

```
// ดึงค่าจาก payload JSON ที่ส่งจาก ESP32
```

```
var device = msg.payload["device_id"];
```

```
var temp = msg.payload["อุณหภูมิ"];
```

```
var humi = msg.payload["ความชื้น"];
```

```
var pres = msg.payload["ความดัน"];
```

```
// สร้าง SQL INSERT query
```

```
msg.topic = "INSERT INTO device_logs (device_id, temp, humidity, pressure) VALUES (?, ?,  
?, ?)";
```

```
msg.payload = [device, temp, humi, pres];
```

```
return msg;
```

```
#include <WiFi.h>
```

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

```
#include <Wire.h>
```

```
#include <BME280I2C.h>
```

```
WiFiClient espClient;
```

```
PubSubClient client(espClient);
```

```
BME280I2C bme;
```

```
int led = 23;
```

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

```
void callback(char* topic, byte* message, unsigned int length) {
```

```
Serial.print("Message arrived on topic: ");  
Serial.print(topic);  
Serial.print(". Message: ");
```

```
String msg = "";  
for (int i = 0; i < length; i++) {  
    msg += (char)message[i];  
}  
Serial.println(msg);
```

```
if (String(topic) == "home/led") {  
    if (msg == "1") {  
        digitalWrite(led, HIGH);  
        Serial.println("LED ON");  
    } else if (msg == "0") {  
        digitalWrite(led, LOW);  
        Serial.println("LED OFF");  
        delay(10);  
    }  
}  
}
```

```
void reconnect() {  
    while (!client.connected()) {  
        Serial.print("Attempting MQTT connection...");  
        if (client.connect("ESP32-BME280-LED")) {
```

```
    Serial.println("connected");

    client.subscribe("home/led");

    Serial.println("Subscribed to home/led");

} else {

    Serial.print("failed, rc=");

    Serial.print(client.state());

    Serial.println(" try again in 5 seconds");

    delay(500);

}

}

}
```

```
void setup() {

    Serial.begin(115200);

    pinMode(led, OUTPUT);

    digitalWrite(led, LOW);


    Serial.println("Connecting to WiFi...");

    WiFi.begin("Devops", "itcm1c1234");

    while (WiFi.status() != WL_CONNECTED) {

        delay(500);

        Serial.print(".");

    }

    Serial.println("WiFi connected");


    client.setServer("192.168.20.253", 1883);
```

```
client.setCallback(callback);
```

```
Wire.begin();
```

```
if (!bme.begin()) {
```

```
    Serial.println("Could not find BME280 sensor!");
```

```
}
```

```
}
```

```
void loop() {
```

```
    if (!client.connected()) {
```

```
        reconnect();
```

```
    }
```

```
    client.loop();
```

```
float t, h, p;
```

```
bme.read(p, t, h, BME280::TempUnit_Celsius, BME280::PresUnit_Pa);
```

```
p /= 100.0;
```

```
String js = "{\"device_id\":\"" + String(device_id) + "\"" +
```

```
    "\", \"อุณหภูมิ\":" + String(t, 2) +
```

```
    "\", \"ความชื้น\":" + String(h, 2) +
```

```
    "\", \"ความดัน\":" + String(p, 2) + "\"}";
```

```
client.publish("sensor/bme280", js.c_str());
```

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

```
delay(1000);
```

```
}
```