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

const char* ssid = "FITM WiFi";
const char* password = "";
const char* mqtt_server = "m11.cloudmqtt.com";

char msg[50];

WiFiClient espClient;
PubSubClient client(espClient);


void setup(){
  Serial.begin(115200);
  pinMode(D1, INPUT);
  setup_wifi();
  client.setServer(mqtt_server, 11915); //port ใน mqtt
  client.setCallback(callback);
}

void setup_wifi() {

  delay(10);
  // We start by connecting to a WiFi network
  Serial.println();
  Serial.print("Connecting to ");
  Serial.println(ssid);

  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }
  Serial.println("");
  Serial.println("WiFi connected");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
}


```

```
42  void callback(char* topic, byte* payload, unsigned int length)
    {
43    Serial.print("Message arrived [");
44    Serial.print(topic);
45    Serial.print("] ");
46  }
47
48  void reconnect() {
49    // Loop until we're reconnected
50    while (!client.connected()) {
51      Serial.print("Attempting MQTT connection...");
52      // Attempt to connect
53      if (client.connect("pir", "upnkpelr", "GHZ0Xc72wZx-")) {
        // topic,username,password
54        Serial.println("connected");
55        // Once connected, publish an announcement...
56       // client.publish("iot", "Start");
57        // ... and resubscribe
58        //client.subscribe("Node2");
59       // client.publish("/checkPIR", "Hi");
60      } else {
61        Serial.print("failed, rc=");
62        Serial.print(client.state());
63        Serial.println(" try again in 5 seconds");
64        // Wait 5 seconds before retrying
65        delay(5000);
66      }
67    }
68  }
69
70
71  void loop(){
72    int value= digitalRead(D1);
73    //Serial.println(value);
74  //  if (value == HIGH)
75  //  {
76  //    Serial.println("yes");
77  //    //delay(1000) ;
78  //  }
79  //
```

```
//  else
//  {
//    Serial.println("no");
//  }

  if (!client.connected()) {
    reconnect();
  }
  client.loop();

 // char gas[50];

//  float sensor_volt;
//  float sensorValue;

 // sensorValue = analogRead(A0);
 // sensor_volt = sensorValue / 1024 * 5.0;


  delay(1000);
 // itoa(sensor_volt,gas,10);
 // snprintf (msg,75,value);
 //msg = value;
 //String msg = String(value, DEC);
 //Serial.println(msg);
 if (value == HIGH)
  {
    client.publish("/checkPIR", "1");
    Serial.println("yes");
    //delay(1000) ;
  }
  else
  {
    client.publish("/checkPIR", "0");
    Serial.println("no");
  }
//  client.publish("/checkPIR", msg);
}

```