

## **PROJECT DEVELOPMENT PHASE**

### **SPRINT 4**

**Team ID:** PNT2022TMID33446

**Project:** Gas Leakage Monitoring and Alerting System for Industries.

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#### **Final Code:**

```
#include <LiquidCrystal.h>
LiquidCrystal lcd(1,5,9,13,15,6);

int red_led = 2;
int green_led =3;
int buzzer = 4;
int sensor = A0;
int sensor_Thresh = 400;

void setup()
{
  pinMode(red_led, OUTPUT);
  pinMode(green_led,OUTPUT)
  pinMode(buzzer,OUTPUT);
  pinMode(sensor,INPUT);
  Serial.begin(9600);
  lcd.begin(16,2);
}

void loop()
{
  int analogValue = analogRead(sensor);
  Serial.print(analogValue);
  if(analogValue>sensorThresh)
  {
    digitalWrite(red_led,HIGH);
    digitalWrite(green_led,LOW)
    tone(buzzer,1000,10000);
    lcd.clear();
    lcd.setCursor(0,1);
    lcd.print("ALERT");
    delay(1000);
    lcd.clear();
```

```
    lcd.setCursor(0,1);  
    lcd.print("EVACUATE");  
    delay(1000);  
}  
else  
{  
    digitalWrite(green_led,HIGH)  
    digitalWrite(red_led,LOW);  
    noTone(buzzer);  
    lcd.clear();  
    lcd.setCursor(0,0);  
    lcd.print("SAFE");  
    delay(1000); lcd.clear();  
    lcd.setCursor(0,1);  
    lcd.print("ALL CLEAR");  
    delay(1000);  
}  
}
```