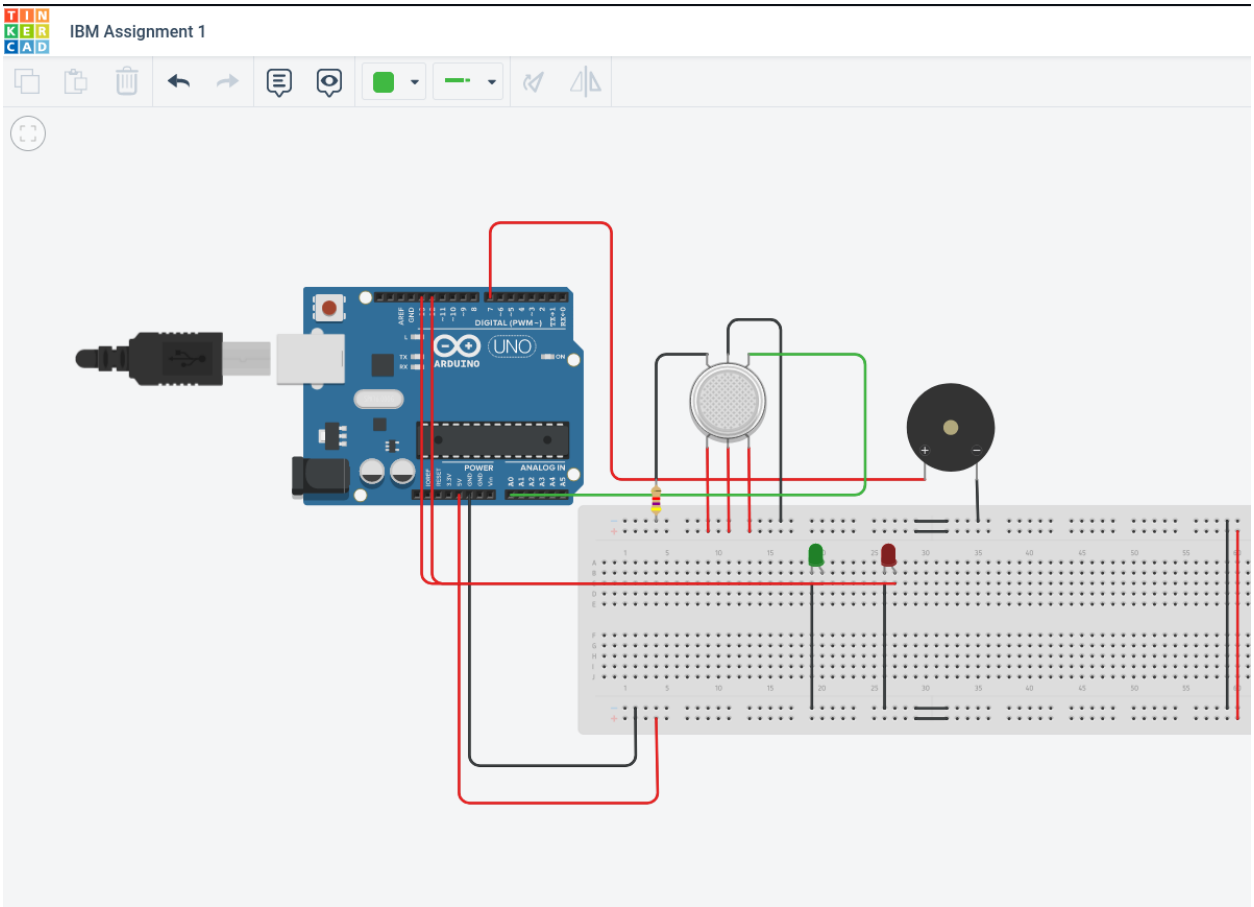
Circuit and code:

