

Activity

PictoBlox

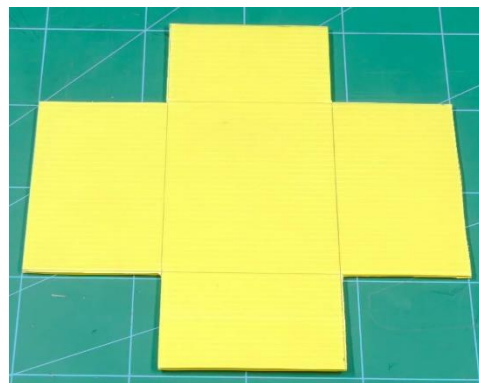
DIY Smart LED Street Light



In this activity, you will make a Smart Street Light, in which, the LED light will glow when the light will go below certain limit.

STEP-BY-STEP

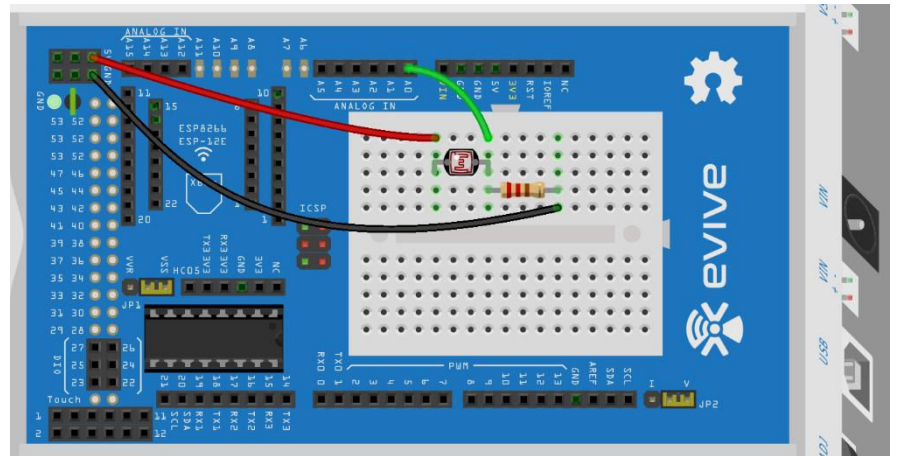
1. Take a corrugated sheet of the size 20 cm * 20 cm. Make a rectangle of 10 cm * 8 cm in the center of our sheet. Remove the corners so that your sheet looks like a plus sign, similar to the one shown in the image.
2. Fold along the markings done using a ruler. And finally, glue them together using hot glue. With this, your base is completed.
3. Connect LDR with evive as given below. Use 10KOhm Resistor.
4. Turn ON evive and navigate to **Pin State Monitor**. Get the reading of light on A0 pin. Also get the see the reading for light on and light off by covering the sensor with hand.
5. Cut a small portion of the straw to make the arm. Make a slit of approximately 1cm at one end of it. This will help fix our head to the pole.
6. Create two holes into the U-shaped corrugated sheet or the lampshade of our Smart Street light using the header of the male jumper cable.
7. Insert the LDR legs into the given hole so that it sits tightly on the top of our lamp.
8. Connect the legs of LDR with a jumper cable and pass the wires through the arm.



STEP 1



STEP 2



STEP 3



STEP 4



STEP 5



STEP 6-7

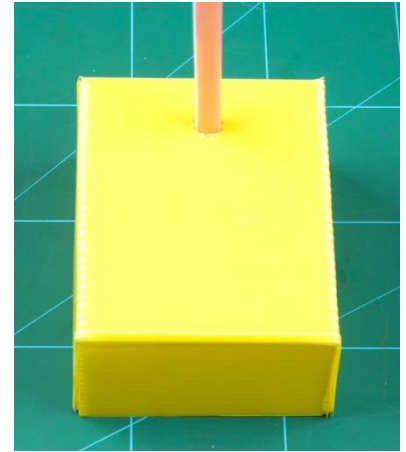


9. Add the LED to the other jumper cable and pass it through jumpers.

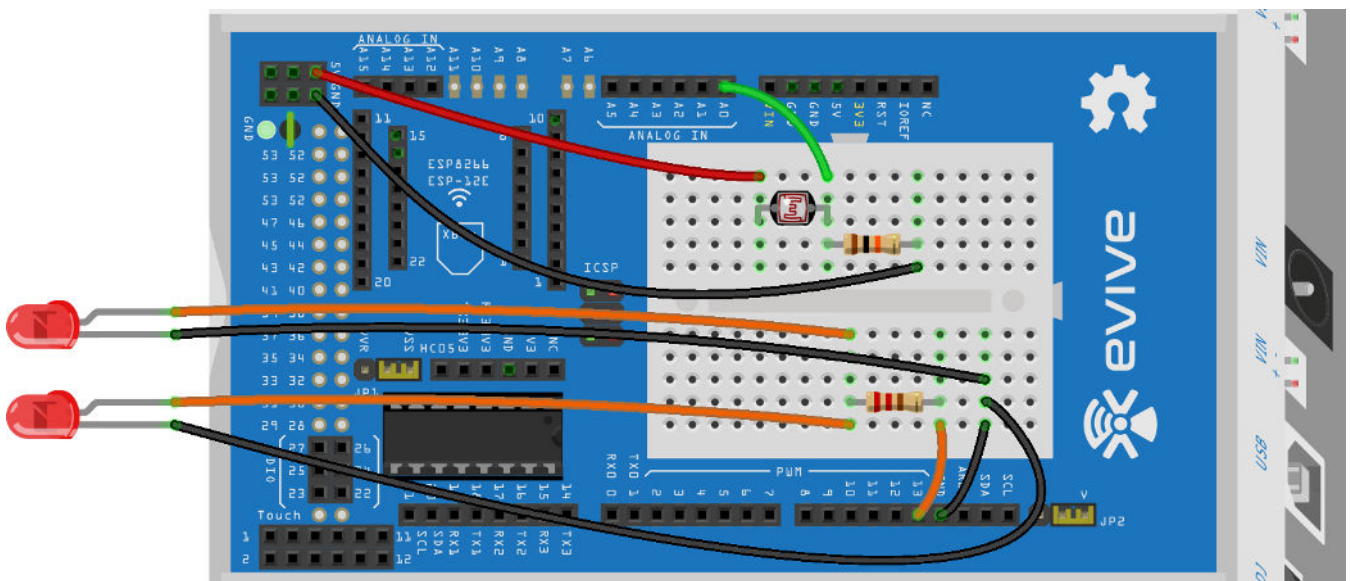


STEP 8-9

10. Make a hole of size of the straw in the platform and glue a straw (new to be used for pole) on the platform.
11. For connections, we would need to extend the jumper cables. Pass the wires through the pole and attach LDR straw to pole.



STEP 10



12. Make the circuit as shown in the figure.
13. Open **PictoBlox**, connect evive, and select the Board as evive.
14. Make the script to turned ON the LEDs when the LDR reading is less than 500, otherwise LED is turned OFF.
15. Switch to **Upload Mode**.
16. Upload the code.

