

Design Development Phase

Sprint-2

Date	16 NOVEMBER 2022
Team ID	PNT2022TMID20972
Project Name	Gas Leakage Monitoring and Alerting System

Program:

```
#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,1000,1000);

    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);  
    }  
  
}
```