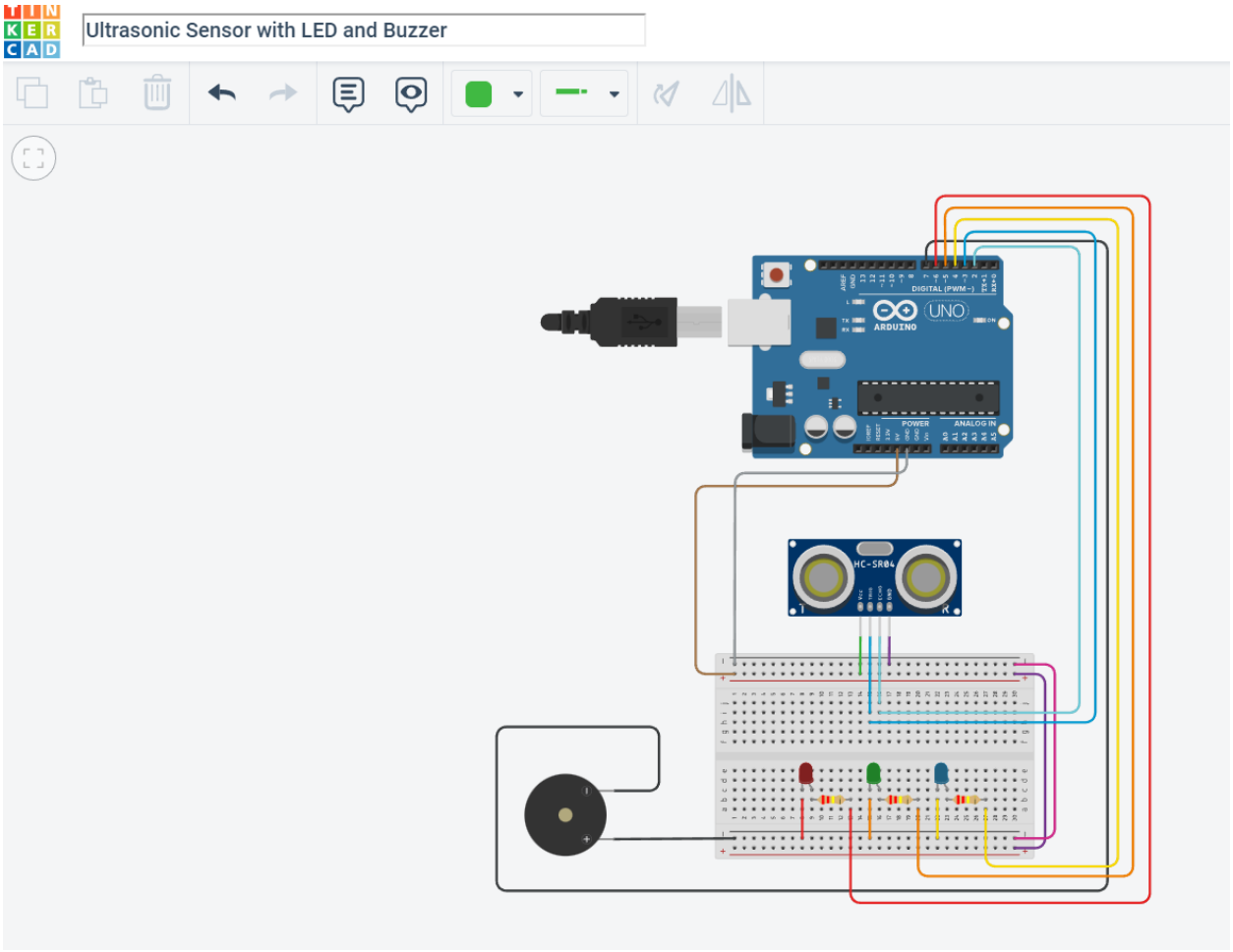
```
const int echoPin=2, triggerPin=3, red=4, green=5, blue=6;
const int buzz = 7;
int pulseValue;
float distance;

void setup( ) {
pinMode(echoPin, INPUT);
pinMode(triggerPin, OUTPUT);
pinMode(red, OUTPUT);
pinMode(green, OUTPUT);
pinMode(blue, OUTPUT);
pinMode(buzz, OUTPUT);
Serial.begin(9600);
}

void loop( )
{

digitalWrite(triggerPin, LOW);
delayMicroseconds(5);
digitalWrite(triggerPin, HIGH);
delayMicroseconds(10);
pulseValue=pulseIn(echoPin, HIGH);
```

