

GAS LEAKAGE MONITORING AND ALERT SYSTEM FOR INDUSTRIES

PROJECT DEVELOPMENT PHASE

PROJECT ID: PNT2022TMID30444

SPRINT-4

```
#include
<LiquidCrystal.h>LiquidCrystal
lcd(5,6,8,9,10,11);

int redled = 2;
int greenled = 3;
int buzzer = 4;
int sensor = A0;
int sensorThresh = 400;

void setup()
{
  pinMode(redled,
  OUTPUT);pinMode(greenled,OUT
  PUT);pinMode(buzzer,OUTPUT);
  pinMode(sensor,INPUT);Serial.beg
  in(9600);lcd.begin(16,2);
```

```
}
```

```
void loop()
```

```
{
```

```
    int analogValue = analogRead(sensor);  
    Serial.print(analogValue);  
    if (analogValue > sensorThresh)
```

```
    {
```

```
        digitalWrite(redled, HIGH);  
        digitalWrite(greenled, 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(greenled, HIGH);  
    digitalWrite(redled, 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);
  }

}
```