PROJECT DEVELOPMENT PHASE - SPRINT 3

DATE	20 October 2022
TEAM ID	PNT2022TMID21380
PROJECT NAME	Gas leakage Monitoring and Alerting System
TEAM MEMBERS	19D070 Raji Santhoshi T G 19D047 Mahalakshmi C 19D043 Laila B G 19D117 Durga Devi G

CODE:

```
#include <LiquidCrystal.h>

LiquidCrystal lcd(5,6,8,9,10,11);


int redled = 2;

int greenled = 3;

int buzzer = 4;

int sensor = A0;

int sensorThresh = 400;


void setup()

{

pinMode(redled, OUTPUT);

pinMode(greenled,OUTPUT);

pinMode(buzzer,OUTPUT);

pinMode(sensor,INPUT);

Serial.begin(9600);

lcd.begin(16,2);

}
```

```
void loop()
{
 int analogValue = analogRead(sensor);
 Serial.print(analogValue);
 if(analogValue>sensorThresh)
 {
  digitalWrite(redled,HIGH);
  digitalWrite(greenled,LOW);
  tone(buzzer,1000,10000);
  lcd.clear();
  lcd.setCursor(0,1);
  lcd.print("ALERT");
  delay(1000);
  lcd.clear();
  lcd.setCursor(0,1);
  lcd.print("EVACUATE");
  delay(1000);
 }
 else
 {
  digitalWrite(greenled,HIGH);
  digitalWrite(redled,LOW);
  noTone(buzzer);
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("SAFE");
  delay(1000);
  lcd.clear();
  lcd.setCursor(0,1);
  lcd.print("ALL CLEAR");
  delay(1000);
```

```
 }

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}
```
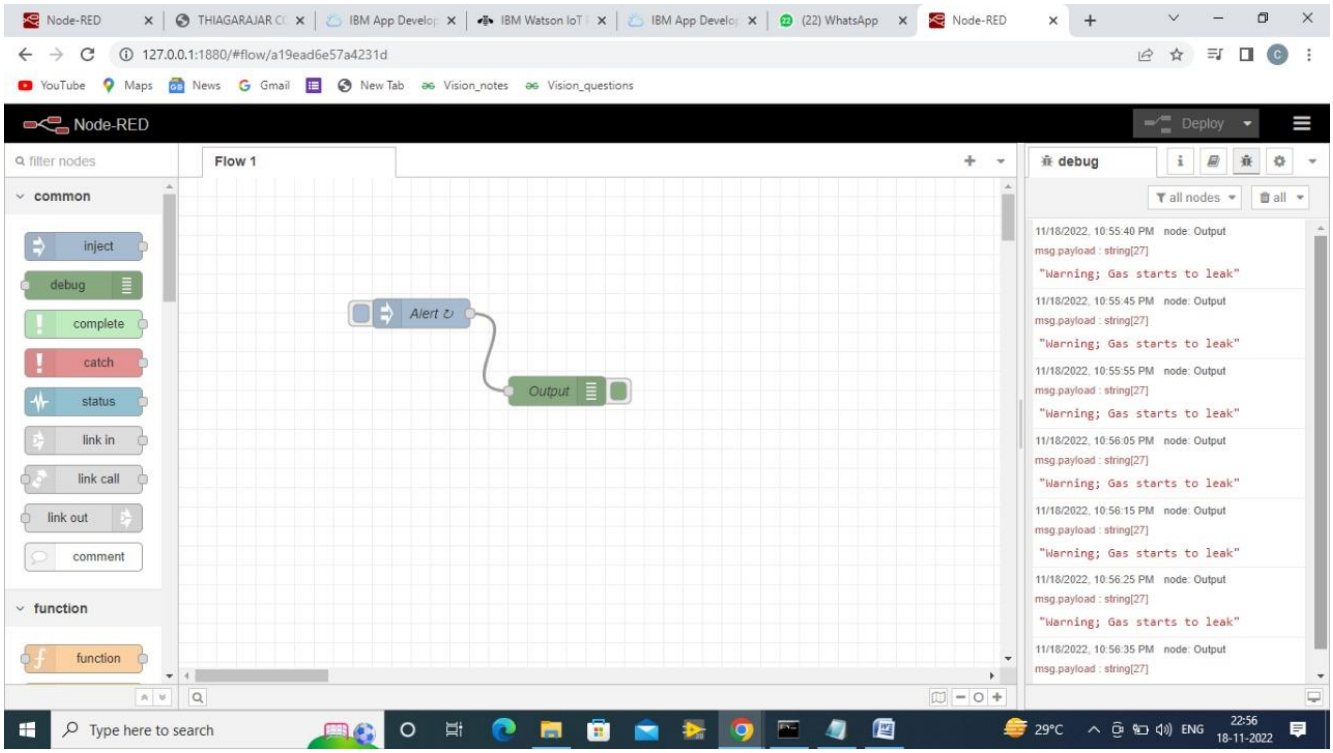

OUTPUT:



- The pallets in the left side are the various options which we have, from which we can choose the desired operation to be performed.
- Centre one the circuit diagram for alerting the gas leakage.
- We have the output in the right side, we have got the output for 100 times which means it is alerting for each second consecutively and thus leading to 100 beep sounds.
- Thus, the working of gas leakage monitoring and alerting system.