

FINAL CODE

Team ID : PNT2022TMID52179

Project Name : GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

CODE:

```
#include <LiquidCrystal.h>
```

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

```
//pin variables
```

```
int buzzer = 4;
```

```
int sensor = A0;
```

```
int sensorThresh = 400;
```

```
void setup()
```

```
{
```

```
    pinMode(buzzer,OUTPUT);
```

```
    pinMode(sensor,INPUT);
```

```
    Serial.begin(9600);
```

```
    lcd.begin(16,2);
```

```
}
```

```
void loop()
```

```
{
```

```
    int analogValue = analogRead(sensor);
```

```
    Serial.print(analogValue);
```

```
//gas concentration condition
```

```
if(analogValue>sensorThresh)
```

```
{
```

```
tone(buzzer,1000,10000);
```

```
lcd.clear();
```

```
//to print on LCD
```

```
lcd.setCursor(0,1);
```

```
lcd.print("ALERT");
```

```
delay(1000);
```

```
lcd.clear();
```

```
lcd.setCursor(0,1);
```

```
lcd.print("EVACUATE");
```

```
delay(1000);
```

```
}
```

```
else
```

```
{
```

```
noTone(buzzer);
```

```
lcd.clear();
```

```
lcd.setCursor(0,1);
```

```
lcd.print("ALL CLEAR");
```

```
delay(1000);
```

```
}
```

```
}
```