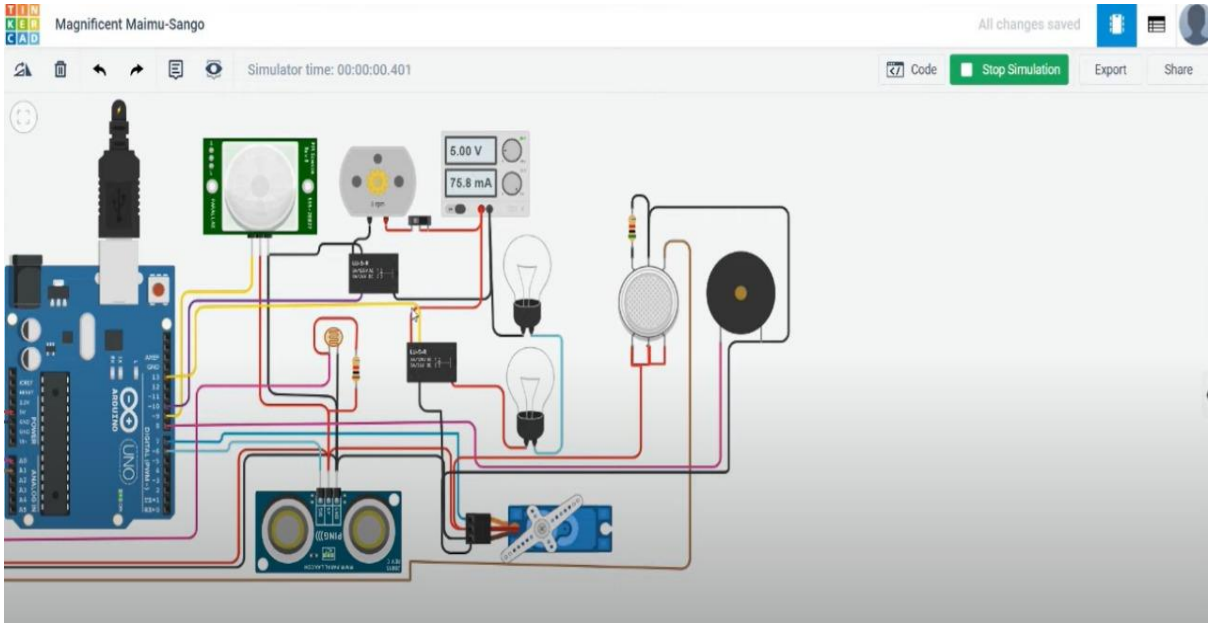

Code:

```
#include <Servo.h>

int output1Value = 0;
int sen1Value = 0;
int sen2Value = 0;
int const gas_sensor = A1;
int const LDR = A0;
int limit = 400;

long readUltrasonicDistance(int triggerPin, int echoPin)
{
  pinMode(triggerPin, OUTPUT);
  digitalWrite(triggerPin, LOW);
  delayMicroseconds(2);
  digitalWrite(triggerPin, HIGH);
  delayMicroseconds(10);
  digitalWrite(triggerPin, LOW);
  pinMode(echoPin, INPUT);
  return pulseIn(echoPin, HIGH);
}



Servo servo_7;

void setup()
{
  Serial.begin(9600);
  pinMode(A0, INPUT);
```

```
  pinMode(A1,INPUT);
  pinMode(13, OUTPUT);
  servo_7.attach(7, 500, 2500);

  pinMode(8,OUTPUT);
  pinMode(9, INPUT);
  pinMode(10, OUTPUT);
  pinMode(4, OUTPUT);
  pinMode(3, OUTPUT);

}

void loop()
{
    int val1 = analogRead(LDR);
  if (val1 > 500)
            {
            digitalWrite(13, LOW);
    Serial.print("Bulb ON = ");
    Serial.print(val1);
            }
  else
            {
            digitalWrite(13, HIGH);
     Serial.print("Bulb OFF = ");
    Serial.print(val1);
            }

  sen2Value = digitalRead(9);
  if (sen2Value == 0)
            {
            digitalWrite(10, LOW);
            digitalWrite(4, HIGH);
            digitalWrite(3, LOW);
    Serial.print("     || NO Motion Detected    " );
            }

  if (sen2Value == 1)
            {
            digitalWrite(10, HIGH);
    delay(3000);
            digitalWrite(4, LOW);
            digitalWrite(3, HIGH);
     Serial.print("    || Motion Detected!      " );
            }
  delay(300);

int val = analogRead(gas_sensor);
```

```
  Serial.print("|| Gas Sensor Value = ");
  Serial.print(val);
 //val = map(val, 300, 750, 0, 100);
  if (val > limit)
          {
          tone(8, 650);
          }
          delay(300);
          noTone(8);

  sen1Value = 0.01723 * readUltrasonicDistance(6, 6);

  if (sen1Value < 100)
          {
          servo_7.write(90);
    Serial.print("    || Door Open!  ; Distance = ");
    Serial.print(sen1Value);
   Serial.print("\n");

          }
  else
          {
          servo_7.write(0);
    Serial.print("    || Door Closed! ; Distance =  ");
    Serial.print(sen1Value);
    Serial.print("\n");
  }
  delay(10);
}
```