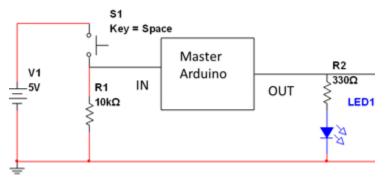
CSCI U509 – Introduction to Internet of Things <u>IoT Project-1</u>

Demo Video due on Tuesday, March 24, 2020 at 5PM in Blackboard

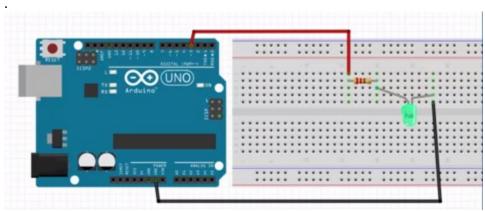
Note: You need to make a demo video for the output for each of the circuit below and submit the video on Blackboard on Tuesday, March 24. Please explain the output when you make the demo video.

• A push button switch 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 the operator pushes the Key the Arduino lights LED1.



Circuit 1: Turn ON/OFF LED using push button

• For the circuit 2 below, Program the Arduino so that the LED blink with different intensity. Use Pulse Width Modulation (PWM) to vary the intensity of the LED. Use 100Ω resistor for the circuit below.



Circuit 2: Blinking LED with different intensity