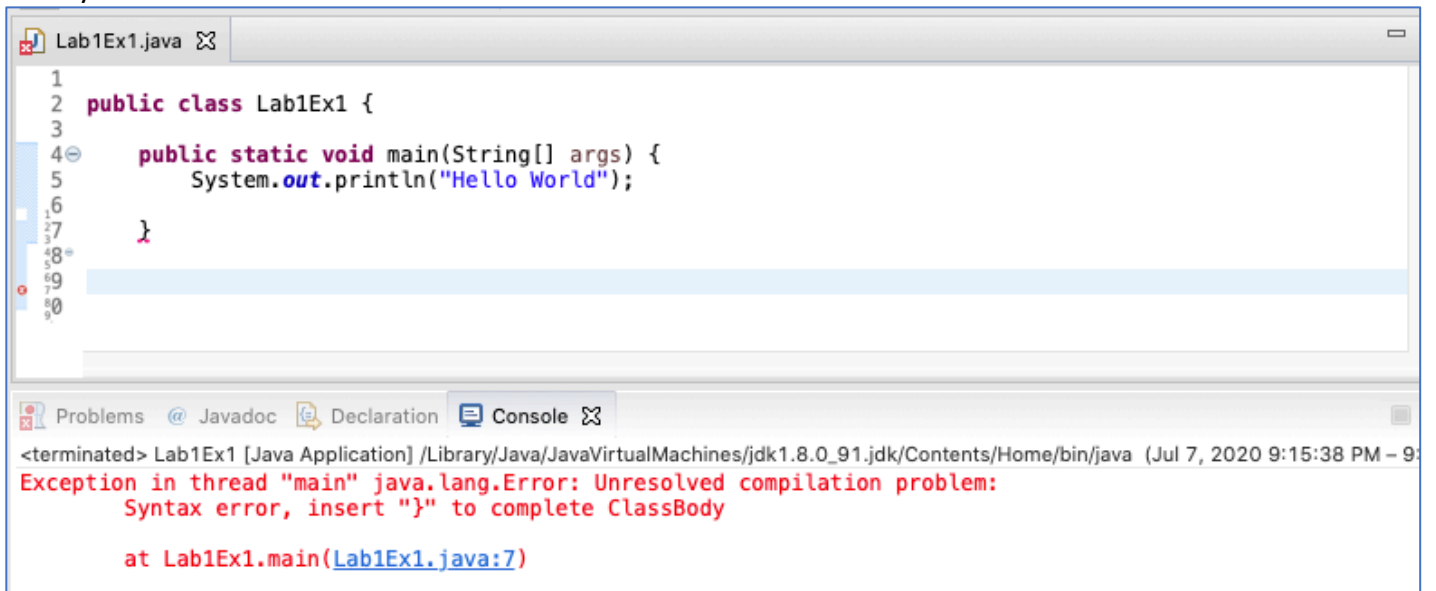
```
1
2 public class Lab1Ex1 {
3
4     public static void main(String[] args) {
5         System.out.println("Hello World")
6     }
7 }
8
```

<terminated> Lab1Ex1 [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 7, 2020 9:12:07 PM - 9:12:07 PM)
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
Syntax error, insert ";" to complete BlockStatements
at Lab1Ex1.main(Lab1Ex1.java:5)

d) Remove the last brace in the program

- **Prediction:** Similar to how a semicolon is necessary to indicate the end of a statement, the last brace is necessary to indicate the end of the program. It will be unable to run as it won't be read as a complete program.
- **Result:**

