

# ReflectionLog: LED Brightness

Youdis

```
import com.phidget22.*;
public class LEDBrightness {

    public static void main(String[] args)throws Exception {
        //Create
        DigitalOutput redLED = new DigitalOutput();

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

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

Importing phidget library, creating a digital output object , setting its port to connect to a physical object, and opening its connection to the physical object corresponding to it's name.

```
        //Use your Phidgets with Duty Cycle | Duty Cy
        for(int i = 0; i <= 10; i++) {
            Thread.sleep(200);
            redLED.setDutyCycle(i * 0.1);

        }

        for(int i = 10; i >= 0; i--) {
            Thread.sleep(200);
            redLED.setDutyCycle(i * 0.1);

        }
    }
}
```

First for loop will gradually increase the brightness of the led until its at 1 then the next for loop will decrease the brightness until its at 0(off).