LED BRIGHTNESS REFLECTION LOG

```java
//Add Phidgets Library
import com.phidget22.*;

public class LEDbrightness {
    //Handle Exceptions
    public static void main(String[] args) throws Exception{

        //Create
        DigitalOutput redLED = new DigitalOutput();

        //Address
        redLED.setHubPort(1);
        redLED.setIsHubPortDevice(true);

        //Open
        redLED.open(1000);
```

```java
        while (true) {
            redLED.setDutyCycle(0.0);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.2);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.4);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.6);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.8);
            Thread.sleep(1000);

            redLED.setDutyCycle(1);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.8);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.6);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.4);
            Thread.sleep(1000);

            redLED.setDutyCycle(0.2);
            Thread.sleep(1000);

            redLED.setDutyCycle(0);
            Thread.sleep(1000);
        }
```

In this code, first I copy pasted the given code than modified it. I added a bunch of setDutyCycle(#.#); statements with a sleep underneath which start from 0, go all

the way to 1, and back down to 0. This first starts at no brightness at all starting at 0, and then increases the brightness, 0.5 is half brightness, and then goes to 1 which is the full brightness, and then the code makes the brightness increment back down to no brightness where is started. This just keeps repeating due to the while loop.