

Group Member Names : _____

ENGR 207: Programming Robots and Sensors
Lab 1: Introduction to Arduino

Lab Instructions

1. Assemble a circuit consisting of three LEDs (red, yellow, green) with current limiting resistors. Each LED should be attached to a separate digital pin on the Arduino.
2. Include a pushbutton switch to the circuit, with a default “off” position (use a pulldown resistor of 10 kOhm).
3. Write a program that cycles the LEDs in a stoplight fashion.
 - The circuit should start only once the pushbutton is depressed.
 - The LEDs should cycle as follows: green 2 sec., yellow 1 sec., red 2 sec.

Lab Assignment

1. Once you have completed your circuit, show the instructor or teaching assistant. (5 pts)

Instructor / TA Initials: _____

2. Draw a schematic of your working circuit using appropriate symbols. The components should share a common ground. Label the color of each diode. Label resistor values. Label each pin as digital/analog and input/output. Also include the pin number. (5 pts)