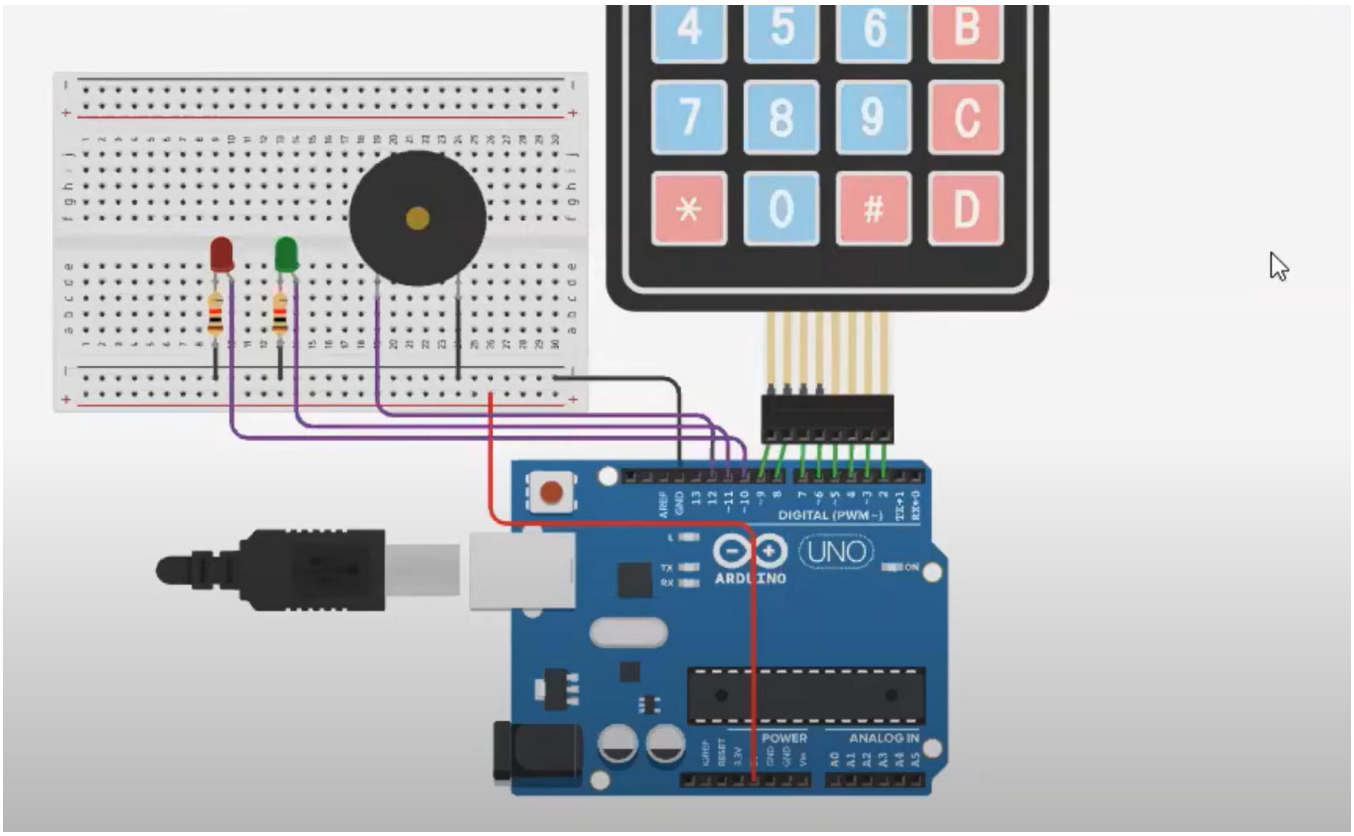
# #4:Password Protected Security System project using Arduino, Keypad, Piezo Buzzer and LEDs on TinkerCAD

## Circuit Connections and its Working:




The input device used here is the 4*4 keypad. It has 8 terminals and here each terminal is connected to one digital pin of the Arduino board to allow Arduino to receive input from the keypad. Pressing of each key triggers a particular function of each of the 8 terminals and hence the input is received by the Arduino.

The breadboard is going to house all the external connections done to the Arduino board. So the power supply line and Ground line are specified separately by making a connection from 5V and GND pins from the Arduino board respectively.

We will be using 2 two LEDs along with a Piezo buzzer as output. One LED can be chosen RED and the other can be chosen GREEN. The **Cathode** of the LEDs is connected to the ground line through resistors and the **Anode** is connected to the digital pins of Arduino, D10, and D11 respectively.

The positive terminal of the Piezo buzzer is connected to another digital pin of Arduino, say D12. The negative terminal of the buzzer is connected to the ground line on the breadboard.

## Code:

https://github.com/sami-118/tinker-cad-project.git