

# ASSIGNMENT 1

## OBJECTIVE:

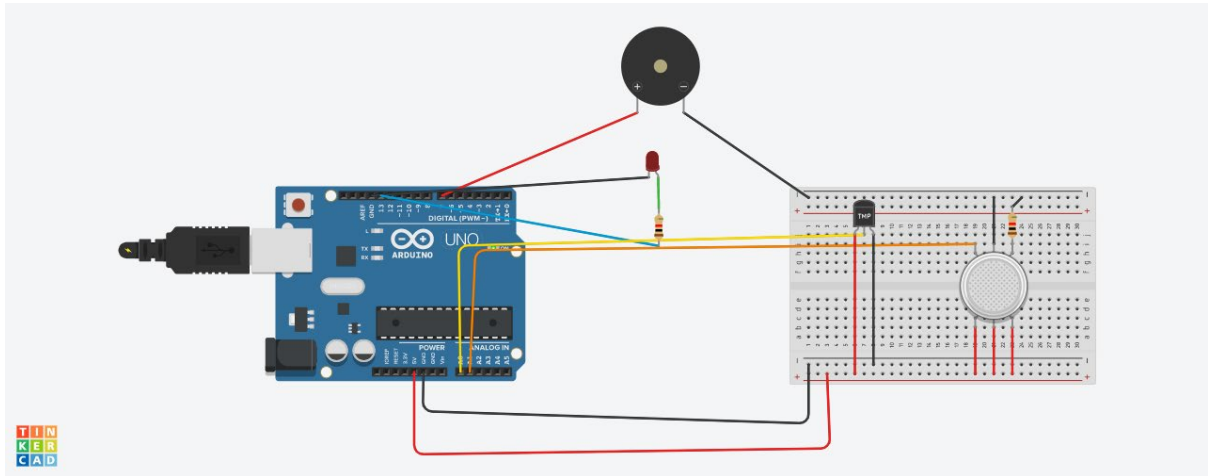
To simulate Smart Home Applications using Tinkercad with 2 sensors, LED, Buzzer in single code and circuit

## CODE:

```
float temp;
float vout;
float vout1;
int LED =13;
int gasSensor;
int piezo = 7;
void setup()
{
  pinMode(A0,INPUT);
  pinMode(LED,OUTPUT);
  pinMode(piezo,OUTPUT);
  Serial.begin(9600);
}
void loop()
{
  vout=analogRead(A1);
  vout1=(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:



## OUTPUT:

<https://www.tinkercad.com/things/ffSvZ5BNhQV>