

GAS LEAKAGE MONITORING AND ALERT SYSTEM FOR INDUSTRIES PROJECT DEVELOPMENT PHASE

PROJECT ID : PNT2022TMID08134

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,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(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);  
}  
  
}
```