ASSIGNMENT

Assignment - 1

BATCH	B12-6A2E
TEAM ID	PNT2022TMID01722
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PROJECT	Gas Leakage Monitoring & Alerting System for Industries

Submitted By

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Code:

```
int led = 8;
int trig = 2;
int echo = 5;
int buzzer = 4;

void setup()
{
 Serial.begin(9600);
 pinMode(led,OUTPUT);
 pinMode(trig,OUTPUT);
 pinMode(echo,INPUT);
 pinMode(buzzer,OUTPUT);
 pinMode(7,INPUT);
}

void loop()
{
 double a = analogRead(A2);
 double v = a / 1024;
 double tvolt = v * 5;
 double o = tvolt - 0.5;
 double t = o * 100;
 Serial.print("Temperature in degree");
 Serial.println(t);
 if(t >= 50)
 {
  digitalWrite(led,HIGH);
 }
 else
 {
  digitalWrite(led,LOW);
 }
 digitalWrite(trig,LOW);
 digitalWrite(trig,HIGH);
 delayMicroseconds(10);
 digitalWrite(trig,LOW);
 float dur = pulseIn(echo,HIGH);
 float dist = (dur * 0.343)/2;
 Serial.print("Distance");
 Serial.println(dist);
 if(dist >= 17)
 {
  digitalWrite(buzzer,HIGH);
 }
 else
 {
  digitalWrite(buzzer,LOW);
 }
 int m=digitalRead(7);
 Serial.print("motion detected");
 Serial.println(m);
 if (m==1)  {
  Serial.println("yes");
 }
 else  {
  Serial.println("no");
}
}
```

Circuit: