

```
#include<LiquidCrystal.h>

const int RS = D6, EN = D5, d4 = D1, d5 = D2, d6 = D3, d7 = D4;

LiquidCrystal lcd(RS, EN, d4, d5, d6, d7);
```

```
#include <ESP8266WiFi.h>
```

```
const char* ssid  = "wifi003";

const char* password = "12345678";
```

```
const char* host = "iotproject19-20.000webhostapp.com";

const char* streamId = ".....";

const char* privateKey = ".....";
```

```
const int trigPin = D7;

const int echoPin = D8;

//define sound velocity in cm/uS

#define SOUND_VELOCITY 0.034

#define CM_TO_INCH 0.393701
```

```
const int gs = D0;

int it=0;

int lvl=0;

long duration;

float distanceCm;

float distanceInch;
```

```
const int alarm = D8;

void setup() {

  Serial.begin(115200);

  lcd.begin(16, 2);

  lcd.setCursor(0,0);

  lcd.print("Garbage Level");

  lcd.setCursor(0,1);

  lcd.print(" Monitor ");

  pinMode(trigPin, OUTPUT); // Sets the trigPin as an Output

  pinMode(echoPin, INPUT); // Sets the echoPin as an Input


  pinMode(alarm,OUTPUT);

  digitalWrite(alarm,LOW);

  pinMode(gs, INPUT);

  delay(10);


  Serial.println();

  Serial.println();

  Serial.print("Connecting to ");

  Serial.println(ssid);


  WiFi.begin(ssid, password);


}
```

```
int value = 0;

void loop() {
    delay(1000);
    ++value;
    // Clears the trigPin
    digitalWrite(trigPin, LOW);
    delayMicroseconds(2);
    // Sets the trigPin on HIGH state for 10 micro seconds
    digitalWrite(trigPin, HIGH);
    delayMicroseconds(10);
    digitalWrite(trigPin, LOW);

    // Reads the echoPin, returns the sound wave travel time in microseconds
    duration = pulseIn(echoPin, HIGH);

    // Calculate the distance
    distanceCm = duration * SOUND_VELOCITY/2;

    if(distanceCm>100)
    {
        distanceCm=100;
    }

    lvl = 100-distanceCm;
```

```
lcd.clear();  
  
lcd.setCursor(0,0);  
  
lcd.print("Level:");  
  
lcd.print(lvl);
```

```
  
lcd.setCursor(0,1);  
  
lcd.print("Gas :");  
  
gssen();
```

```
  
String url = "GET http://iotproject19-20.000webhostapp.com/dustbin/update.php?lvl="; // Getting info  
from my online database through my online website
```

```
  
url+=lvl;  
  
url+="&gs=";  
  
url+=it;
```

```
  
}
```

```
  
void gssen()
```

```
{
```

```
if(!digitalRead(D0))  
{  
    it=1;  
    lcd.setCursor(6,1);  
    lcd.print("  ");  
    lcd.setCursor(6,1);  
    lcd.print("HIGH");  
}  
else  
{  
    it=0;  
    lcd.setCursor(6,1);  
    lcd.print("  ");  
    lcd.setCursor(6,1);  
    lcd.print("LOW");  
}  
}
```