

SPRINT 1

| | |
|---------------------|---|
| Date | 15 NOVEMBER 2022 |
| Team ID | PNT2022TMID06118 |
| Project Name | GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES |

Python 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.println("Gas Level:");
```

```
Serial.println(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();
```

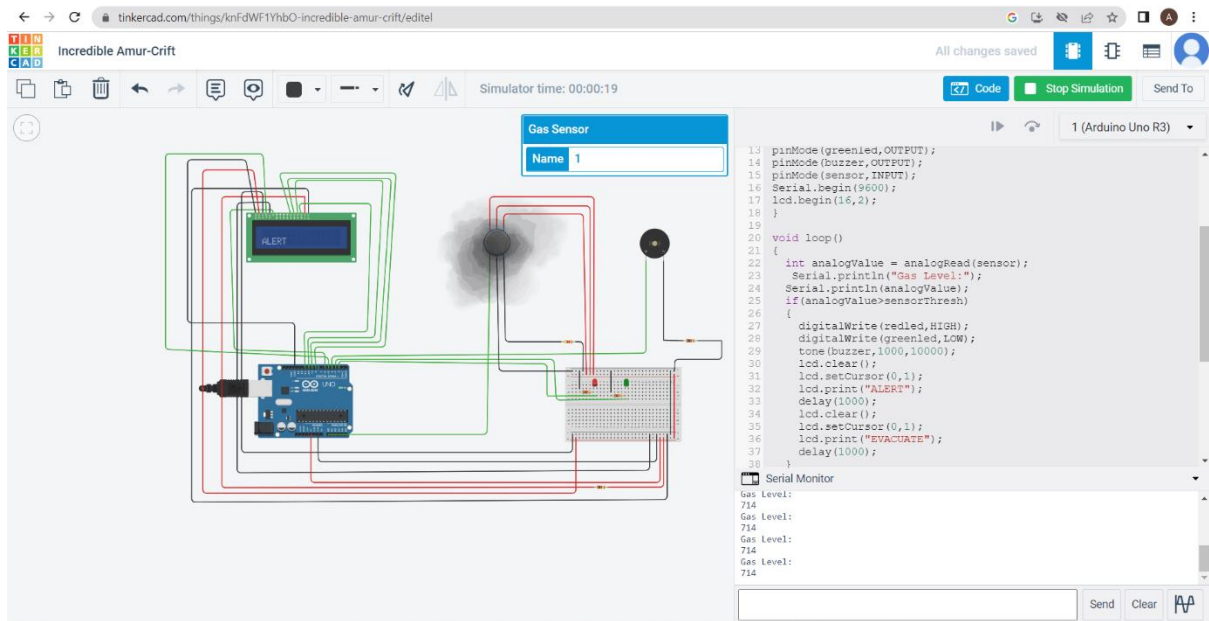
```
lcd.setCursor(0,1);
```

```
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);  
}  
  
}
```

Output:



Tinkercad link:

<https://www.tinkercad.com/things/knFdWF1YhbO-incredible-amur-crft/editel?tenant=circuits>