

## **SPRINT 4**

**DOMAIN:** IOT

**PROJECT TITLE:** GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

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### **CODE:**

```
#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);  
}  
  
}
```