Assignment -1

Assignment Date	08.09.2022
Student Name	H. Jeevapriya
Student Roll Number	142219106037
Maximum Marks	2 Marks

Question-1:

Smart home automation using tinkercad, by interfacing 2 or more sensors?

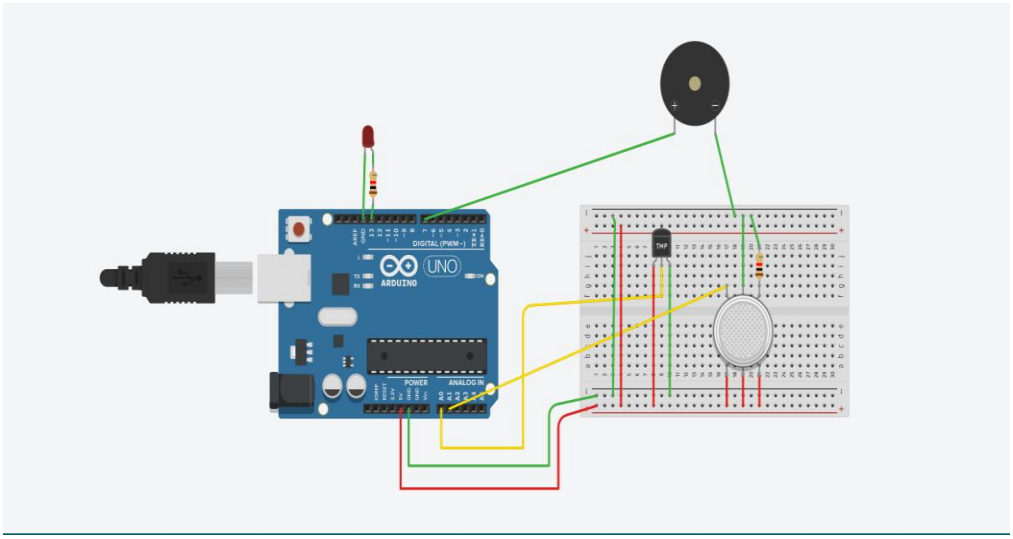
SMART HOME AUTOMATION

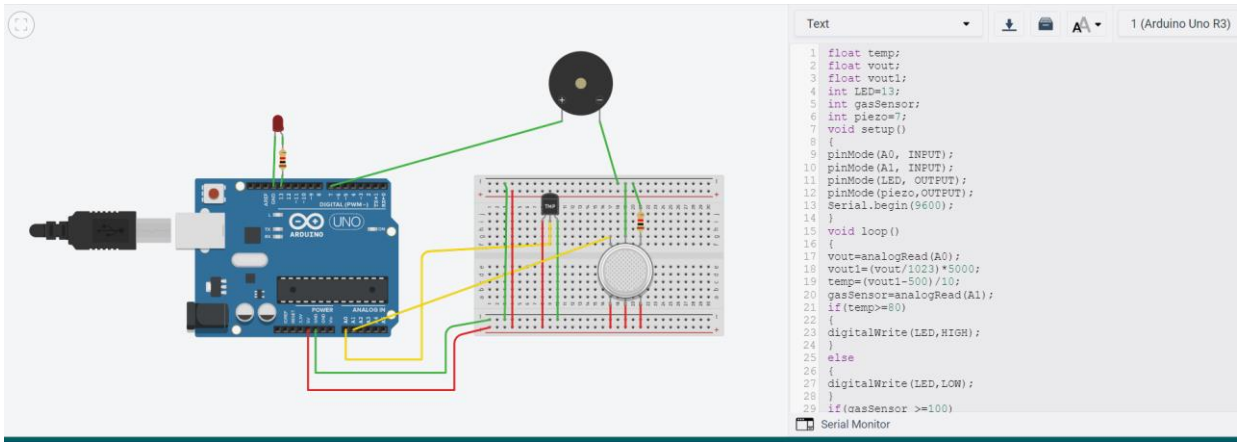
CODE:

```
float temp;
float vout;
float vout1;
int LED=13;
int gasSensor;
int piezo=7;
void setup()
{
pinMode(A0, INPUT);
pinMode(A1, INPUT);
pinMode(LED, OUTPUT);
pinMode(piezo,OUTPUT);
Serial.begin(9600);
}
void loop()
{
vout=analogRead(A0);
vout1=(vout/1023)*5000;
temp=(vout1-500)/10;
gasSensor=analogRead(A1);
if(temp>=80)
{
digitalWrite(LED,HIGH);
}
else
{
digitalWrite(LED,LOW);
}
```

```
if(gasSensor >=100)
{
digitalWrite(piezo,HIGH);
}
else
{
digitalWrite(piezo,LOW);
Serial.print("in degrees =");
Serial.print(" ");
Serial.print(temp);
Serial.print("\t");
Serial.print("gasSensor");
Serial.print(" ");
Serial.print(gasSensor);
Serial.println();
delay(1000);
}
}
```

CIRCUIT SETUP:





Text 1 (Arduino Uno R3)

```
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float vout;
float vout1;
int LED=13;
int gasSensor;
int piezo=7;
void setup()
{
pinMode(A0, INPUT);
pinMode(A1, INPUT);
pinMode(LED, OUTPUT);
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Serial.begin(9600);
}
void loop()
{
vout=analogRead(A0);
vout1=(vout/1023)*5000;
temp=(vout1-500)/10;
gasSensor=analogRead(A1);
if(temp>=80)
{
digitalWrite(LED,HIGH);
}
else
{
digitalWrite(LED,LOW);
}
if(gasSensor >=100)
```

Serial Monitor