

Design Development Phase
Sprint-2

Date	18 NOVEMBER 2022
Team ID	PNT2022TMID11027
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("ALE RT");  
    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);
}

}
```