Assignment -1

Python Programming

Assignment Date	22September 2022
Student Name	Mr. AYYANAR.S
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Maximum Marks	2 Marks

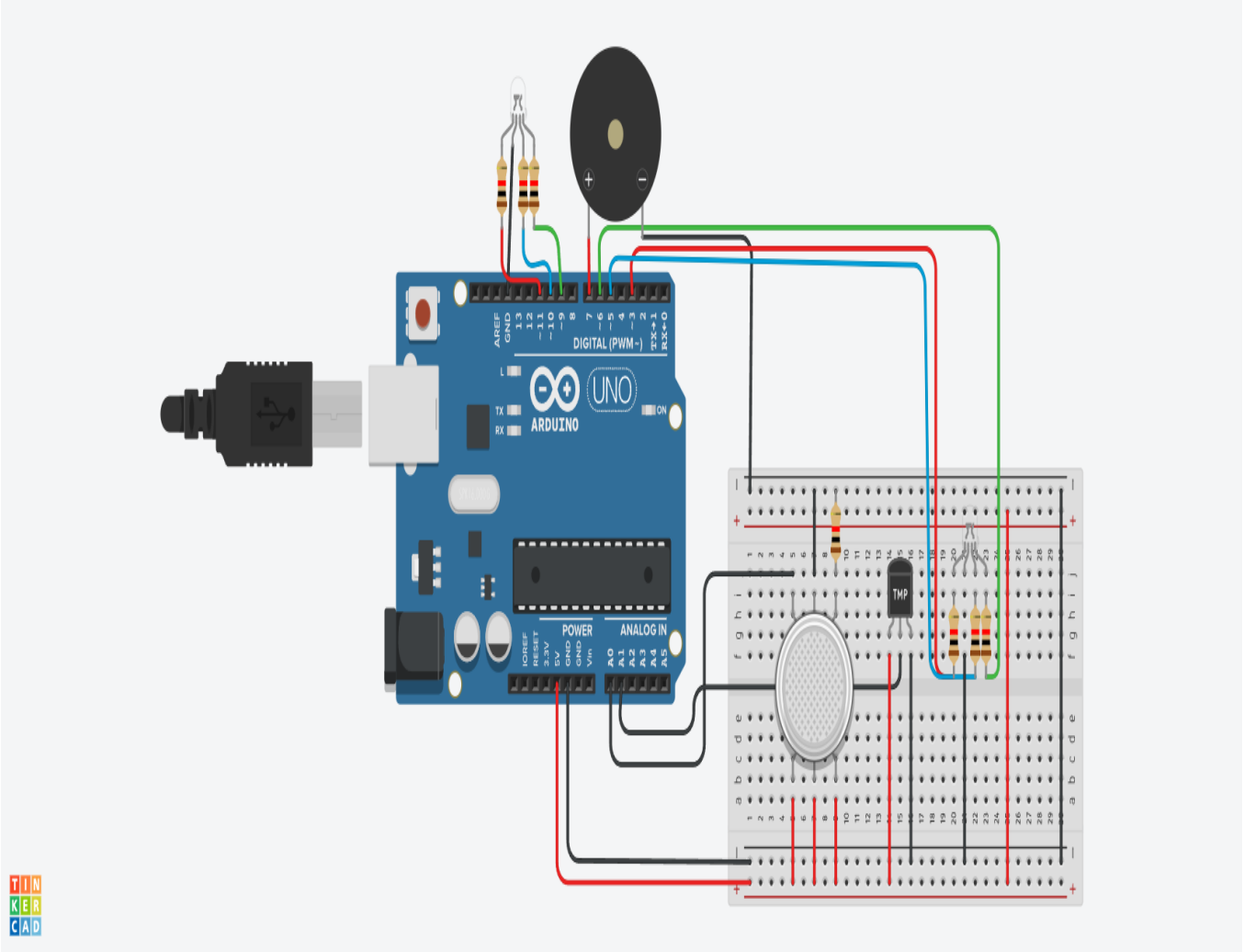
Question

MAKE A SMART HOME USING TWO SENSORS:

LINK:

https://www.tinkercad.com/things/9YhQnHxjFuI-cool-jaiks-rottis/editel

CIRCUIT:



PROGRAM:

```
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);
pinMode(3,OUTPUT);
pinMode(6,OUTPUT);
pinMode(5,OUTPUT);
pinMode(11,OUTPUT);
pinMode(9,OUTPUT);
pinMode(10,OUTPUT);
Serial.begin(9600);
}
void loop()
{
Vout=analogRead(A1);
Vout1=(Vout/1023)*5000;
temp=(Vout1-500)/10;
gasSensor=analogRead(A0);
  if(temp>=80)
  {
    analogWrite(11,255);
     analogWrite(9,0);
     analogWrite(10,0);
  }
  else
  {
    analogWrite(11,0);
     analogWrite(9,0);
     analogWrite(10,255);
  }
  if (gasSensor>=100)
  {
    digitalWrite(piezo,HIGH);
    analogWrite(3,255);
     analogWrite(6,0);
    analogWrite(5,0);
    delay(100);
     analogWrite(3,255);
     analogWrite(6,102);
     analogWrite(5,0);
    delay(100);
     analogWrite(3,255);
     analogWrite(6,155);
     analogWrite(5,0);
    delay(100);
     analogWrite(3,255);
```

```
   analogWrite(6,200);
   analogWrite(5,0);
}
else
{
  digitalWrite(piezo,LOW);
 analogWrite(3,0);
   analogWrite(6,153);
   analogWrite(5,0);
}
Serial.print("in DegreeC= ");
Serial.print(" ");
Serial.print(temp);
Serial.print("\t");
Serial.print("GasSensor= ");
Serial.print(" ");
Serial.print(gasSensor);
Serial.println();
delay(1000);
 }
```