```
#include<LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(32, 16,
2); int green1 = 2; int yellow1 =
3; int red1 = 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(green1, OUTPUT);
 pinMode(yellow1, OUTPUT);
 pinMode(red1, OUTPUT);
 pinMode(siren1, OUTPUT);
 digitalWrite(red1, LOW);
 digitalWrite(yellow1, LOW);
 digitalWrite(green1, 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("GAS DETECTED");
   digitalWrite(red1, HIGH);
   digitalWrite(yellow1,
   LOW); digitalWrite(green1,
   LOW);
   tone(siren, 200);
 }
 else if(sensorValue > 281 && sensorValue < 500)
 { lcd.setCursor(0,1);
   lcd.print("          ");
    digitalWrite(yellow1, HIGH);
    digitalWrite(red1, LOW);
    digitalWrite(green1, LOW);
    noTone(siren1);
 }
 else
 {
   lcd.setCursor(0,1);
   lcd.print("          ");
```

```
    digitalWrite(green1, HIGH);
    digitalWrite(red1, LOW);
    digitalWrite(yellow1, LOW);
    noTone(siren1);
  }
  delay(1000);
}
```