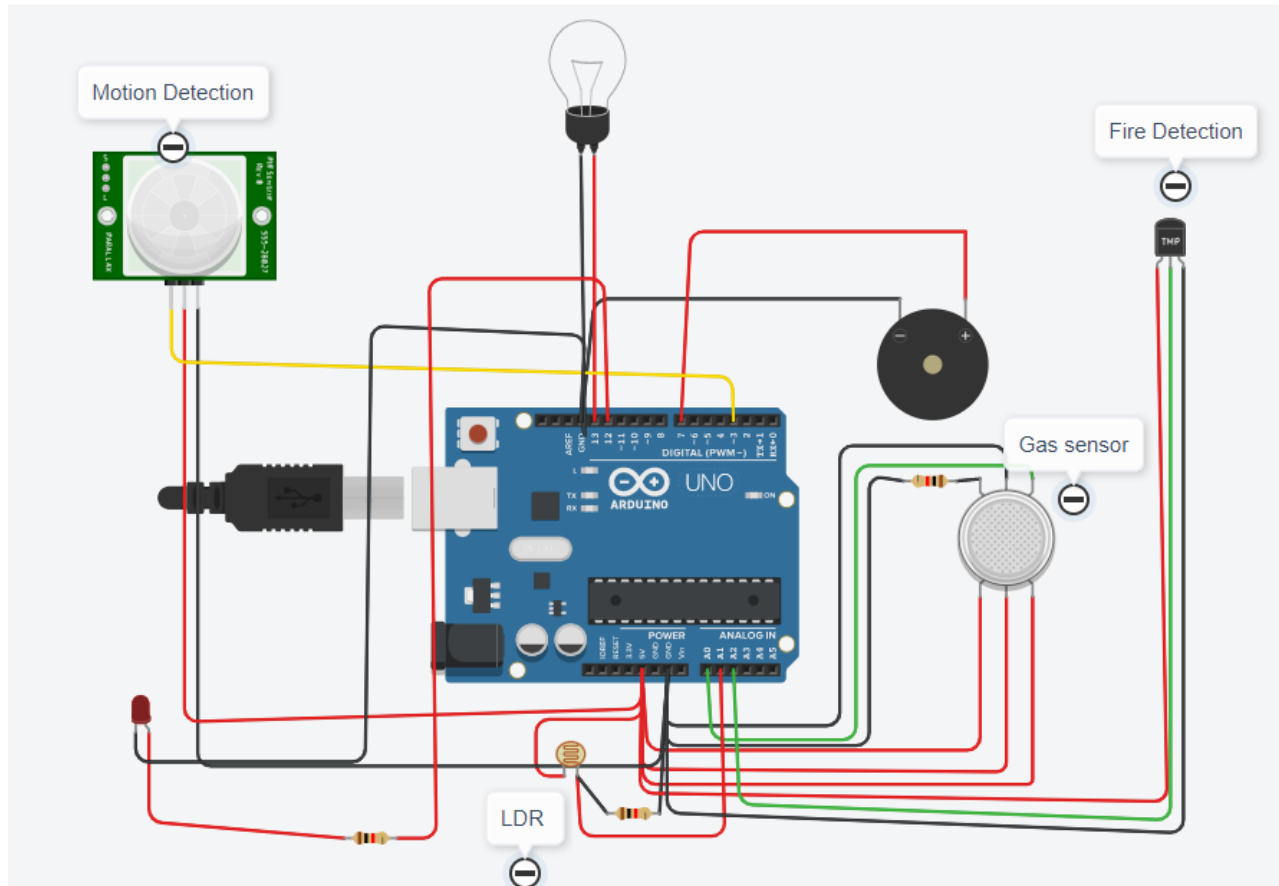


HOME AUTOMATION USING SENSORS

Sarath Vignesh A



Source 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);
```

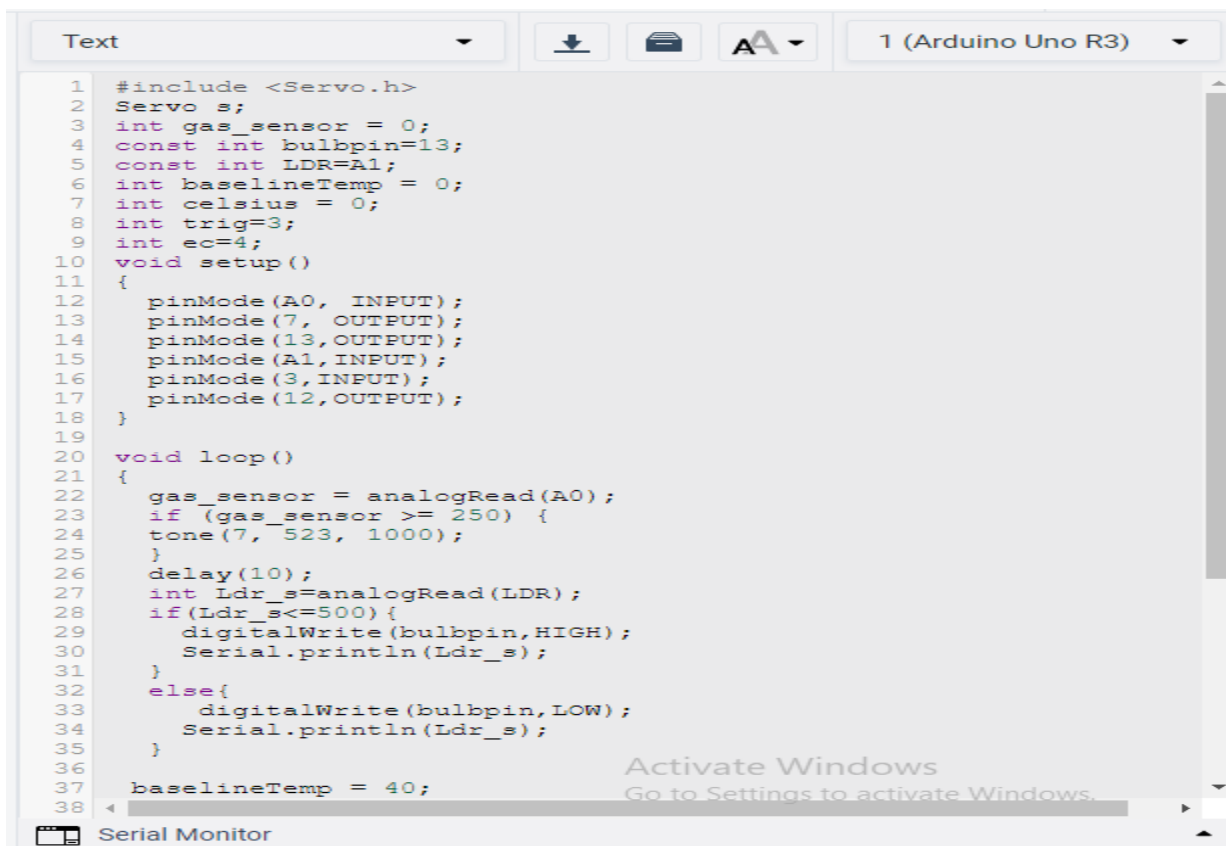
```
    delay(1000);
```

```
    digitalWrite(12,LOW);
```

```
    delay(1000);
```

```
}
```

```
}
```



```
1  #include <Servo.h>
2  Servo s;
3  int gas_sensor = 0;
4  const int bulbpin=13;
5  const int LDR=A1;
6  int baselineTemp = 0;
7  int celsius = 0;
8  int trig=3;
9  int ec=4;
10 void setup()
11 {
12     pinMode(A0, INPUT);
13     pinMode(7, OUTPUT);
14     pinMode(13,OUTPUT);
15     pinMode(A1,INPUT);
16     pinMode(3,INPUT);
17     pinMode(12,OUTPUT);
18 }
19
20 void loop()
21 {
22     gas_sensor = analogRead(A0);
23     if (gas_sensor >= 250) {
24         tone(7, 523, 1000);
25     }
26     delay(10);
27     int Ldr_s=analogRead(LDR);
28     if(Ldr_s<=500){
29         digitalWrite(bulbpin,HIGH);
30         Serial.println(Ldr_s);
31     }
32     else{
33         digitalWrite(bulbpin,LOW);
34         Serial.println(Ldr_s);
35     }
36
37     baselineTemp = 40;
38 }
```

Activate Windows
Go to Settings to activate Windows.

Serial Monitor

```

20 void loop()
21 {
22     gas_sensor = analogRead(A0);
23     if (gas_sensor >= 250) {
24         tone(7, 523, 1000);
25     }
26     delay(10);
27     int Ldr_s=analogRead(LDR);
28     if(Ldr_s<=500){
29         digitalWrite(bulbpin,HIGH);
30         Serial.println(Ldr_s);
31     }
32     else{
33         digitalWrite(bulbpin,LOW);
34         Serial.println(Ldr_s);
35     }
36
37     baselineTemp = 40;
38
39     celsius = map((analogRead(A2) - 20) * 3.04), 0, 1023, -40,
40     if (celsius >= baselineTemp + 30) {
41         tone(7, 220, 100);
42         delay(100);
43     }
44
45     int motion=digitalRead(3);
46     if(motion){
47         digitalWrite(12,HIGH);
48         delay(1000);
49         digitalWrite(12,LOW);
50         delay(1000);
51     }

```