**VSB Engineering College, Karur-639111**

Department of Computer Science and Engineering

IOT Assignment

**Topic** : Gas Leakage Monitoring and Alerting System for Industries

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**Code:-**

int task=2;

int element=3;

void setup()

{

 Serial.begin(9600);

 pinMode(task,OUTPUT);

 pinMode(element,INPUT);

 pinMode(12,OUTPUT);

}

void loop()

{

 digitalWrite(task,LOW);

digitalWrite(task,HIGH);

 delayMicroseconds(10);

 digitalWrite(task,LOW);

 float dur=pulseIn(element,HIGH);

 float dis=(dur\*0.0343)/2;

 Serial.print("Distance is: ");

 Serial.println(dis);

 }

 if(dis>=100)//(in terms of centimeter)

 {

 digitalWrite(8,HIGH);

 digitalWrite(7,HIGH);

 }

 if(dis>=100)

 {

 for(int i=0; i<=30000; i=i+10)

 {

 tone(12,i);

 delay(1000);

 noTone(12);

 delay(1000);

 }

 }

 double a= analogRead(A0);

 double task=(((a/1024)\*5)-0.5)\*100;

 Serial.print("Temp Value: ");

 Serial.println(t);

 delay(1000);

 //LED ON

 if(task>=100)//(in terms of celsius)

 {

 digitalWrite(8,HIGH);

digitalWrite(7,HIGH);

 }

 if(task>=100)

 {

 for(int i=0; i<=30000; i=i+10)

 {

 tone(12,i);

 delay(1000);

 noTone(12);

 delay(1000);

 }

 }

 if(task<100)

 {

 digitalWrite(8,LOW);

 digitalWrite(7,LOW);

 }

}

**OUTPUT:-**

