Insert your name on the top of this word document, and save the file with your lastname substituting for the words LASTname in the filename.

Change the circuit with your LED light to one that uses a **COMMON CATHODE** (you can obtain this in lab)**.** To change your circuit, instead of the common anode connect to +3v3 with your resistor, you will have the common cathode connected to ground using the resistor. You will also have to change the line of code in program 3 to read:

led = RGBLED(red = 21, green=20, blue=16, active\_high = True)

Write a new program that uses the three buttons you programed in class today to play three different wave file sounds, lights up the red, green and blue colors of the common cathode RGB LED, and prints out a statement to the screen indicating something about the sound you are playing. Make the sound play and light stay on as long as the button is being pushed. Your program should be able to play two sounds and have two different colors of the LED play and show simultaneously. You don’t need to change any of the buttons on your breadboard for this task.

Submit your python program and this word document with your code pasted below to your Google Drive folder. Give the file the filename of your lastname\_iot5.py. Take a video of your circuit working showing successful completion of the homework and either upload it to YouTube (you can make it private) and include the youtube link in your documentation lines, or upload the .wav file to your google drive folder. Your program must include documentation lines that include your name, the date, and a line that states what the program is supposed to do. Hopefully you have some external speakers to connect to your Raspberry pi, or you can hold a headphone up to the microphone on your smartphone while shooting the video.

The following is Dr. Bucholts's video (note this was assignment 4 in his class, not 5).

<https://youtu.be/SjVGBozvWRI>

Please choose different sounds. You can also import different wav files you find from the internet.