

Assignment -1

Tinkercad

Assignment Date	19 September 2022
Student Name	K. S. Dinesh Kumar
Student Roll Number	812419106017
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:

```
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);
}

```

