**#include<LiquidCrystal.h>**

**LiquidCrystal lcd(3,4,5,6,7,11);**

**int fre =2000;**

**int z=0;**

**int gas=100;**

**void setup()**

**{**

**lcd.begin(16,2);**

**pinMode(A2,INPUT);**

**pinMode(2,OUTPUT);**

**pinMode(9,OUTPUT);**

**pinMode(1,INPUT);**

**}**

**void loop()**

**{**

**int y=analogRead(A1);**

**int x=digitalRead(1);**

**int z=analogRead(A2);**

**float temp=(y\*0.4882)-50;**

**if (x==HIGH)**

**{**

**lcd.setCursor(0,1);**

**lcd.print("Danger ZONE");**

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**delay(2000);**

**lcd.clear();**

**digitalWrite(9,HIGH);**

**}**

**else**

**{**

**lcd.setCursor(0,1);**

**lcd.print("SAFE ZONE");**

**delay(2000);**

**lcd.clear();**

**digitalWrite(9,LOW);**

**}**

**if(z>gas)**

**{**

**lcd.clear();**

**lcd.setCursor(0,0);**

**lcd.print("POISONOUS GASES");**

**tone(2,523,1000);**

**}**

**else**

**{**

**lcd.setCursor(0,0);**

**lcd.print("NO GASES");**

**}**

**if(temp>=50)**

**{**

**lcd.setCursor(0,0);**

**lcd.print("Temp=");**

**lcd.println(temp);**

**tone(2,fre);**

**}**

**else**

**{**

**lcd.setCursor(0,0);**

**lcd.print("temp=");**

**lcd.println(temp);**

**}**

**if (temp>=50&&z>gas&&x==HIGH)**

**{**

**lcd.setCursor(0,1);**

**lcd.print("Temp=");**

**lcd.println(temp);**

**lcd.setCursor(0,2);**

**lcd.print("POISONOUS GASES");**

**lcd.setCursor(0,0);**

**lcd.print("DANGER ZONE");**

**tone(2,fre);**

**}**

**}**