```
#include<LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(32, 16,2);
int green_one = 2;
int yellow_one = 3;
int red_one = 4;
int siren 1= 5;
int gas = A0;
 int sensorValue = 0;
 void setup()
{
 Serial.begin(9600);
 lcd.init();
  lcd.clear();
  lcd.backlight();
 lcd.setCursor(3,0);
 lcd.print("GAS LEAKAGE");
 lcd.setCursor(4,1);
 lcd.print("DETECTION");
 delay(3000); lcd.clear();
 lcd.setCursor(0,0);
 lcd.print("Gas Value: ");
 pinMode(green_one,OUTPUT
 );
 pinMode(yellow_one,
 OUTPUT);
 pinMode(red_one, OUTPUT);
 pinMode(siren_one,OUTPUT);
 digitalWrite(red_one, LOW);
 digitalWrite
 (yellow_one,LOW);
 digitalWrite(green_one,LOW);
}
void loop()
{
 sensorValue = analogRead(gas);
 Serial.println(sensorValue);
 lcd.setCursor(11,0);
 lcd.print(sensorValue);
 if(sensorValue > 500)
 {
 lcd.setCursor(0,1);
  lcd.print("GASDETECTED");
  digitalWrite(red_one,
  HIGH);
  digitalWrite(yellow_one,
  LOW);
  digitalWrite(green_one,
  LOW); tone(siren, 200);
 }
 else if(sensorValue > 281 && sensorValue <500)
 {
```

```
  lcd.setCursor(0,1);
   lcd.print("");
   digitalWrite(yellow_one,
   HIGH);
   digitalWrite(red_one,
   LOW);
   digitalWrite(green_one,
   LOW);
   noTone(siren_one);
  }
  else
  {
   lcd.setCursor(0,1);
    lcd.print("        ");
   digitalWrite(green_one,
   HIGH);
   digitalWrite(red_one, LOW);
   digitalWrite(yellow_one,
   LOW);
    noTone(siren_one);
  }
  delay(1000);
}
```