Lab _6a

Arduino Digital

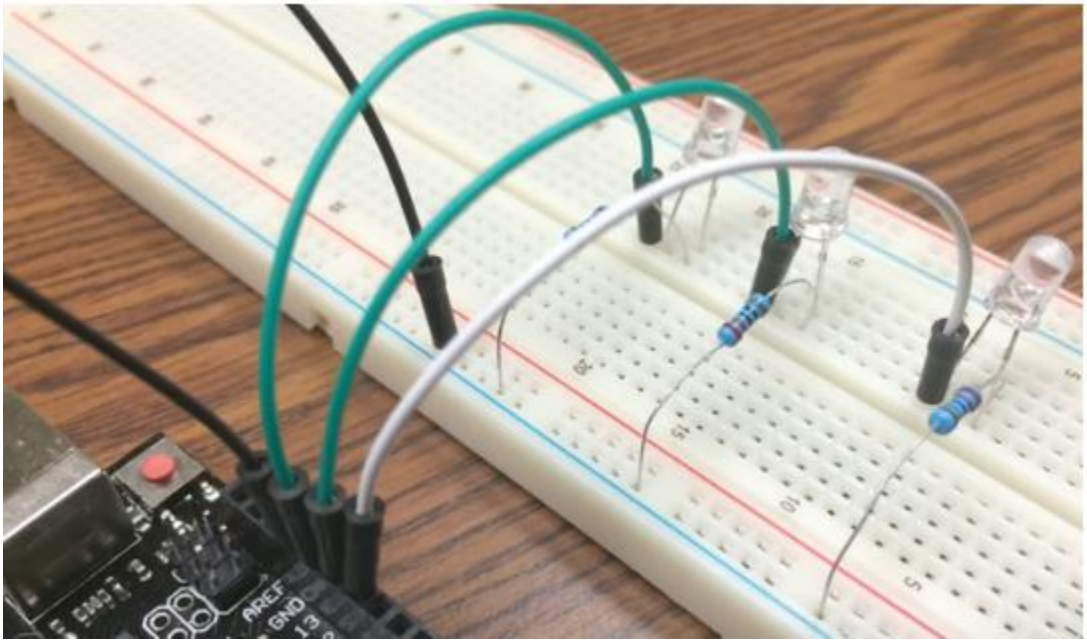
This experiment is an extended version of the lab activity. The concept is the same; you just need to add a few extra commands to your code.

Components Needed: Arduino UNO and USB cable, Breadboard, 3 LEDs, 1 RGB, 220/330 ohm resistors (3), connecting jumper wires.

