

```
// 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 w; PubSubClient c(w); BME280I2C bme;
```

```
int device_id = 12345678;
```

```
void setup() {
```

```
  Serial.begin(115200);
```

```
  WiFi.begin("IT-CMTC-WiFi","itcmtc1234");
```

```
  while(WiFi.status() != WL_CONNECTED){delay(500); Serial.print(".");}
```

```
  Serial.println("\nWiFi connected: "+WiFi.localIP().toString());
```

```

c.setServer("192.168.20.253",1883);

Wire.begin(); if(!bme.begin()){Serial.println("BME280 error"); while(1) delay(1000);}

}

void reconnectMQTT(){while(!c.connected()){if(c.connect("ESP32-
BME280"))Serial.println("MQTT connected"); else{Serial.println("MQTT failed");
delay(2000);}}}

void loop() {

  if(!c.connected()) reconnectMQTT();

  c.loop();

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

  p /= 100.0; // Pa → hPa

  String s = "{\"device_id\":\""+String(device_id)+"\", \"อุณหภูมิ\":\""+String(t,2)+"\", \"
ความชื้น\":\""+String(h,2)+"\", \"ความดัน\":\""+String(p,2)+"\"}";

  c.publish("sensor/bme280", s.c_str());

  Serial.print("device_id: "); Serial.print(device_id); Serial.print(" °C\t");

  Serial.print("อุณหภูมิ: "); Serial.print(t,2); Serial.print(" °C\t");

  Serial.print("ความชื้น: "); Serial.print(h,2); Serial.print("%\t");

  Serial.print("ความดัน: "); Serial.print(p,2); Serial.println(" hPa");

  delay(1000);

}

```