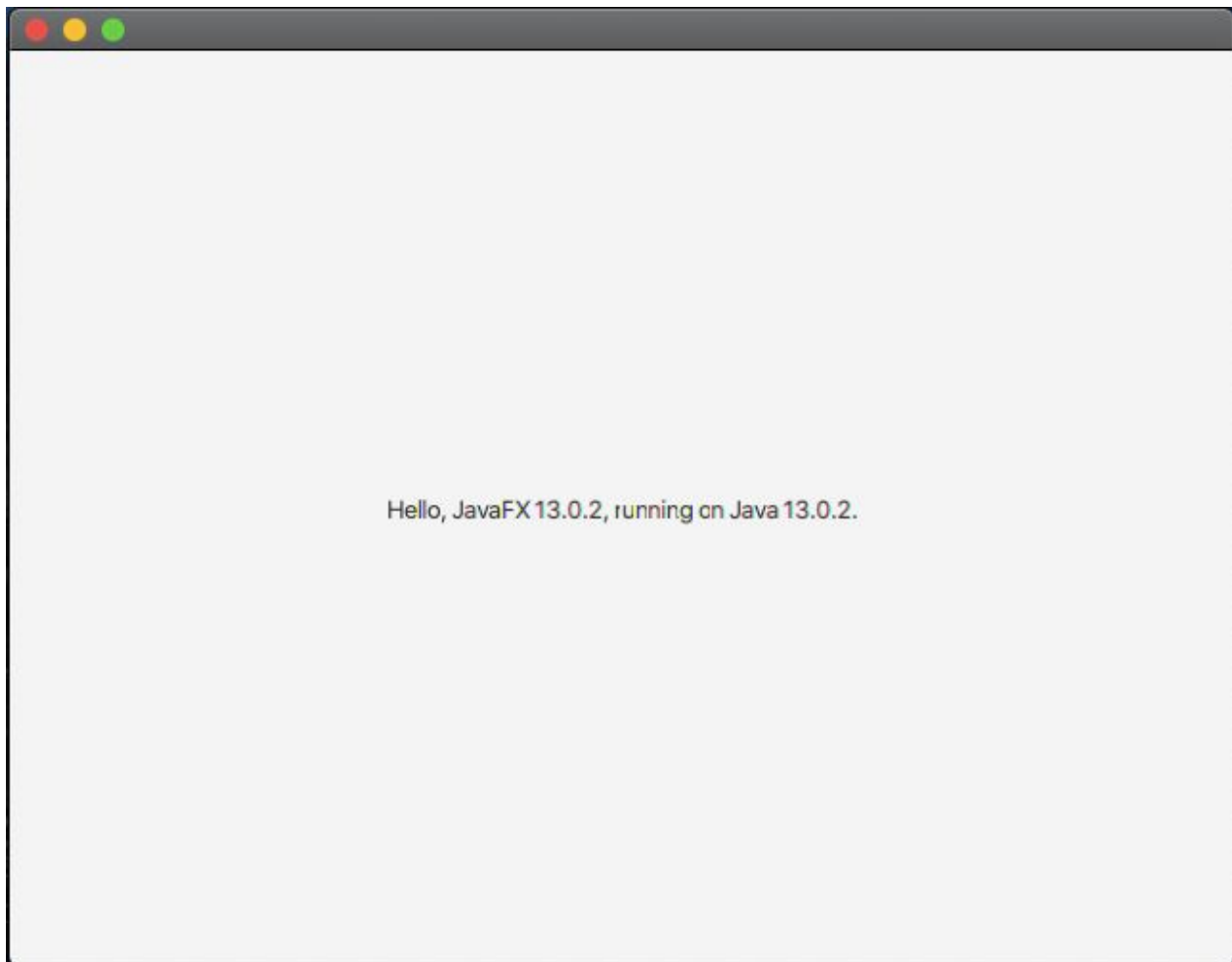


```
[kaiyahogg@Kaiyas-MacBook-Air ~ % echo $JAVA_HOME  
/Library/Java/JavaVirtualMachines/jdk-13.0.2.jdk/Contents/Home  
kaiyahogg@Kaiyas-MacBook-Air ~ %
```

```
[kaiyahogg@Kaiyas-MacBook-Air ~ % java --version  
java 13.0.2 2020-01-14  
Java(TM) SE Runtime Environment (build 13.0.2+8)  
Java HotSpot(TM) 64-Bit Server VM (build 13.0.2+8, mixed mode, sharing)
```

```
[kaiyahogg@Kaiyas-MacBook-Air ~ % echo $JAVAFX  
/users/kaiyahogg/javafx-sdk-13.0.2/lib  
kaiyahogg@Kaiyas-MacBook-Air ~ %
```



```
kaiyahogg@Kaiyas-MacBook-Air Desktop % java HelloWorld  
Hello World!  
kaiyahogg@Kaiyas-MacBook-Air Desktop %
```

1. First add all homework grades to get:  $hw\#1 + hw\#2 + \dots + hw\#9 + hw\#10 = \text{sum}$  (in other words the sum of all homework grades).  
sum/10 where sum is the total number of homeworks.
2. First define an alphabet. Next have a loop parse through each character of the inputted string. For each character in the input string, the letter is to be found within the defined alphabet resulting in an index using a “find” method. Then 5 is added to that index and the result is to be concatenated to a new string.
3. Message says: “puzzles are fun.” Similarly to the algorithm above, each character is to be parsed through a defined alphabet. The numbers 0-25 are to be added to the index found by a “find” method and the algorithm won’t end until the message is completely comprised of real English words.
4. For each grade the little brother says, a count is kept. A variable count starts off at 0 and at the end of the loop a new count is defined through being equal to the count + 1.  
Alongside, each input is added to the previous one creating a sum. Outside of the loop, the sum is divided by the count.
5. 46
6. 10

	Triangle
	- sideOne: double - sideTwo: double - sideThree: double
<b>Circle</b>	
- radius: double	
+ calculateArea(): double	+ createTriangle() + calculateArea(): double + calculatePerimeter(): double

```
[kaiyahogg@Kaiyas-MacBook-Air hogg-lab1 % javac Shapes.java
[kaiyahogg@Kaiyas-MacBook-Air hogg-lab1 % java Shapes
***** ***** *****
**** * * ***
*** * * *
** * * ***
* ***** *****
kaiyahogg@Kaiyas-MacBook-Air hogg-lab1 % ]
```