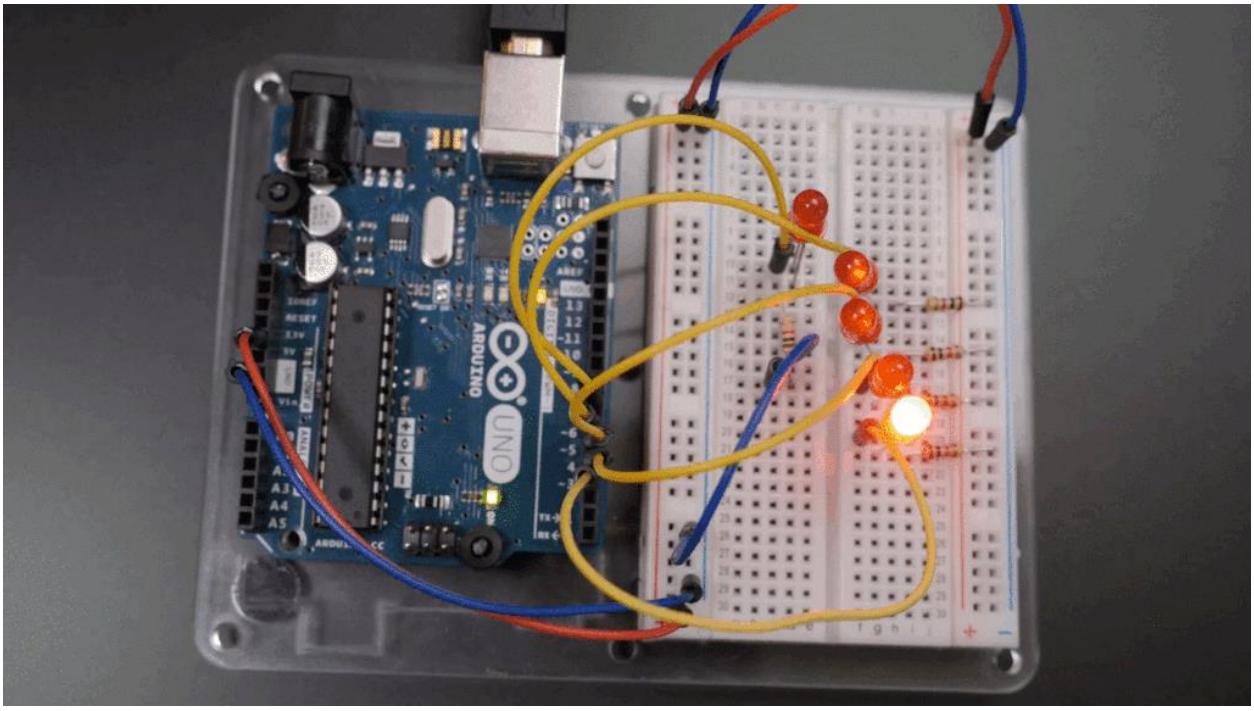
Task 1: LED Sequential Control

You have to get three different LEDs to turn on and turn off in a simple sequence (say with a gap of 1 sec).

Circuit



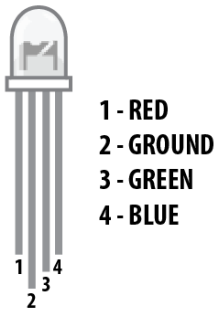
Expected Output



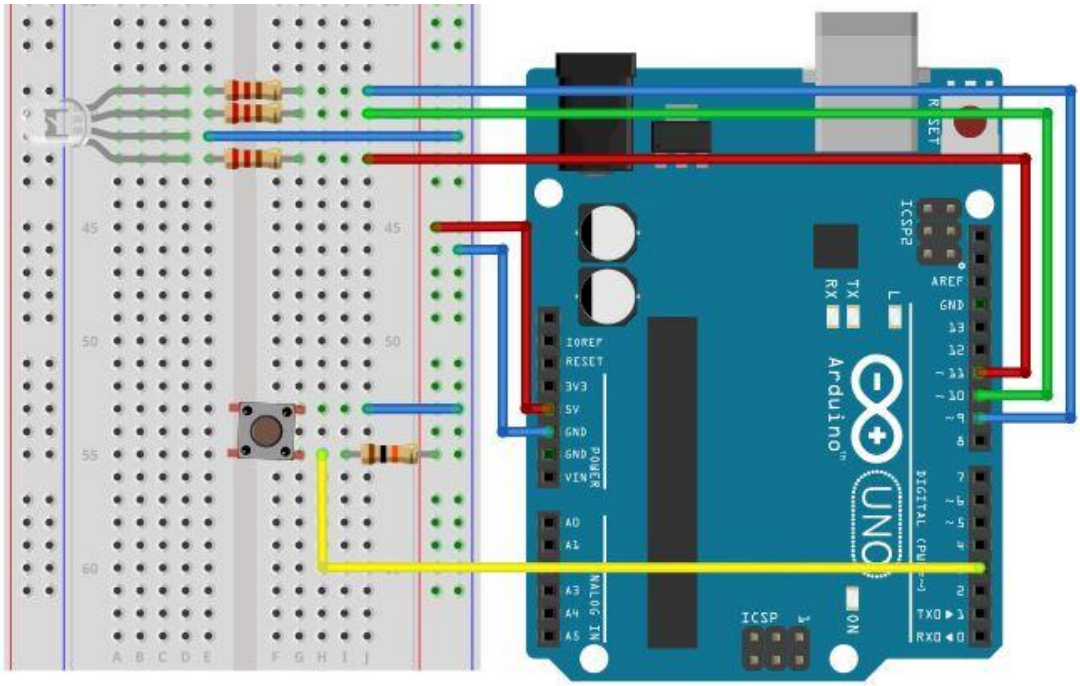
TASK 2: RGB LED control using pushbutton

You have to use pushbutton to control the RGB. For example if you press the button once, Red LED should glow, next press will give you another color & same pattern should follow.

Pinout of RGB LED (Common Cathode):



Circuit:



Expected Output: