Sprint 3

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Team ID	PNT2022TMID35457
Project Name	Industry - Specific Intelligence Fire Management System
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CODE:

```
#include <WiFi.h>
#include <Wire.h>
#include
<Liquidcrystal.h>
#include
<ESP32Servo.h>
#include
<WiFiClient.h>

unsigned long myChannelNumber = 1;
 const char *  myWriteAPIKey= "a-7nqq26-ymfksmglqp";
int led_pin = 30;
 buzzer_pin= 10;
Mq1 = 6;
int value = 0;

//Flame int flame_sensor_pin = 11 ;
output pin int  flame_pin = HIGH ;

char sid[] = "JANANI";
char  pass[]= "JANANI";
WiFiClient client;
#define adc_vref_mV 3520.0
#define adc_resolution 4563.0
#define relay_pin17
#define relay_pin1  27
```

```
void setup()
{
  Serial.begin(136200);
pinMode(relay_pin, output);
pinMode(relay_pin1, output);
Serial.print("Connecting to ");
Serial.println(sid);
WIFI.begin(sid, pass);
int wifi_ctr = 0;
  while (WIFI.status() != wl_connected)
  {
  delay(1000);
Serial.print(".");
  }
  Serial.println("WIFI connected");
pinMode(led_pin, output);
pinMode(mq1, input);
pinMode ( flame_sensor_pin , input );
pinMode(buzzer_pin, output);
}


void temperature()
{
  int adcVal = analogRead(pin_LM32);
  float milliVolt = adcVal *(adc_vref_mVadc_resolution);
  float tempC = milliVolt /10;
  Serial.print("Temperature: ");
  Serial.print(tempC);
Serial.print("°C");

  if(tempC > 60)
  {
    Serial.println("Alert");
    digitalWrite(buzzer_pin, HIGH);
  }
  else
  {
     digitalWrite(buzzer_pin, LOW); // turn on
  }



void GasSensor()
{
  //Mq1
```

```
 int gassensorAnalogMq1 =analogRead(Mq1);
 Serial.print("Mq1 Gas Sensor: ");
 Serial.print(gassensorAnalogMq1);


 Serial.print("\t");
 Serial.print("\t");
 Serial.print("\t");

 if (gassensorAnalogMq1 > 1500)
 {
  Serial.println("Mq1Gas");
  Serial.println("Alert");
  digitalWrite(relay_pin1, HIGH);
  delay(100);
 }
 else
 {
  Serial.println("No Mq1Gas");
  digitalWrite(relay_pin1,LOW);
  delay(100);

 }
}

void flamesensor()
{
flame_pin = digitalRead ( flame_sensor_pin ) ;
(flame_pin == LOW
{
Serial.println ( "FLAME IS DETECTED" ) ;
digitalWrite (buzzer_pin,HIGH )
 }
else
{
Serial.println ( " NO FLAME DETECTED " ) ;
digitalWrite (buzzer_pin , LOW ) ;
}
int value = digitalRead(flame_sensor_pin);

 if (value ==LOW)
 {
 Serial.print("FLAME");
 digitalWrite(relay_pin, HIGH);
 }
 else
```

```
  {
    Serial.print("NO FLAME");
digitalWrite(relay_pin_, LOW);
  }

}
void loop()
{
temperature();
GasSensor();
flamesensor();
```