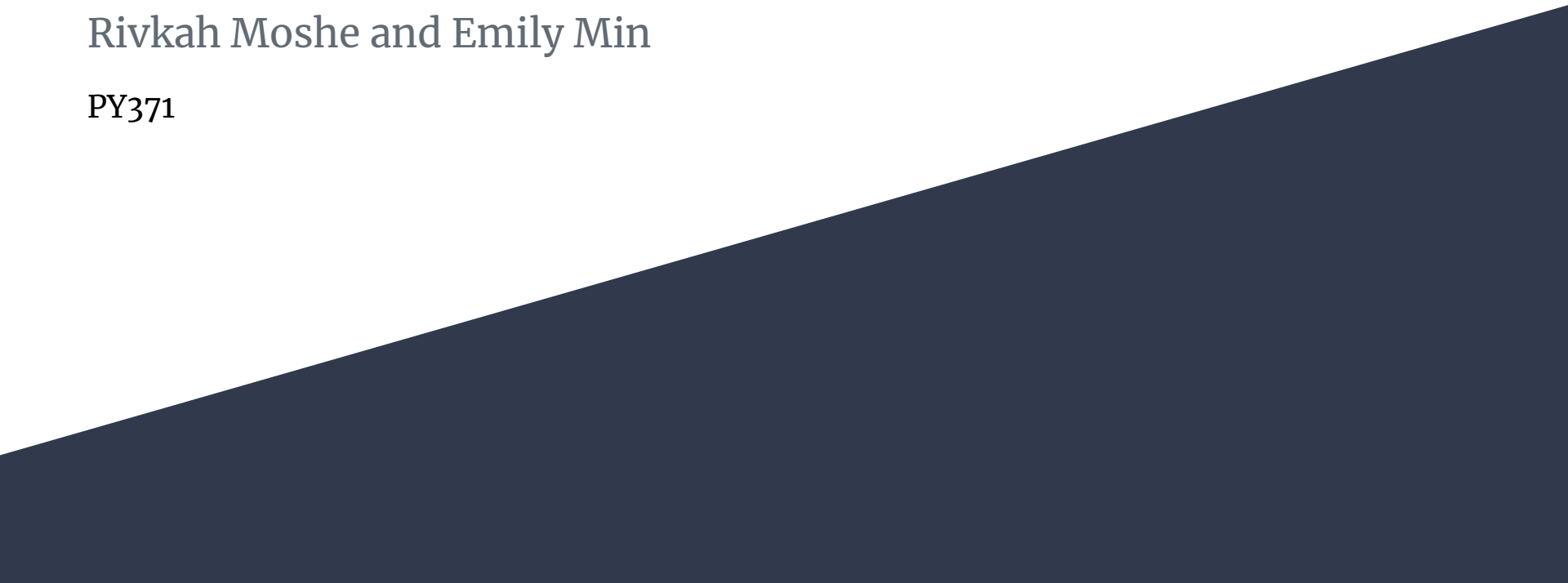


# Computer Temperature Monitor

Rivkah Moshe and Emily Min

PY371

A dark blue diagonal gradient bar that starts from the bottom left corner and extends towards the top right corner, covering the bottom half of the slide.