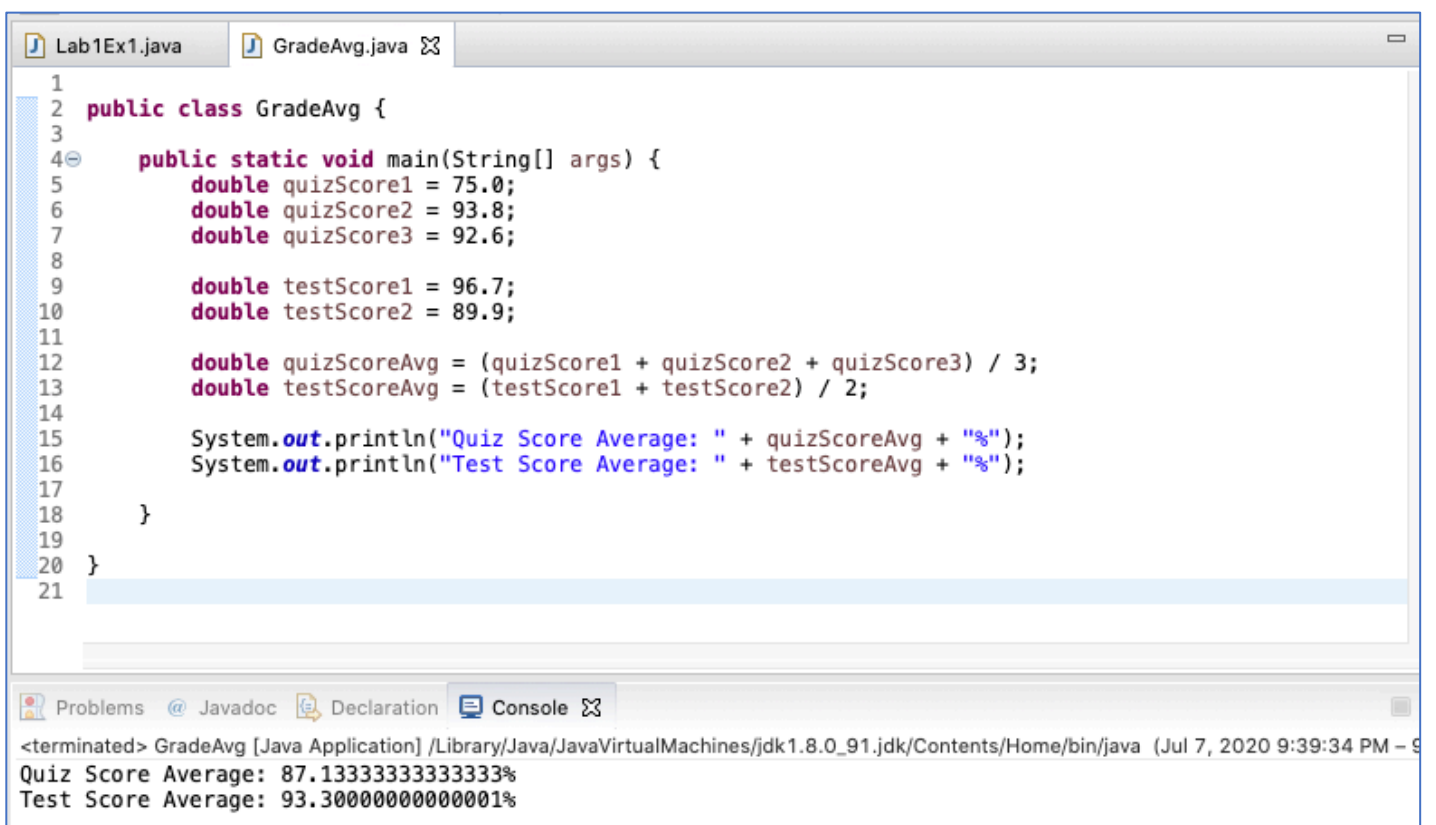
Shirley Ramirez – Week 1: Lab



```
1
2 public class Lab1Ex1 {
3
4     public static void main(String[] args) {
5         System.out.println("Hello World");
6     }
7 }
```

<terminated> Lab1Ex1 [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 7, 2020 9:15:38 PM – 9:15:38 PM)
Exception in thread "main" java.lang.Error: Unresolved compilation problem:
Syntax error, insert ")" to complete ClassBody
at Lab1Ex1.main(Lab1Ex1.java:7)

