



instructables

Smart Street Light Using Ir Sensor With Arduino



by vishalsoniindia

This project is about Smart street light, street light will turn on while vehicle is passing through it.

here we are using **4 IR sensors** that senses the position of the vehicle, each IR sensor controls 3 LED's. When vehicle passes by a particular IR sensor it senses the position of vehicle and gives its signal to the arduino board and it will turn on the LED's.

ADVANTAGES:

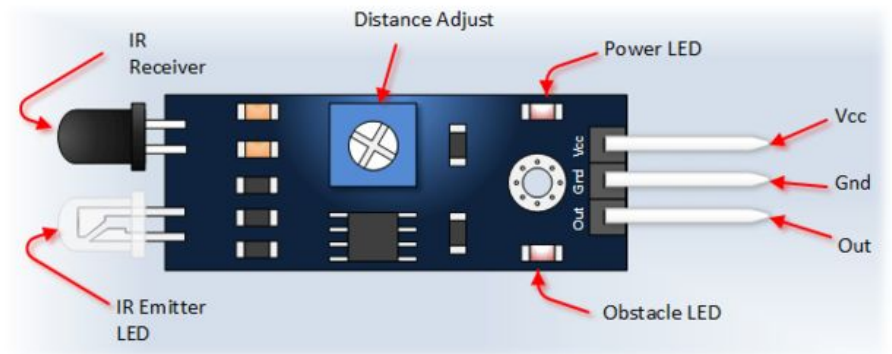
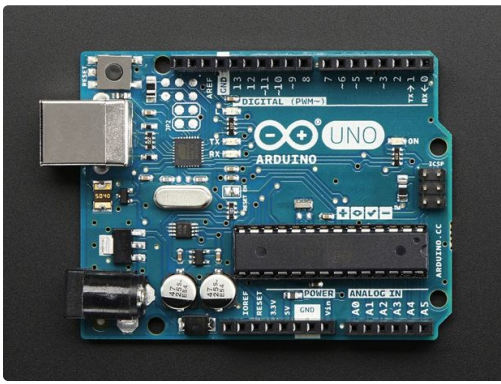
If we use this idea and implement it in our society it will be helpful in saving enough amount of electricity and off-course money.

https://www.youtube.com/watch?v=c5_2ab6AKOY



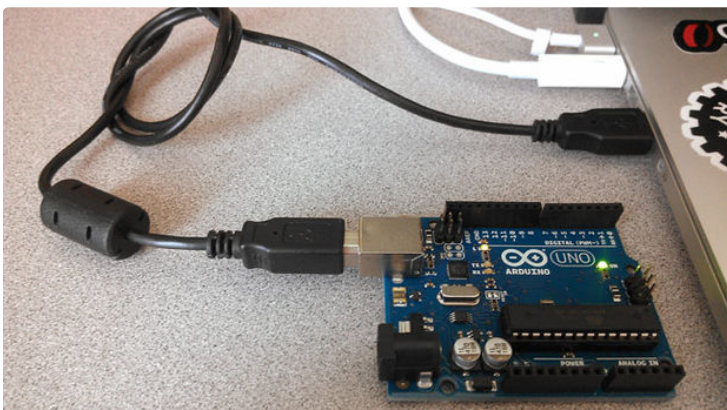
Step 1: Components Required

1. arduino uno
2. ir sensor (4)
3. 10mm LEDs (6)
4. connecting wire
5. foam board



Step 2: Upload the Program

download and upload the program in arduino uno





Step 3: Connect the Circuit

Connect all the components as given in the circuit diagram.

ir sensor 1 ---> 2

ir sensor 2 ---> 3

ir sensor 3 ---> 4

ir sensor 4 ---> 5

connect all ir sensor's to +5v and ground.

the positive pin of leds are connected to these pins of arduino.

led 1 -----> 6

led 2 -----> 7

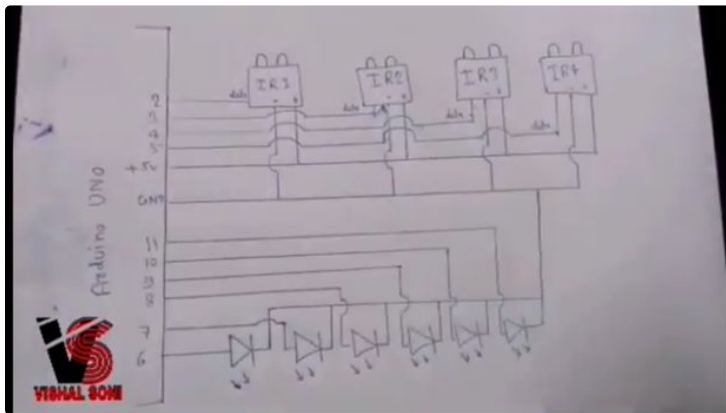
led 3 -----> 8

led 4 -----> 9

led 5 -----> 10

led 6 -----> 11

and finally all ground pins of led connect to the ground of arduino.



Step 4: Build Suitable Structure

To make these poles as given in above picture, use foam board and glue.

and you may also use black chart to make a road and wooden board for the base of pole.

