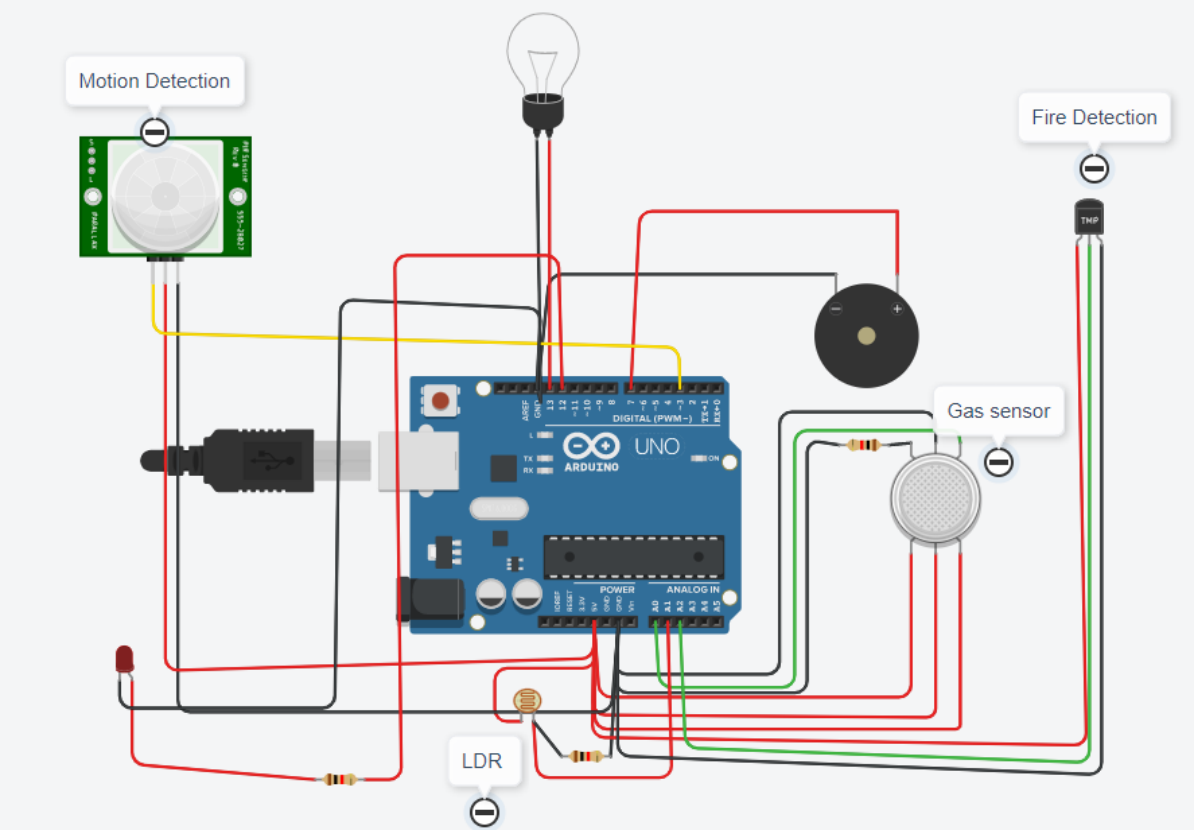
ASSIGNMENT – 1

SMART HOME AUTOMATION

Assignment Date	16 September 2022
Student Name	Ajay A
Student Roll Number	212219040006
Maximum Marks	2 Marks

CIRCUIT DIAGRAM:

