

Assignment -1

SMART HOME IN TINKERCAD

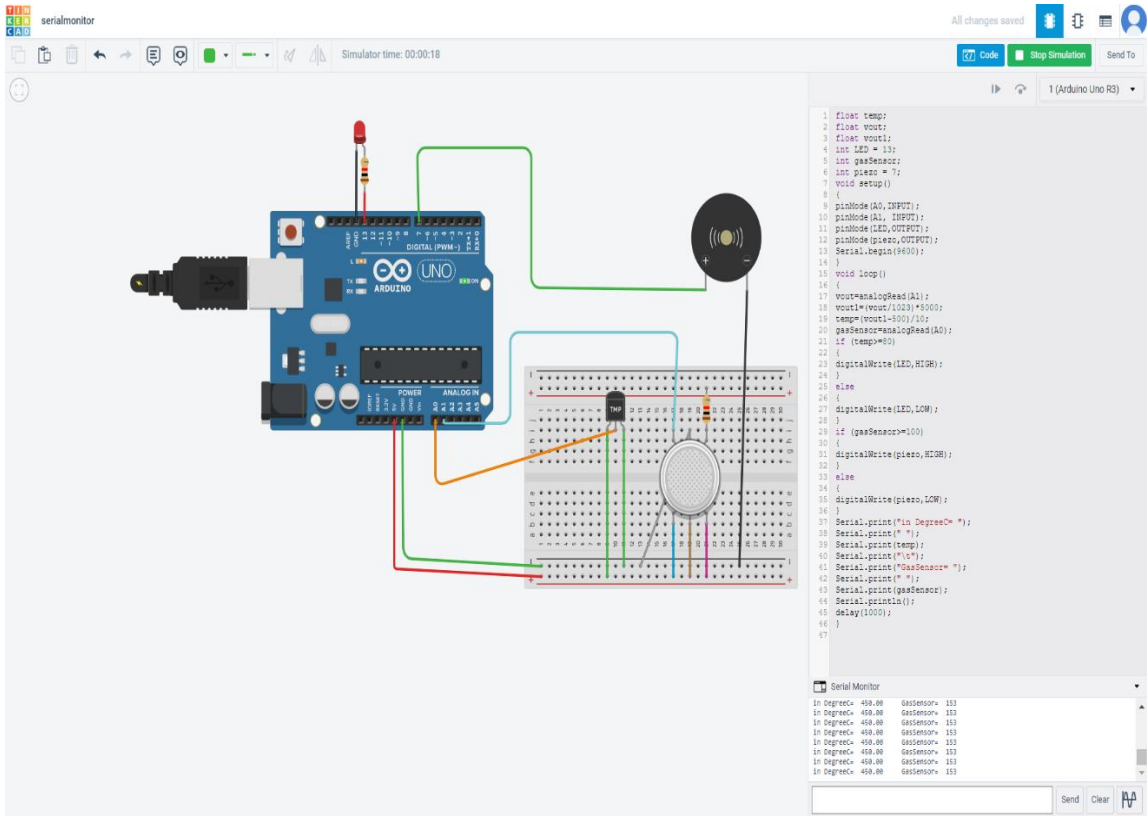
Assignment Date	19 September 2022
Student Name	M.RITHIKA
Student Roll Number	815119106034
Maximum Marks	2 Marks

Question-1:

Build a smart home in tinkercad

Use atleast 2 sensors, led, buzzer in a circuit. Simulate in a single code.

Solution:



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);  
}
```