

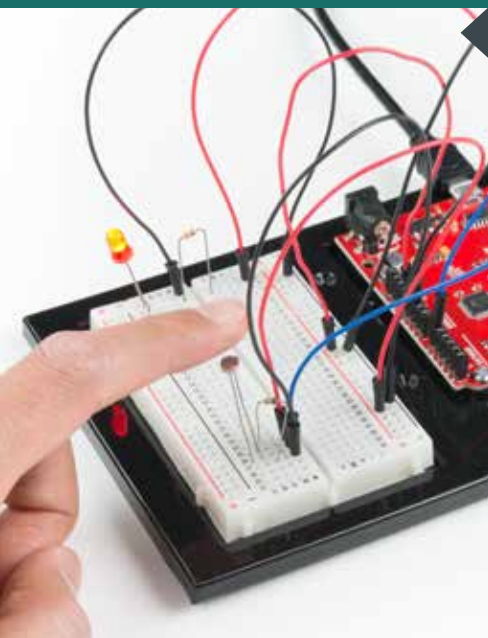
Open the Arduino IDE

Connect the RedBoard to a USB port on your computer.

Open the Sketch:

File > Examples > SIK-Guide-Code-master > **CIRCUIT_1C-PHOTORESISTOR**

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



WHAT YOU SHOULD SEE

The program stores the light level in a variable. Using an **if/else** statement, the variable value is compared to the threshold. If the variable is above the threshold (it's bright), turn the LED off. If the variable is below the threshold (it's dark), turn the LED on. Open the Serial Monitor in Arduino. The value of the photoresistor should be printed every so often. When the photoresistor value drops below the threshold, the LED should turn on (you can cover the photoresistor with your finger for testing).

NEW IDEAS

LIGHT LEVELS: If the room you are in is very bright or dark, you may have to change the value of the **threshold** variable in the code to make your night-light turn on and off. See the Troubleshooting section for instructions.

PROGRAM OVERVIEW

- 1 Store the light level in the variable **photoresistor**.
- 2 If the value of the **photoresistor** is above the **threshold** (it's bright), turn the LED off.
- 3 Otherwise, the value of the **photoresistor** is below the **threshold** (it's dark), turn the LED on.