SMART HOME AUTOMATION

REQUIREMENTS:

Arduino UNO R3,Temperature sensor(TMP36),LED, Resistor, Gas sensor, Breadboard Small, Piezo , Power supply.

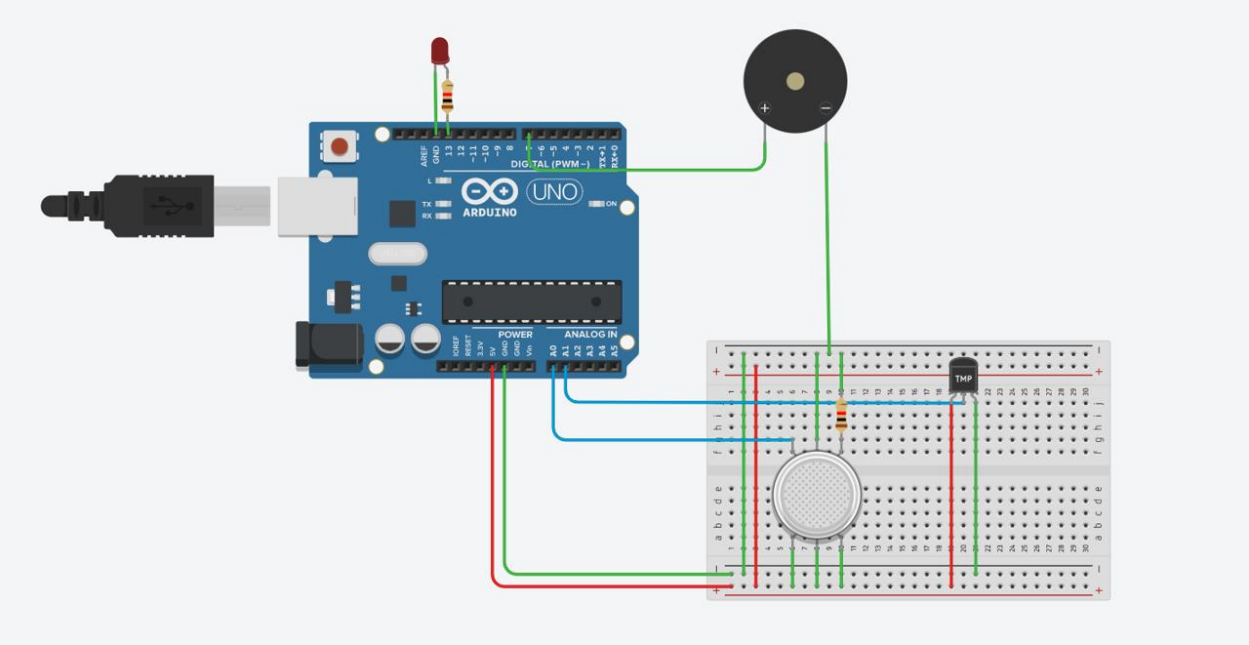
SOFTWARE REQUIRED: Tinkercad Software

CODE:

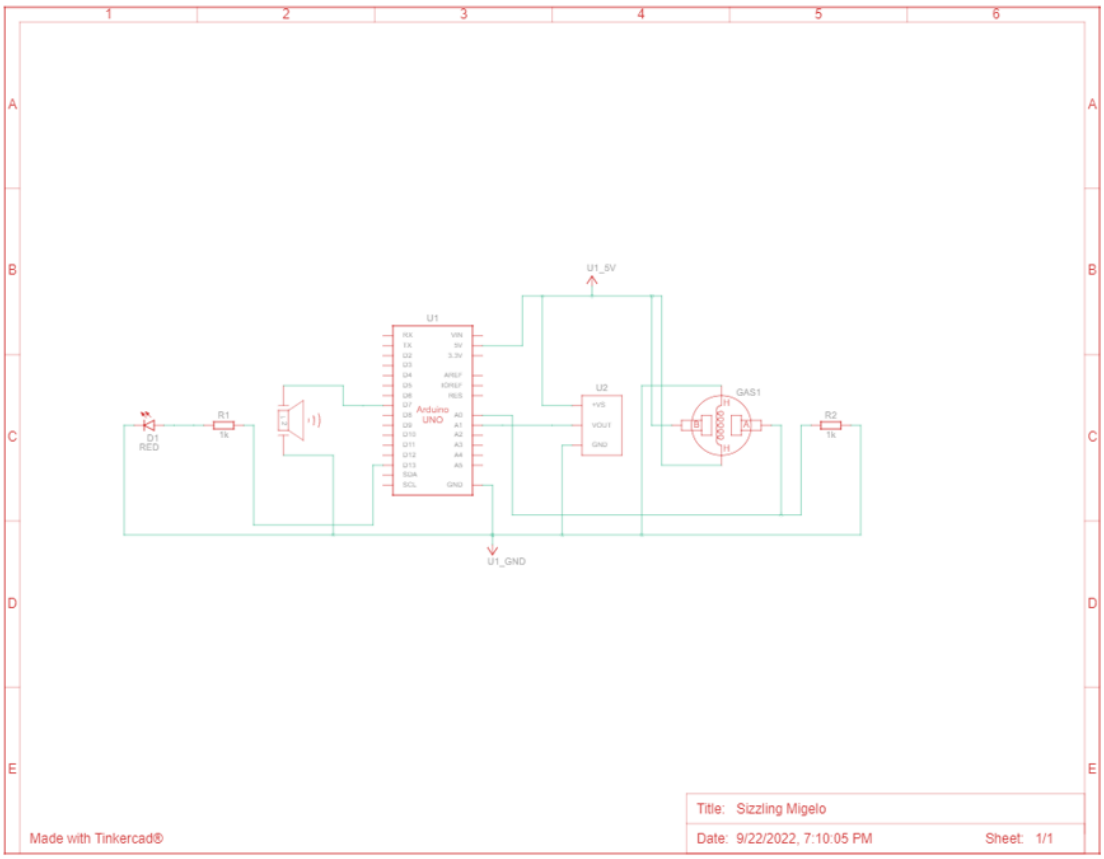
```
float temp;
float vout;
float vout1;
int LED=13;
int gasSensor;
int piezo=7;
void setup()
{
  pinMode(A0,INPUT);
  pinMode(A1,INPUT);
  pinMode(LED,OUTPUT);
  pinMode(piezo,OUTPUT);
  Serial.begin(9600);
}
void loop()
{
  vout=analogRead(A1);
  vout1=(vout/1023)*5000;
  temp=(vout1-500)/10;
```

```
  gasSensor=analogRead(A0);
  if (temp>=80)
  {
    digitalWrite(LED,HIGH);
  }
  else
  {
    digitalWrite(LED,LOW);
  }
  if(gasSensor>=100)
  {
    digitalWrite(piezo,HIGH);
  }
  else
  {
    digitalWrite(piezo,LOW);
  }
  Serial.print("in DegreeC= ");
  Serial.print(" ");
  Serial.print(temp);
  Serial.print("\t");
  Serial.print("GasSensor= ");
  Serial.print(" ");
  Serial.print(gasSensor);
  Serial.println();
  delay(1000);
}
```

CIRCUIT DIAGRAM:



SCHEMATIC DIAGRAM:



DEMO LINK:

https://www.tinkercad.com/things/lbSn6LPvziR-sizzling-migelo/editel