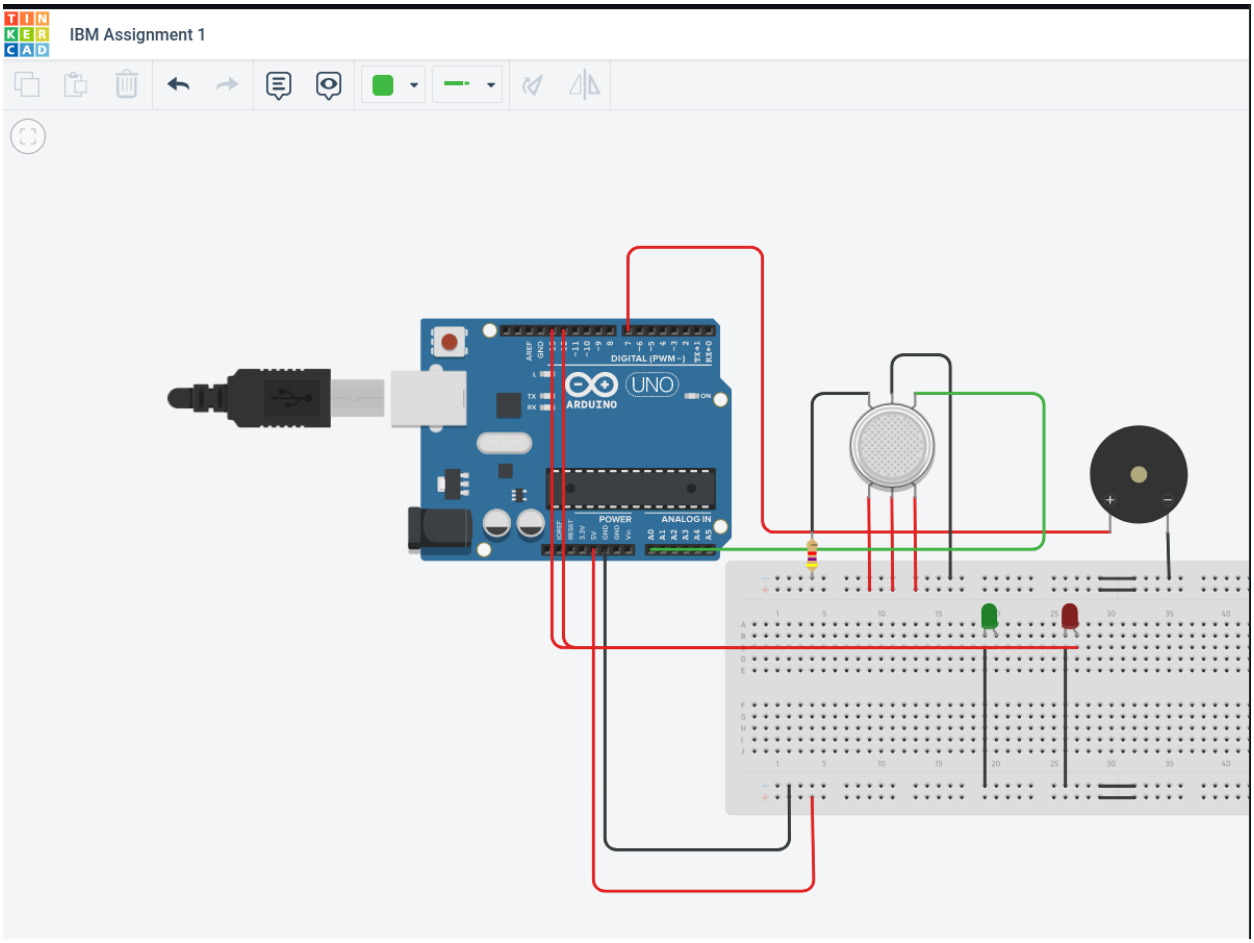
```
distance=(pulseValue*0.0001657*39.37);




if (distance<=5)
{
  digitalWrite(red, HIGH);
  digitalWrite(green, LOW);
  digitalWrite(blue, LOW);
  tone(buzz, 500);
}

else if (distance<=10)
{
  digitalWrite(green, HIGH);
  digitalWrite(red, LOW);
  digitalWrite(blue, LOW);
  tone(buzz, 1000);
}

else
{
  digitalWrite(blue, HIGH);
  digitalWrite(red, LOW);
  digitalWrite(green, LOW);
```

```
  tone(buzz, 1500);
}

Serial.print(distance);
Serial.println(" inch/es");
delay(500);
}
```

Output :




Ultrasonic Sensor with LED and Buzzer
DIGITAL (PWM~)
UNO
ARDUINO
POWER
ANALOG IN
HC-SR04

