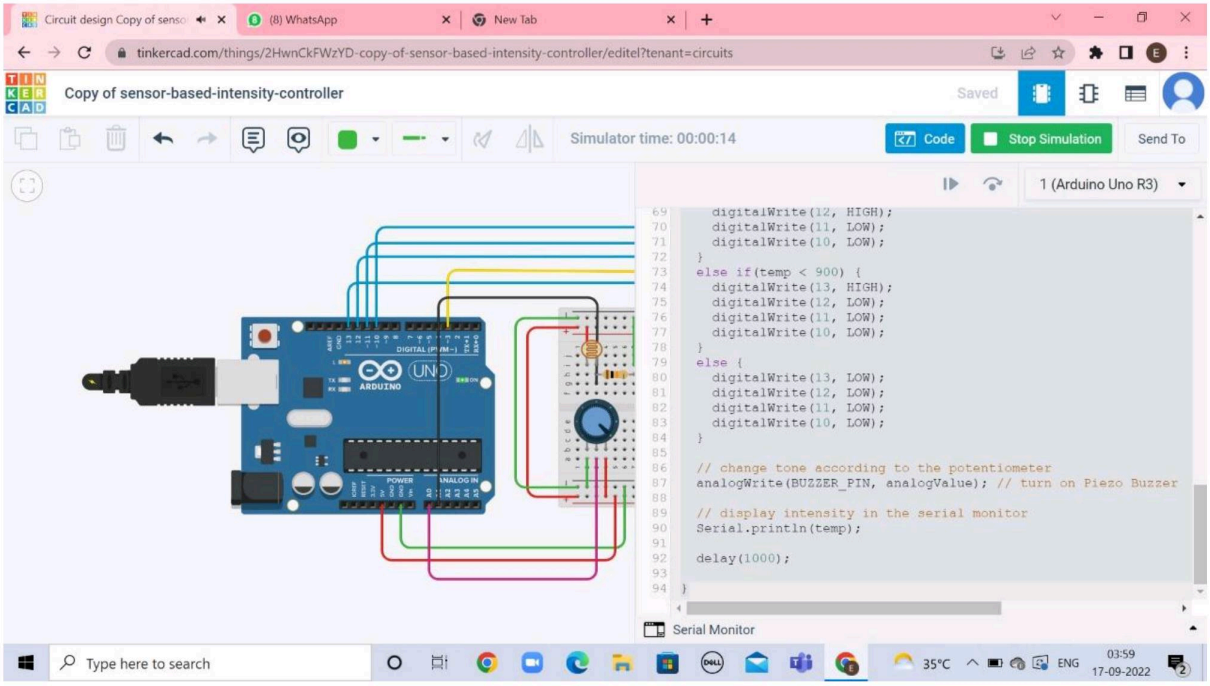

/*

* Requirements:

*

* Arduino Uno

* 220 ohm resistor X4

* led X4

* Potentiometer

* ends to +5V and ground

* buzzer

* photoresistor

The Potentiometer circuit:

* Terminal 1 to ground, Terminal 2 to +5v

* Wiper (middle) to Analog IN A0.

The Photo Resistor Circuit:

* photoresistor one pin to A1, another to +5v

* resistor 10k, one pin to photo-resistor leg 2,

```
   another to ground.


 The Buzzer Cicuit:
 * One leg to ground and other to PWM pin 3.
 * Tutorial page: https://arduinogetstarted.com/tutorials/arduino-potentiometer-triggers-piezo-buzzer
 *
 */

const int POTENTIOMETER_PIN = A0; // Arduino pin connected to Potentiometer pin
const int BUZZER_PIN        = 3; // Arduino pin connected to Buzzer's pin
const int ANALOG_THRESHOLD  = 500;
const int PR = A1;  //define a pin for Photo resistor

int analogValue = 0;
int temp = 0;

void setup()
{
  Serial.begin(9600);
  pinMode(13, OUTPUT);
  pinMode(12, OUTPUT);
  pinMode(11, OUTPUT);
  pinMode(10, OUTPUT);
  pinMode(BUZZER_PIN, OUTPUT);
  pinMode(POTENTIOMETER_PIN, INPUT);
}

void loop()
{
  // analog read potentiometer
```

```
analogValue = analogRead(POTENTIOMETER_PIN);

// analog read photo resistor
temp = analogRead(PR);

// glowing leds
if(temp < 80) {
  digitalWrite(13, HIGH);
  digitalWrite(12, HIGH);
  digitalWrite(11, HIGH);
  digitalWrite(10, HIGH);
}
else if(temp < 600) {
  digitalWrite(13, HIGH);
  digitalWrite(12, HIGH);
  digitalWrite(11, HIGH);
  digitalWrite(10, LOW);
}
else if(temp < 800) {
  digitalWrite(13, HIGH);
  digitalWrite(12, HIGH);
  digitalWrite(11, LOW);
  digitalWrite(10, LOW);
}
else if(temp < 900) {
  digitalWrite(13, HIGH);
  digitalWrite(12, LOW);
  digitalWrite(11, LOW);
  digitalWrite(10, LOW);
}
else {
```

```
  digitalWrite(13, LOW);
  digitalWrite(12, LOW);
  digitalWrite(11, LOW);
  digitalWrite(10, LOW);
 }

 // change tone according to the potentiometer
 analogWrite(BUZZER_PIN, analogValue); // turn on Piezo Buzzer

 // display intensity in the serial monitor
 Serial.println(temp);

 delay(1000);

}
```