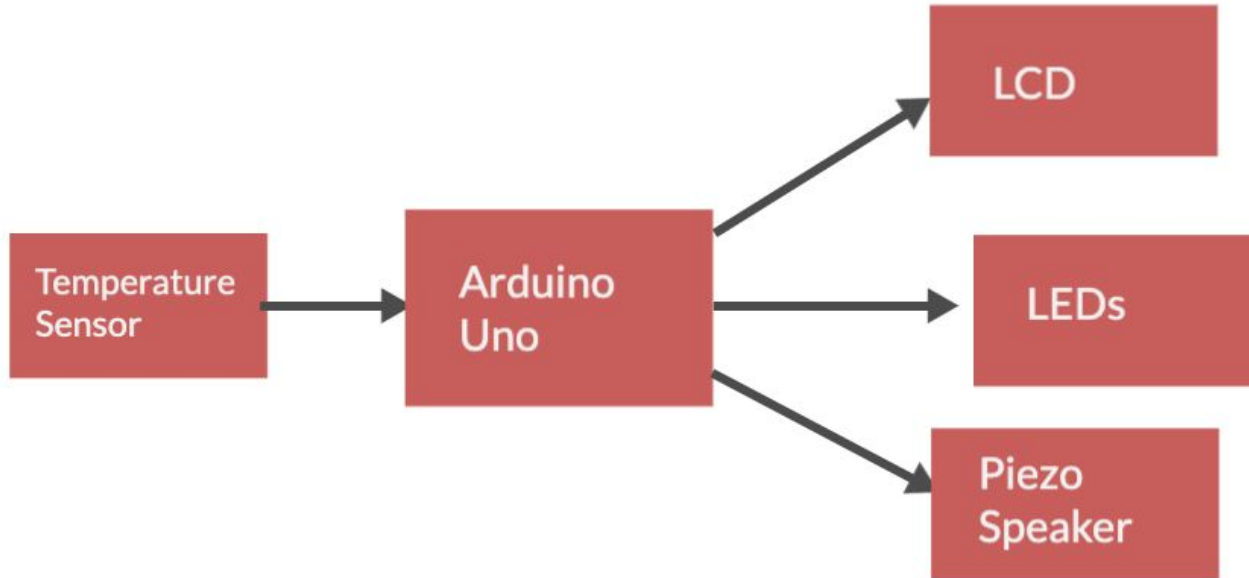
# Abstract

We will create an Arduino device that is able to monitor and display the current temperature of a given device, targeted for computers and other devices.

## *COMPONENTS*

- LCD screen displaying temperature
- LED light that flashes red with high temperatures; adjustable frequency
- Piezo speaker triggered with high temperatures; adjustable frequency

# Block Diagram



# Parts needed

- Arduino Uno
- LCD Screen
- Temperature Sensor/Thermistor
- Piezo Speaker
- Jumper wires
- LED lights
- Potentiometer

All items are available in our lab, and we are planning to experiment with the temperature sensor to see if it performs well with what we planned.

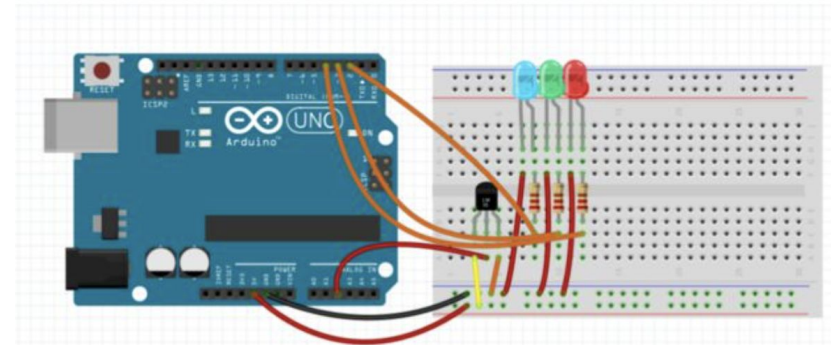
# Status Report 4/11/2022

This week, we have decided to begin with the construction of our device, starting with attempting to program the Arduino to display 3 different LED colors based on what temperature is being detected.

This is our primary goal for this week, and we will extend this to the other components of our project once we complete this.

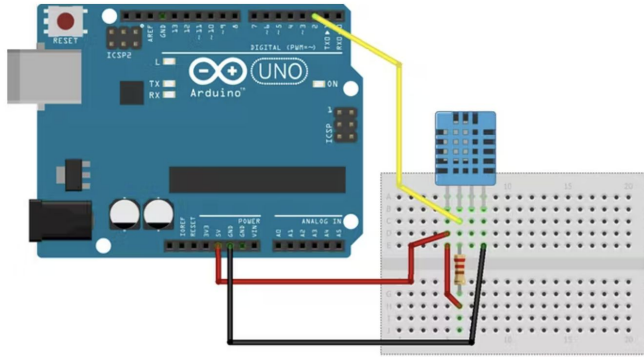
We have drafted the code for this, and once we are able to successfully program it we will test it. We will then attempt to incorporate the LED screen to work in combination with the LED lights.

