**Code to be written in the Arduino to calculate the weight of the cyclinder and to minus some amount of gas to alert the user for minimum amount of gas :**

#include <Wire.h>

#include <LiquidCrystal\_I2C.h>

#include <SoftwareSerial.h>

#include <HX711.h>

#define MQ2pin A3

#define LOADCELL\_DOUT\_PIN A1

#define LOADCELL\_SCK\_PIN A0

LiquidCrystal\_I2C lcd(0x3F, 16, 2);

SoftwareSerial gsmSerial(10, 11);

HX711 scale;

float sensorValue;

float weight;

void setup() {

Serial.begin(9600);

lcd.init();

lcd.clear();

lcd.backlight();

lcd.setCursor(0,0);

lcd.print("Gas Sensor");

lcd.setCursor(0,1);

lcd.print("Warming Up...");

delay(2000);

scale.begin(LOADCELL\_DOUT\_PIN, LOADCELL\_SCK\_PIN);

scale.set\_scale(2280.0); // adjust this calibration value to match your load cell

scale.tare();

gsmSerial.begin(9600);

}

void loop() {

sensorValue = analogRead(MQ2pin);

lcd.setCursor(0,0);

lcd.print("Gas Sensor:");

lcd.print(sensorValue);

// lcd.clear();

weight = scale.get\_units();

lcd.setCursor(0,1);

lcd.print("Weight:");

lcd.print(weight);

lcd.print(" g");

delay(800);

Serial.print("Gas Sensor: ");

Serial.print(sensorValue);

Serial.print(" | Weight: ");

Serial.print(weight);

Serial.println(" g");

if (weight < 1200) {

// lcd.clear();

String message = "Weight is less than 2kg: " + String(weight) + "g";

gsmSerial.println("ATD+919751585762;"); // replace with your phone number

delay(2000);

gsmSerial.println("ATH");

delay(500);

Serial.println("Missed call made");

lcd.clear();

lcd.print("weight Alert");

lcd.setCursor(0,1);

lcd.print("weight call made");

}

if(sensorValue>600)

{

lcd.clear();

lcd.print("Aleart !!");

lcd.setCursor(0,1);

lcd.print("Gas call made");

}

delay(2000);

}

Code to detect the gas leakage :

#define MQ2pin (0)

float sensorValue; //variable to store sensor value

void setup()

{

Serial.begin(9600); // sets the serial port to 9600

Serial.println("Gas sensor warming up!");

delay(20000); // allow the MQ-2 to warm up

}

void loop()

{

sensorValue = analogRead(MQ2pin); // read analog input pin 0

Serial.print("Sensor Value: ");

Serial.print(sensorValue);

if(sensorValue > 600)

{

Serial.print(" | Smoke detected!");

}

Serial.println("");

delay(2000); // wait 2s for next reading

}