

Design Development Phase

Sprint-3

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

Program:

```
#include <LiquidCrystal.h>
```

```
LiquidCrystallcd(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,1000,1000);
    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);
    }
}

```