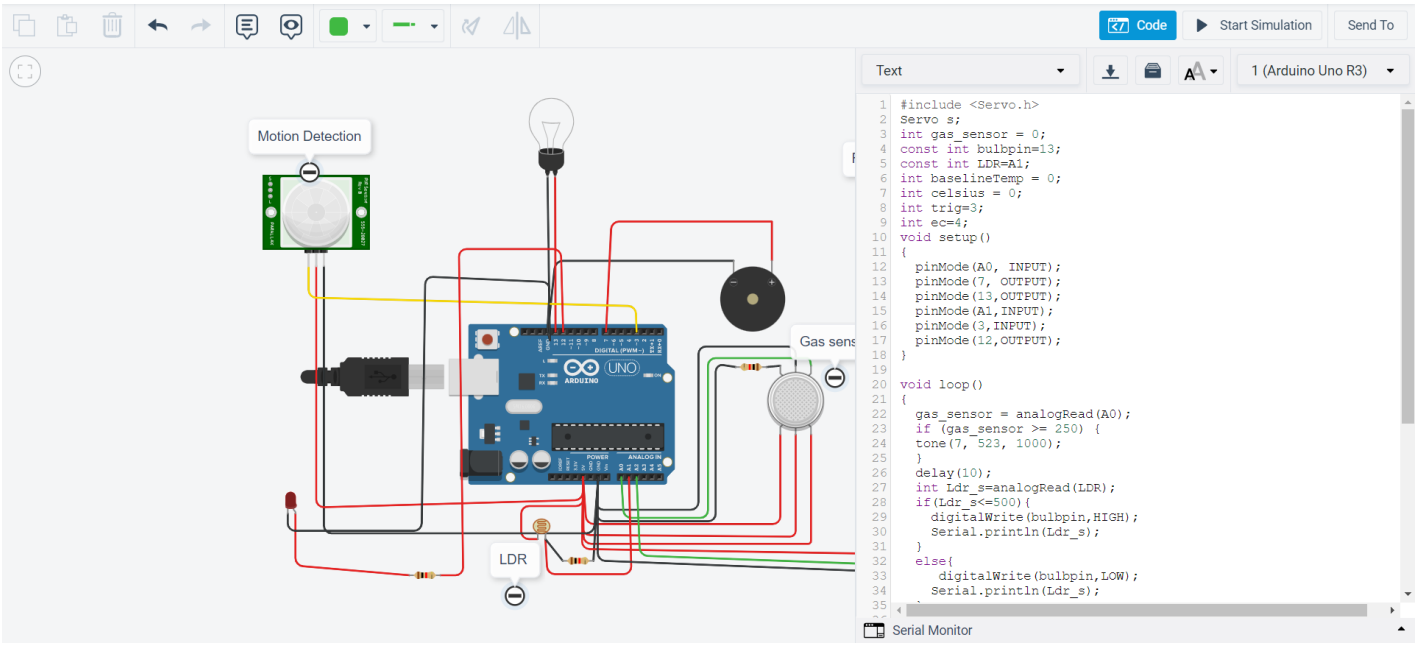


CODE:

```
#include <Servo.h>

Servo s;

int gas_sensor = 0;

const int bulbpin=13;

const int LDR=A1;
```

```
int baselineTemp = 0;
int celsius = 0;
int trig=3;
int ec=4;
void setup()
{
  pinMode(A0, INPUT);
  pinMode(7, OUTPUT);
  pinMode(13,OUTPUT);
  pinMode(A1,INPUT);
  pinMode(3,INPUT);
  pinMode(12,OUTPUT);
}

void loop()
{
  gas_sensor = analogRead(A0);
  if (gas_sensor >= 250) {
  tone(7, 523, 1000);
  }
  delay(10);
  int Ldr_s=analogRead(LDR);
  if(Ldr_s<=500){
    digitalWrite(bulbpin,HIGH);
    Serial.println(Ldr_s);
```

```
  }
  else{
     digitalWrite(bulbpin,LOW);
    Serial.println(Ldr_s);
  }

 baselineTemp = 40;

  celsius = map(((analogRead(A2) - 20) * 3.04), 0, 1023, -40, 125);
  if (celsius >= baselineTemp + 30) {
    tone(7, 220, 100);
    delay(100);
  }

int motion=digitalRead(3);
  if(motion){
    digitalWrite(12,HIGH);
    delay(1000);
    digitalWrite(12,LOW);
    delay(1000);
}
}
```

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