Exercise 2

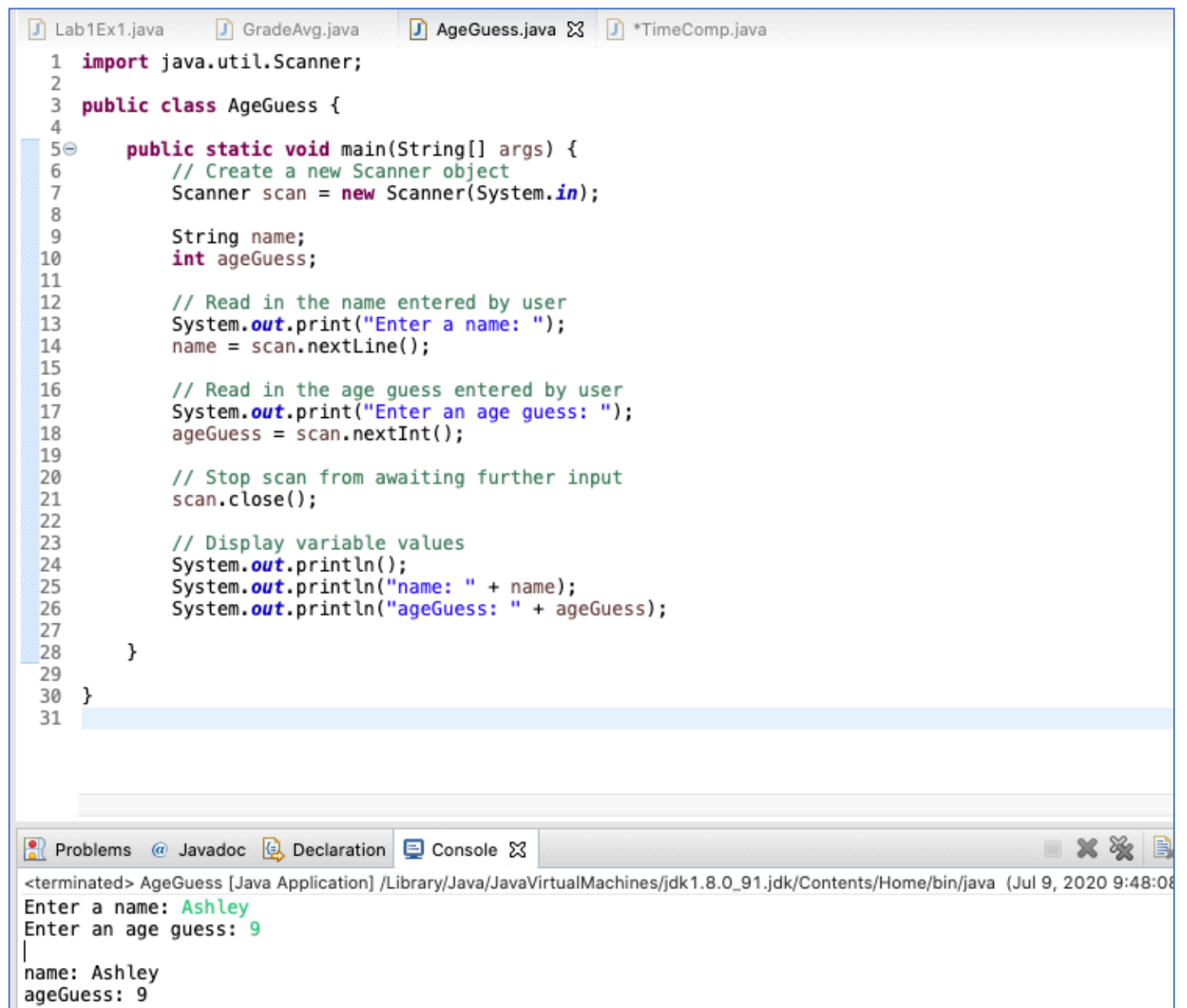


```
1
2 public class GradeAvg {
3
4     public static void main(String[] args) {
5         double quizScore1 = 75.0;
6         double quizScore2 = 93.8;
7         double quizScore3 = 92.6;
8
9         double testScore1 = 96.7;
10        double testScore2 = 89.9;
11
12        double quizScoreAvg = (quizScore1 + quizScore2 + quizScore3) / 3;
13        double testScoreAvg = (testScore1 + testScore2) / 2;
14
15        System.out.println("Quiz Score Average: " + quizScoreAvg + "%");
16        System.out.println("Test Score Average: " + testScoreAvg + "%");
17    }
18 }
19
20
21
```

<terminated> GradeAvg [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 7, 2020 9:39:34 PM – 9:39:34 PM)
Quiz Score Average: 87.13333333333333%
Test Score Average: 93.30000000000001%

Exercise 3

AgeGuess



The screenshot shows an IDE with four tabs: Lab1Ex1.java, GradeAvg.java, AgeGuess.java (active), and *TimeComp.java. The AgeGuess.java file contains the following code:

