

CSCI U509 – Introduction to Internet of Things

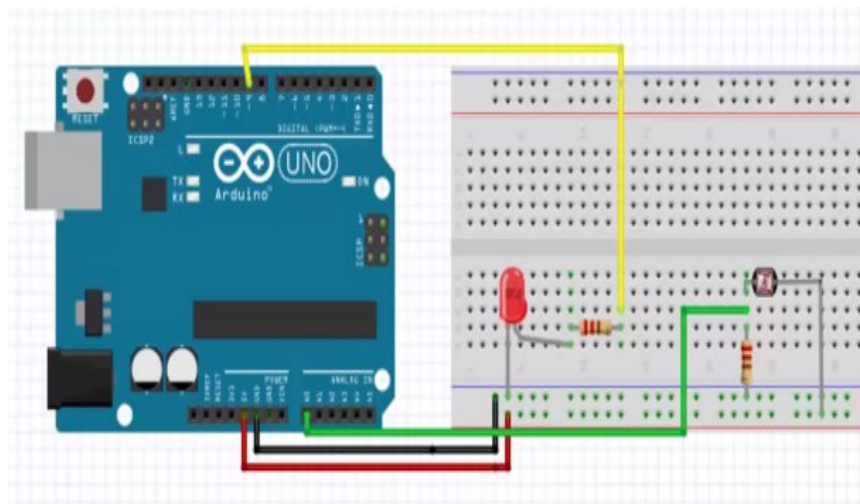
IoT In-class Project-2

Demo Video due on Tuesday, March 31, 2020 at 5PM in Blackboard

Note: You need to make a demo video for the output for each of the circuit below and submit the video on Blackboard on Tuesday, March 31. Please explain the output when you make the demo video.

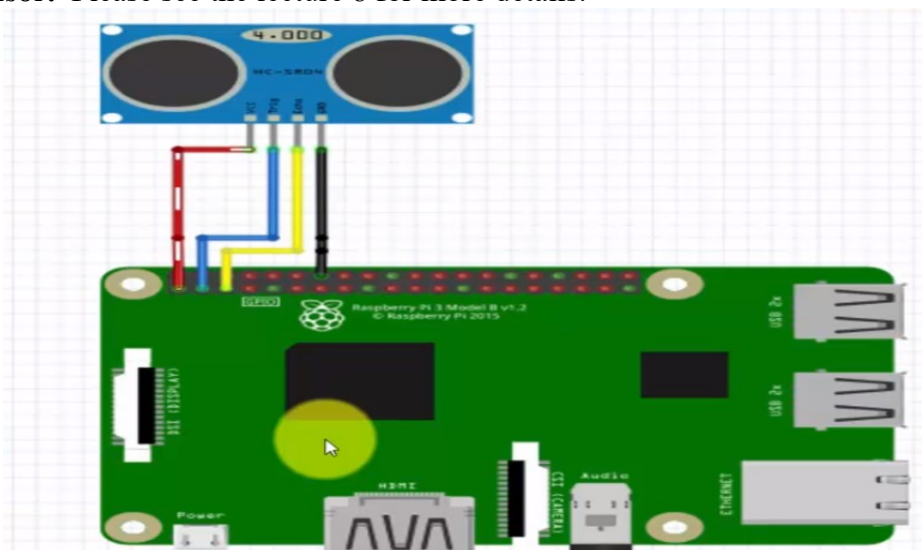
- **Smart Lighting for Smart-Home**

- The light dependent resistor (LDR) can be a signal input to an Arduino similar to the use of an LED as an output of the Arduino. Set the input pin on Arduino as an INPUT and the output pin on Arduino as an OUTPUT. Program the Arduino from the circuit 1 below, so that when there is no lights around the Arduino lights the LED and turn off when not required. Please see the lecture 8 for more details.



Circuit 1: Turn ON/OFF LED using LDR

- For the circuit 2 below, program the Raspberry Pi to measure the distance **using Ultrasonic Sensor**. Please see the lecture 8 for more details.



Circuit 2: Distance Measurement Using Ultrasonic Sensor