This is a model of what we will build this week:

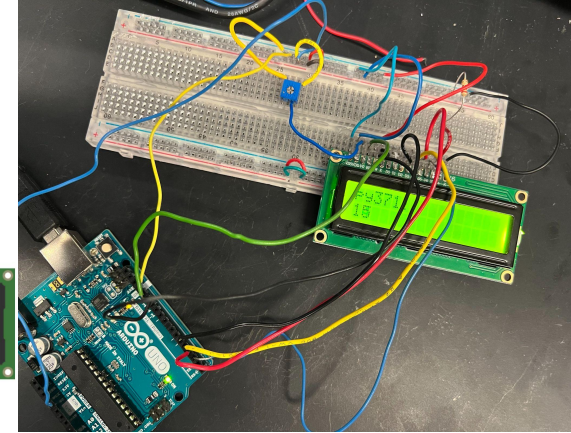
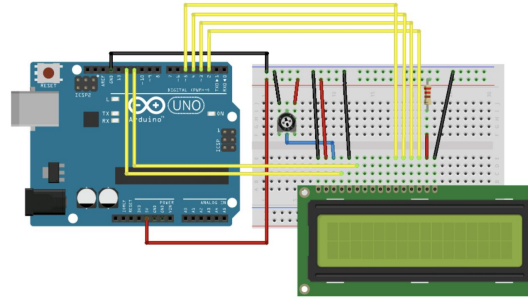


# Status Report 4/20/2022

Test run on DHT11 sensor, received correct temperature and humidity values on serial monitor via Arduino.



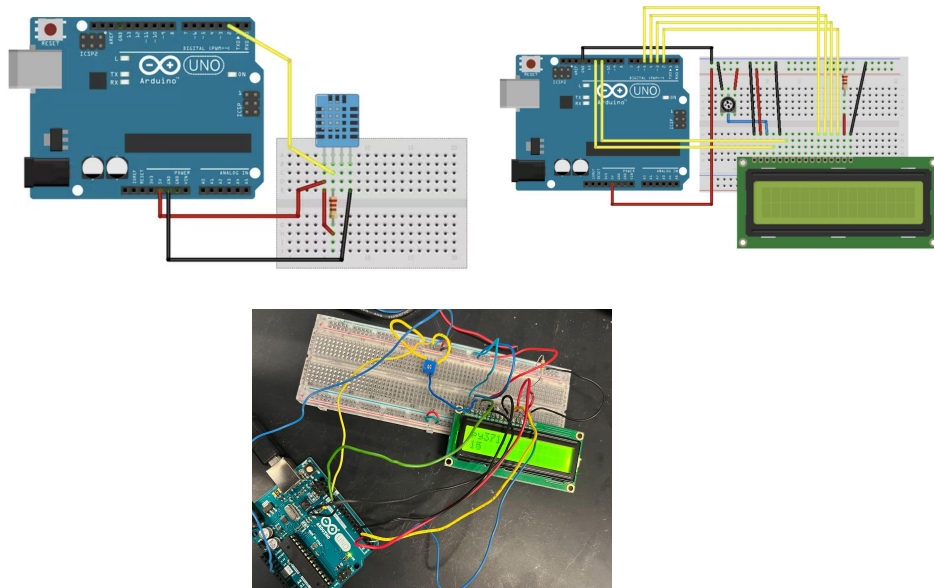
Test run on LCD1602, where we printed words and phrases of our choice.



Our next step is combining these two circuits, and having our LCD display the correct temperature (in Fahrenheit) as it does on our computer. We have constructed the circuit for this, and am working on finishing the code by the end of today's session.

# Status Report 4/25/2022

Test runs on DHT11 sensor and LCD1602



Test run on DHT sensor. LCD. LED lights combined

