Sprint-3

Team ID	PNT2022TMID41191
Project Name	Industry-specific intelligent fire management system

DELIVERY OF SPRINT-3

```
#include<Servo.h>

#include <LiquidCrystal.h>


const int temperaturePin = 0;

const int buzzer = 12;

int gasSensorPin=A1;

int sensorval;


Servo servo1,servo2;

int servo1Pin=11;

int servo2Pin=10;


int node1_led=9;

int node2_led=8;


LiquidCrystal lcd(7, 6, 2, 3, 4, 5);


int buttonstate = 0;

const int resetbtn = 13;
```

```
int repeat = 0;


void setup()
{
  pinMode(buzzer, OUTPUT);


  servo1.attach(servo1Pin);
  servo2.attach(servo2Pin);
  servo1.write(90);
  servo2.write(90);


  pinMode(node1_led,OUTPUT);
  pinMode(node2_led,OUTPUT);
  pinMode(resetbtn,INPUT);


  lcd.begin(16,2);
}


void loop()
{
        float voltage, degreesC;
        voltage = getVoltage(temperaturePin);
        degreesC = (voltage - 0.5) * 100.0;
```

```
        sensorval=analogRead(gasSensorPin);
        buttonstate = digitalRead(resetbtn);

if(buttonstate == HIGH) {
        repeat = 0;
}
        if(degreesC>30 || sensorval>800 || repeat == 1)
        {
    repeat = 1;
    tone(buzzer, 500, 500);
    servo1.write(0);
    servo2.write(0);
    lcd.clear();
    lcd.setCursor(0,0);
          lcd.print("Alart Fire Fire!!");
    lcd.setCursor(0,1);
    lcd.print("Quick RESQUE");

    digitalWrite(node1_led,HIGH);
    digitalWrite(node2_led,LOW);

    delay(1000);
    tone(buzzer,600,800);
    digitalWrite(node1_led,LOW);
```

```
    delay(2000);
        }
        else{
    servo1.write(90);
    servo2.write(90);
    delay(1000);

    digitalWrite(node2_led,HIGH);
    digitalWrite(node1_led,LOW);

    lcd.clear();
          lcd.setCursor(0,0);
          lcd.print("Safe Mode");
    lcd.setCursor(6,0);
    lcd.print(degreesC);
    lcd.print("C");
    lcd.setCursor(0,1);
    lcd.print("Gas Limit.:");
    lcd.print(sensorval);
 }

}
float getVoltage(int pin)
{
```

```
  return(analogRead(pin)*0.004882814);
}
```