**Lab 2 Sine Wave – ECE 5780**

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**Objective**

The purpose of this lab is to implement a program using FreeRTOS to produce a 440 Hz Sine Wave when an LED is activated by a button push on our STM32 Nucleo Board. This sine wave is then put through an audio amplifier circuit and an 8-ohm speaker to produce the sound of the sine wave.

**Procedure**

**Results**

**Figure 1. Audio Amplifier Circuit connected to our STM32 Nucleo Board**

**Figure 2. Oscilloscope Screenshot showing our 440 Hz Sine Wave**

**Conclusion**

In conclusion,

**Appendix**

***Main.c code***

***Init.c code***

***Init.h code***