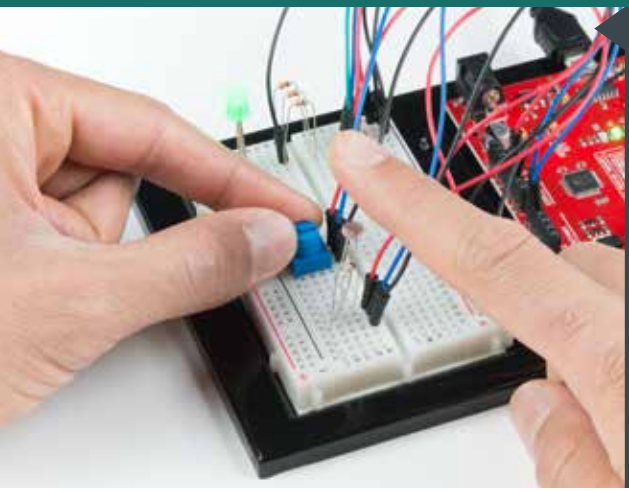
Open the Arduino IDE

Connect the RedBoard to a USB port on your computer.

Open the Sketch:
File > Examples > SIK-Guide-Code-master > **SIK_CIRCUIT_1D-RGB NIGHT LIGHT**

Select **UPLOAD** to program the sketch on the RedBoard.



WHAT YOU SHOULD SEE

This sketch is not dissimilar from the last. It reads the value from the photoresistor, compares it to a threshold value, and turns the RGB LED on or off accordingly. This time, however, we've added a potentiometer back into the circuit. When you twist the trimpot, you should see the color of the RGB LED change based on the trimpot's value.

PROGRAM OVERVIEW

1	Store the light level from pin A0 in the variable **`photoresistor`**.
2	Store the potentiometer value from pin A1 in the variable **`potentiometer`**.
3	If the light level variable is above the **`threshold`**, call the function that turns the RGB LED off.
4	If the light level variable is below the **`threshold`**, call one of the color functions to turn the RGB LED on.
5	If **`potentiometer`** is between 0 and 150, turn the RGB LED on red.
6	If **`potentiometer`** is between 151 and 300, turn the RGB LED on orange.
7	If **`potentiometter`** is between 301 and 450, turn the RGB LED on yellow.
8	If **`potentiometer`** is between 451 and 600, turn the RGB LED on green.
9	If **`potentiometer`** is between 601 and 750, turn the RGB LED on cyan.
10	If **`potentiometer`** is between 751 and 900, turn the RGB LED on blue.
11	If **`potentiometer`** is greater than 900, turn the RGB LED on magenta.