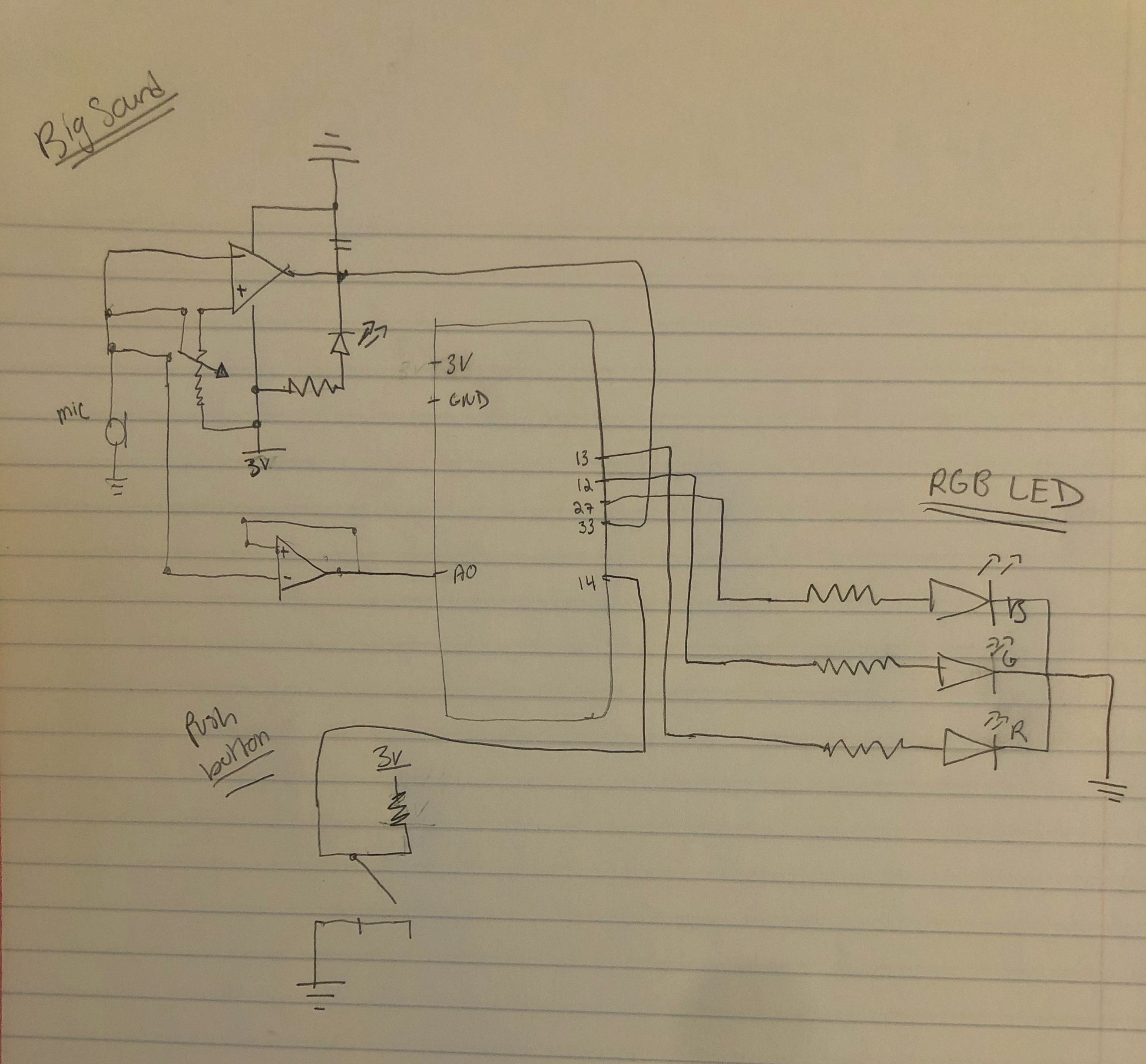
**Music Reactive LED’s with Push Button Interactivity**

By Lauren Simons

**Description**

For my individual design project, I made music reactive lights that are interactive with the touch of a button. To do this, I used the Big Sound Sensor, a triple color LED, and a push button. The sound sensor (with digital and analog) and the push button pin (digital) were established as inputs and each LED color pin as outputs. If the sound sensor detected a sound (if digital output pin was 1), it would turn on the LED. The brightness of the LED is determined by the analog output from the sound sensor, which indicates the sound volume. With the touch of a button, the color of the LED would change between red, green, and blue. I did this by putting an array list in the code and having the index adjust accordingly to when the button is pressed. While the goal for this project was to have the LED’s be interactive with music, it also works for any type of sound such as regular speaking or clapping.

**Schematic**

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