TEAM ID :PNT2022TMID45791

PROJECT DEVELOPMENT PHASE
SPRINT-1

```
#include<LiquidCrystal_I2C.h>
LiquidCrystal_I2C lcd(32, 16, 2);
int green = 2;
int yellow = 3;
int red =  4;
int siren = 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, OUTPUT);
 pinMode(yellow, OUTPUT);
 pinMode(red, OUTPUT);
 pinMode(siren, OUTPUT);
 digitalWrite(red, LOW);
 digitalWrite(yellow, LOW);
 digitalWrite(green, 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(red, HIGH);
  digitalWrite(yellow, LOW);
  digitalWrite(green, LOW);
  tone(siren, 200);
 }
 else if(sensorValue > 281 && sensorValue < 500)
 {
  lcd.setCursor(0,1);
  lcd.print("          ");
  digitalWrite(yellow, HIGH);
  digitalWrite(red, LOW);
  digitalWrite(green, LOW);
  noTone(siren);
 }
```

```
  else
  {
   lcd.setCursor(0,1);
   lcd.print("           ");
   digitalWrite(green, HIGH);
   digitalWrite(red, LOW);
   digitalWrite(yellow, LOW);
   noTone(siren);
  }
  delay(1000);
}
```