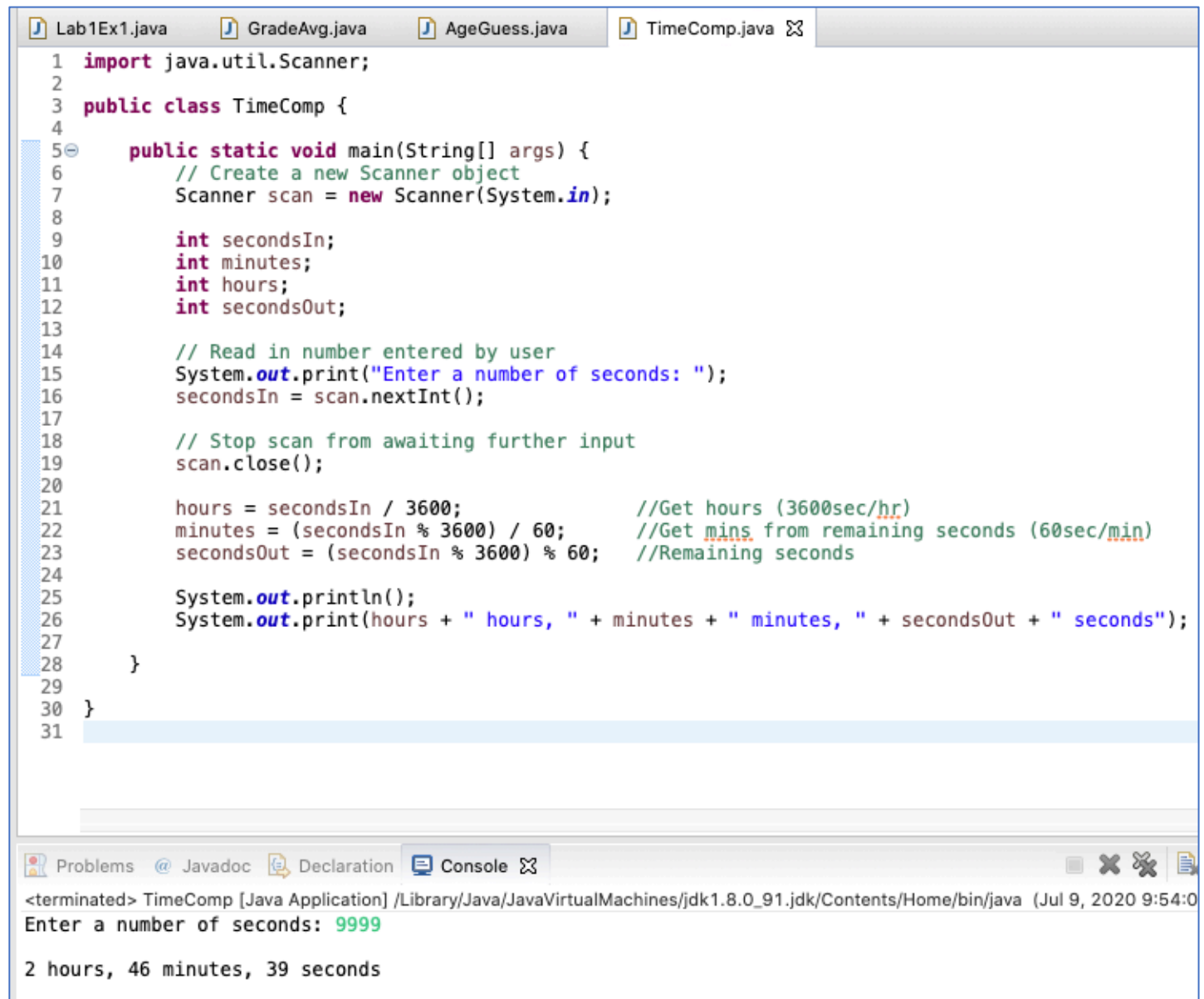
```
1 import java.util.Scanner;
2
3 public class AgeGuess {
4
5     public static void main(String[] args) {
6         // Create a new Scanner object
7         Scanner scan = new Scanner(System.in);
8
9         String name;
10        int ageGuess;
11
12        // Read in the name entered by user
13        System.out.print("Enter a name: ");
14        name = scan.nextLine();
15
16        // Read in the age guess entered by user
17        System.out.print("Enter an age guess: ");
18        ageGuess = scan.nextInt();
19
20        // Stop scan from awaiting further input
21        scan.close();
22
23        // Display variable values
24        System.out.println();
25        System.out.println("name: " + name);
26        System.out.println("ageGuess: " + ageGuess);
27    }
28 }
29
30 }
31
```

The console output at the bottom shows the program's execution:

```
<terminated> AgeGuess [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 9, 2020 9:48:08)
Enter a name: Ashley
Enter an age guess: 9
|
name: Ashley
ageGuess: 9
```

Exercise 4

TimeComp



The screenshot shows an IDE with four tabs: Lab1Ex1.java, GradeAvg.java, AgeGuess.java, and TimeComp.java. The TimeComp.java tab is active, displaying the following Java code:

```
1 import java.util.Scanner;
2
3 public class TimeComp {
4
5     public static void main(String[] args) {
6         // Create a new Scanner object
7         Scanner scan = new Scanner(System.in);
8
9         int secondsIn;
10        int minutes;
11        int hours;
12        int secondsOut;
13
14        // Read in number entered by user
15        System.out.print("Enter a number of seconds: ");
16        secondsIn = scan.nextInt();
17
18        // Stop scan from awaiting further input
19        scan.close();
20
21        hours = secondsIn / 3600;           //Get hours (3600sec/hr)
22        minutes = (secondsIn % 3600) / 60; //Get mins from remaining seconds (60sec/min)
23        secondsOut = (secondsIn % 3600) % 60; //Remaining seconds
24
25        System.out.println();
26        System.out.print(hours + " hours, " + minutes + " minutes, " + secondsOut + " seconds");
27    }
28 }
29
30 }
31
```

Below the code editor, the Console tab is active, showing the execution output:

```
<terminated> TimeComp [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_91.jdk/Contents/Home/bin/java (Jul 9, 2020 9:54:0
Enter a number of seconds: 9999

2 hours, 46 minutes, 39 seconds
```