Coding Steps:

1. Create an interface named Logger.

2. Add two void methods to the Logger interface, each should take a String as an argument

   a. Log

   b. Error

3. Create two classes that implement the Logger interface

   a. AsteriskLogger

   b. SpacedLogger

4. The log method on the AsteriskLogger should print out the String it receives between 3 asterisks on either side of the String (e.g. if the String passed in is "Hello", then it should print ***Hello*** to the console.

5. The error method on the AsteriskLogger should print the String it receives inside a box of asterisks, with the String preceded by the word "ERROR:". For example, if "Hello" is the argument, the following should be printed:

   ****

   Error: Hello

   ****

6. The SpacedLogger should add spaces between each character of the String argument passed into its methods.

7. If the log method received "Hello" as an argument, it should print H e l l o

8. The error method should do the same, but with "ERROR:" preceding the spaced out input (i.e. ERROR: H e l l o)

9. Create a class named App that has a main method.

10. In this class instantiate an instance of each of your logger classes that implement the Logger interface.

11. Test both methods on both instances, passing in Strings of your choice.

Screenshots of Code:

1.

```java
/**
 * 1. Create an interface named Logger.
 * 2. Add two void methods to the Logger interface, each should take a String as an arugment
 *              a. Log
 *              b. Error
 * @author aaronlindsay
 *
 */
public interface Logger {

}
```

2.

```java
/**
 * 1. Create an interface named Logger.
 * 2. Add two void methods to the Logger interface, each should take a String as an arugment
 *              a. Log
 *              b. Error
 * @author aaronlindsay
 *
 */
public interface Logger {
    public void Log(String str);
    public void Error(String str);

}
```

3.

```java
public class AsteriskLogger implements Logger {

    @Override
    public void Log(String str) {


    }

    @Override
    public void Error(String str) {


    }

}
```

```java
public class SpacedLogger implements Logger {

    @Override
    public void Log(String str) {
        // TODO Auto-generated method stub

    }

    @Override
    public void Error(String str) {
        // TODO Auto-generated method stub

    }

}
```

4.

```
Logger.java    AsteriskLogger.java  ×    SpacedLogger.java
 1  /**
 2       3. Create two classes that implement the Logger
 3          a. AsteriskLogger
 4          b. SpacedLogger
 5
 6       4. The log method on AsterickLogger should print
 7          astericks on either side of the String(e.g. i
 8          should print ***Hello*** to the console.
 9
10       5. The error method on the AsteriskLogger should
11          of asterisks, with the String preceded by the
12          argument, the following should be printed:
13
14          ******************
15          ***Error: Hello***
16          ******************
17   *
18   *
19   * @author aaronlindsay
20   *
21   */
22  public class AsteriskLogger implements Logger {
23
24    @Override
25    public void Log(String str) {
26      System.out.println("***" + str + "***");
27
28    }
```

5.

```
Logger.java    AsteriskLogger.java  ×    SpacedLogger.java
 7          astericks on either side of the String(e.g. i
 8          should print ***Hello*** to the console.
 9
10       5. The error method on the AsteriskLogger should
11          of asterisks, with the String preceded by the
12          argument, the following should be printed:
13
14          ******************
15          ***Error: Hello***
16          ******************
17   *
18   *
19   * @author aaronlindsay
20   *
21   */
22  public class AsteriskLogger implements Logger {
23
24    @Override
25    public void Log(String str) {
26      System.out.println("***" + str + "***");
27
28    }
29
30    @Override
31    public void Error(String str) {
32      String error = "Error: " + str;
33      System.out.println("******************");
34      Log(error);
35      System.out.println("******************");
36
37    }
38
39  }
40
```

6 & 7 & 8.

```java
/*
    3.  Create two classes that implement the Logger interface
        a.  AsteriskLogger
        b.  SpacedLogger

    6.  The SpacedLogger should add spaces between each character of the String argument passe

    7.  If the log method received "Hello" as an argument, it should print H e l l o

    8.  The error method should do the same, but with "ERROR:" preceding the spaced out input
*/
public class SpacedLogger implements Logger {

    @Override
    public void Log(String str) {
        StringBuilder log = new StringBuilder();
        for (int i = 0; i < str.length(); i++) {
            log.append(str.charAt(i)).append(" ");
        }
        System.out.println(log);

    }

    @Override
    public void Error(String str) {
        String er = ("ERROR: " + str);
        Log(er);

    }
}
```

