

Design Development Phase

Sprint-2

Date	19 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,1000,10000);

    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);
}

}
```