

Wokwi Code

Wokwi Code Editor interface showing a sketch for an ESP32 connected to a DHT22 sensor.

Sketch Code:

```
1 #include <WiFi.h>
2 #include <WiFiClient.h>
3 #include <PubSubClient.h>
4 #include "DHT.h"
5
6 const char* ssid = "KAVIYA S";
7 const char* password = "Kaviya@123";
8 #define DHTPIN 4
9 #define DHTTYPE DHT11
10 #define ORG "vtceyy"
11 #define DEVICE_TYPE "ESP32"
12 #define DEVICE_ID "ESP32_1"
13 #define TOKEN "wHKDv_XEAFZf-VUsYmR"
14
15 char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
16 char pubTopic1[] = "iot-2/evt/status1/fmt/json";
17 char pubTopic2[] = "iot-2/evt/status2/fmt/json";
18 char authMethod[] = "use-token-auth";
19 char token[] = TOKEN;
20 char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
21
22 WiFiClient wifiClient;
23 PubSubClient client(server, 1883, NULL, wifiClient);
24 DHT dht(DHTPIN, DHTTYPE);
25
26
27 void setup() {
28   Serial.begin(115200);
29   dht.begin();
30   Serial.println();
31   Serial.print("Connecting to ");
32   Serial.print(ssid);
33   WiFi.begin(ssid, password);
34   while (WiFi.status() != WL_CONNECTED) {
35     delay(500);
```

Simulation:

The simulation shows an ESP32 microcontroller board connected to a DHT22 digital temperature and humidity sensor. The sensor is connected to the ESP32 via I2C (VCC to VCC, GND to GND, SDA to SDA, SCL to SCL).

Connecting to KAVIYA S.....