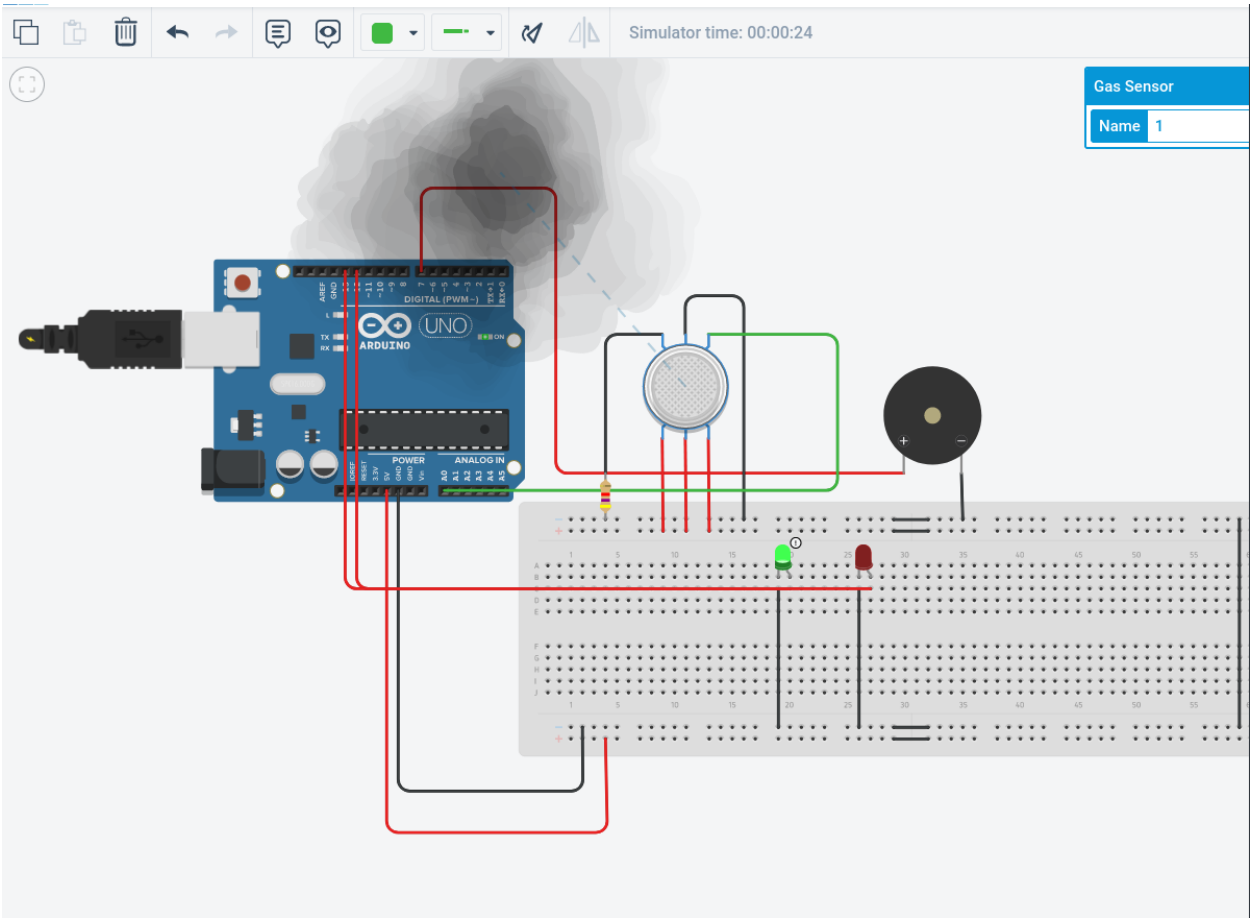


Circuit and Output :

```
int led_green = 12;

int led_red = 13;

int sensor = 8;

int buzzer = 7;

void setup()

{

  pinMode(led_green, OUTPUT);

  pinMode(led_red, OUTPUT);

  pinMode(sensor,INPUT);

  pinMode(buzzer,OUTPUT);
```

```
  Serial.begin(9600);
}

void loop()
{
  digitalWrite(led_red, LOW);
  digitalWrite(buzzer, LOW);
  digitalWrite(led_green, LOW);

  int value = analogRead(A0);
  Serial.println(value);
  if(value >= 500)
  {
    digitalWrite(led_red, HIGH);
    digitalWrite(buzzer, HIGH);
            digitalWrite(led_green, LOW);
    delay(1000);
  }
  if(value < 500)
  {
    digitalWrite(led_green, HIGH);
    digitalWrite(led_red, LOW);
    digitalWrite(buzzer, LOW);
    delay(1000);
  }
```

}


Simulator time: 00:00:24
Gas Sensor
Name 1
UNO
ARDUINO
DIGITAL (PWM~)
POWER
ANALOG IN