9.

```java
/*
 9.  Create a class named App that has a main method.

 10. In this class instantiate an instance of each of your logger

 11. Test both methods on both instances, passing in Strings of you
*/
public class App {

    public static void main(String[] args) {
```

10.

```
Logger.java      AsteriskLogger.java      SpacedLogger.java      App.java ×
 1⊖ /*
 2  9.  Create a class named App that has a main method.
 3
 4  10. In this class instantiate an instance of each of your logger
 5
 6  11. Test both methods on both instances, passing in Strings of yo
 7  */
 8  public class App {
 9
10⊖   public static void main(String[] args) {
11
12      Logger asteriskLogger = new AsteriskLogger();
13      Logger spacedLogger = new SpacedLogger();
14
15      asteriskLogger.Log("Hello!");
16      asteriskLogger.Error("Bye!");
17
18      System.out.println();
19
20      spacedLogger.Log("Hello");
21      spacedLogger.Error("DANGER!");
22
23    }
24
25  }
26
```
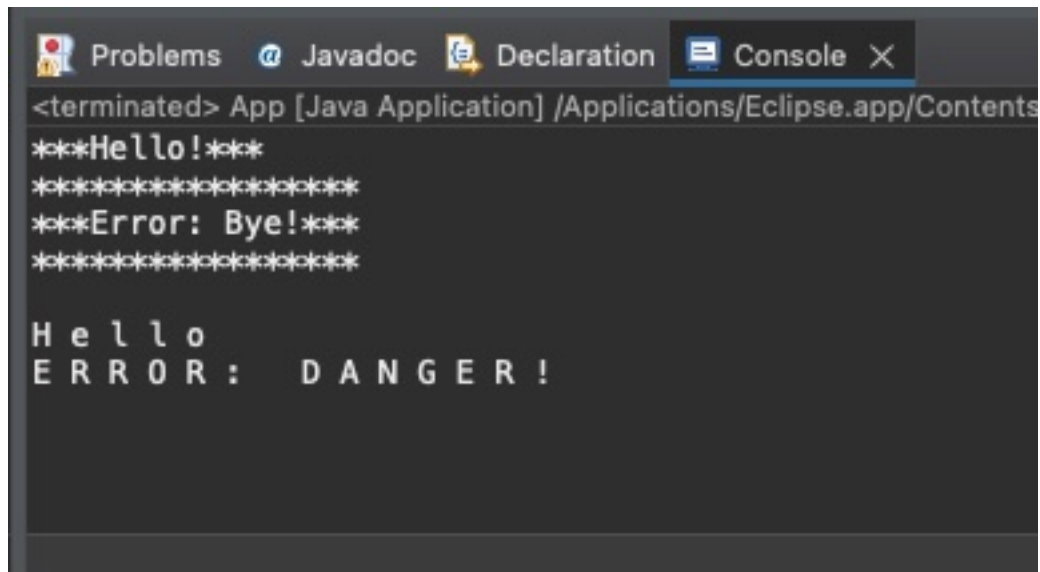
11.

```
Logger.java      AsteriskLogger.java      SpacedLogger.java      App.java ×   Wk3HW.java
 1⊖ /*
 2  9.  Create a class named App that has a main method.
 3
 4  10. In this class instantiate an instance of each of your logger classes that impl
 5
 6  11. Test both methods on both instances, passing in Strings of your choice.
 7  */
 8  public class App {
 9
10⊖   public static void main(String[] args) {
11
12      Logger asteriskLogger = new AsteriskLogger();
13      Logger spacedLogger = new SpacedLogger();
14
15      asteriskLogger.Log("Hello!");
16      asteriskLogger.Error("Bye!");
17
18      System.out.println();
19
20      spacedLogger.Log("Hello");
21      spacedLogger.Error("DANGER!");
22
23    }
24
25  }
26
```

```
Problems  @ Javadoc  Declaration  Console ×
<terminated> App [Java Application] /Applications/Eclipse.app/Contents/Eclipse/plugins/org.eclipse.justj.openjdk.hotspo
***Hello!***
*******************
***Error: Bye!***
*******************

H e l l o
E R R O R :    D A N G E R !
```

Screenshots of Running Application:


```
Problems  @ Javadoc  Declaration  Console  X
<terminated> App [Java Application] /Applications/Eclipse.app/Contents
***Hello!***
*****************
***Error: Bye!***
*****************

H e l l o
E R R O R :    D A N G E R !
```

URL to GitHub Repository:

https://github.com/AaronL1981/JavaWeek5.git