

Design Development Phase

Sprint-3

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,OUTP
```

```
UT);
```

```
pinMode(buzzer,OUTPU
```

```
T);
```

```
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);
    }
}

```

}