

# ASSIGNMENT 1

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<b>PROJECT NAME</b>	GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

## Code

```
int LED1 = 12;

int LED2 = 11

int buzzer = 10;

int smoke = A5;

int bulb = 2;

int fan = 3;

int smokeThreshold = 500;

int inputPir = 9;

int baselineTemp = 0;

int celsius = 0;

int val = 0;


void setup() {

    pinMode(LED1, OUTPUT);

    pinMode(LED2, OUTPUT);

    pinMode(buzzer, OUTPUT);

    pinMode(smoke, INPUT);

    pinMode(inputPir, INPUT);

    pinMode(bulb, OUTPUT);

    pinMode(fan, OUTPUT);

    Serial.begin(9600);

}
```

```
void loop() {  
    int analogSensor = analogRead(smoke);  
  
    val = digitalRead(inputPir);  
  
    baselineTemp = 40;  
  
    celsius = map(((analogRead(A0) - 20) * 3.04), 0, 1023, -40, 125);  
    Serial.print(" TEMP: ");  
    Serial.print(celsius);  
    Serial.print(" C, ");  
  
    if (celsius < 25) {  
        digitalWrite(fan, LOW);  
    }  
    if (celsius > 25) {  
        digitalWrite(fan, HIGH);  
    }  
    Serial.print("Co2: ");  
    Serial.print(analogSensor);  
  
    if (analogSensor > smokeThreshold)  
    {  
        digitalWrite(LED1, HIGH);  
        digitalWrite(LED2, LOW);  
        tone(buzzer, 1000, 350);  
    }  
    else  
    {  
        digitalWrite(LED1, LOW);  
        digitalWrite(LED2, HIGH);  
    }  
}
```

```

    noTone(buzzer);
}
delay(100);
Serial.print(" PIR: ");
Serial.println(val);
if(val == HIGH)
{
    digitalWrite(bulb, HIGH);
    delay(2000);
}
else
{
    digitalWrite(bulb, LOW);
    delay(300);
}
}

```

