

```

#include "WiFiEsp.h"
#include "SoftwareSerial.h"
#include <PubSubClient.h>
#include <dht.h>

dht DHT;
SoftwareSerial Serial1(6, 7); // RX, TX

#define DHT11_PIN 2

char* wifi_ssid = "Nothing Phone (2a)";
char* wifi_password = "Crash@154";

char* mqtt_server = "mqtt3.thingspeak.com";
int mqtt_port = 1883;
char* mqtt_clientID = "Aw4tOjQrHTYGJyYuCTQCISA";
char* mqtt_username = "Aw4tOjQrHTYGJyYuCTQCISA";
char* mqtt_password = "b9ML6nhMK6bmXTL42SiJ84Wh";

char* mqtt_publish_topic = "channels/2688129/publish";

WiFiEspClient espClient;
PubSubClient client(mqtt_server,mqtt_port,espClient);
int status = WL_IDLE_STATUS;    // the Wifi radio's status

void setup_wifi() {

  // initialize serial for ESP module
  Serial1.begin(115200);
  // initialize ESP module
  WiFi.init(&Serial1);
  delay(10);
  // We start by connecting to a WiFi network
  // attempt to connect to WiFi network
  while (status != WL_CONNECTED) {
    Serial.print("Attempting to connect to WPA SSID: ");
    Serial.println(wifi_ssid);
    // Connect to WPA/WPA2 network
    status = WiFi.begin(wifi_ssid, wifi_password);
  }
  Serial.println("You're connected to the network");
  Serial.println("");
  Serial.println("WiFi connected");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
}

void setup() {
  Serial.begin(9600);
  setup_wifi();
}

char msg[50];

void loop() {

```

```

static int counter = 0;
int chk = DHT.read11(DHT11_PIN);

String payload="field1=";
payload+=DHT.temperature;
payload+="&field2=";
payload+=DHT.humidity;
payload+="&status=MQTTPUBLISH";

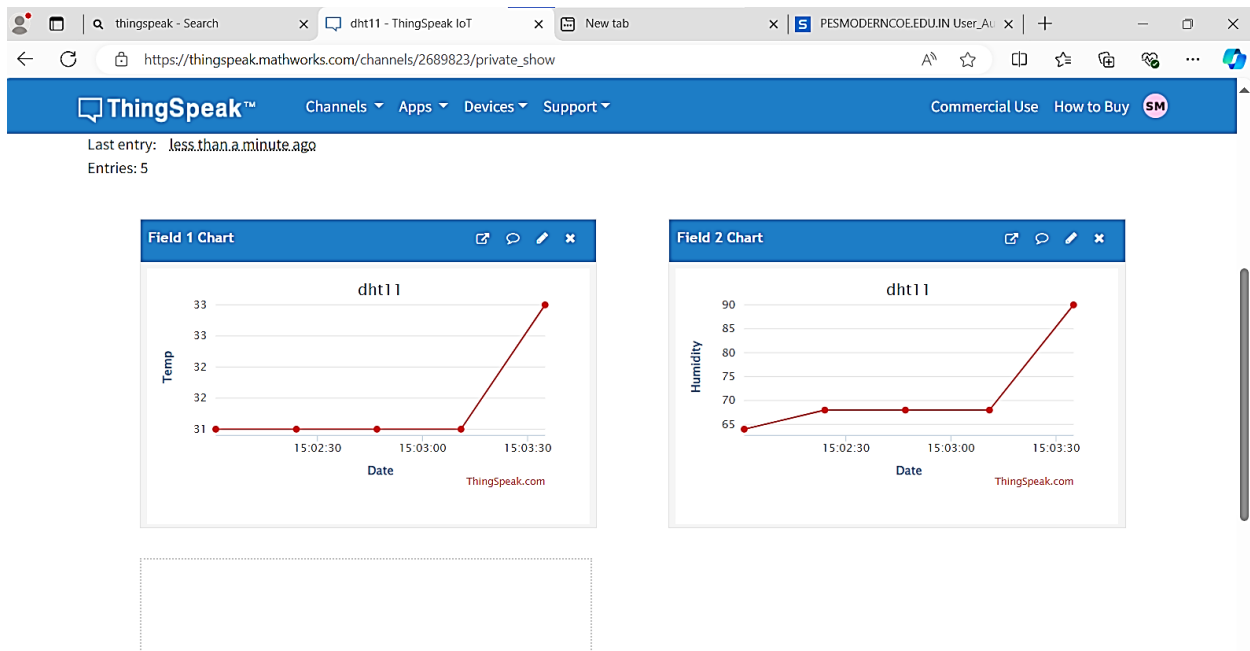
if (client.connect(mqtt_clientID,mqtt_username,mqtt_password)) {
  Serial.println("Connected to MQTT broker");
  Serial.print("Topic is: ");
  Serial.println(mqtt_publish_topic);
}

if (client.connected()){
  Serial.print("Sending payload: ");
  Serial.println(payload);

  if (client.publish(mqtt_publish_topic, (char*) payload.c_str())) {
    Serial.println("Publish ok");
  }
  else {
    Serial.println("Publish failed");
  }
  client.disconnect();
}
++counter;
delay(2000);
}

```

OUTPUT



thingspeak - Search x dht11 - ThingSpeak IoT x +

https://thingspeak.mathworks.com/channels/2689823/private_show

ThingSpeak™ Channels Apps Devices Support Commercial Use How to Buy SM

dht11

Channel ID: 2689823
Author: mwa0000032818024
Access: Private

Private View Public View Channel Settings Sharing API Keys Data Import / Export

+ Add Visualizations + Add Widgets Export recent data

MATLAB Analysis MATLAB Visualization

Channel 4 of 4 < >

Channel Stats

Created: 34 minutes ago
Last entry: less than a minute ago
Entries: 23

Field 1 Chart Field 2 Chart

Output Serial Monitor x

Message (Enter to send message to 'Arduino Uno' on 'COM11')

```
14:59:28.859 -> Topic is: channels/2689823/publish
14:59:28.934 -> Sending payload: field1=31.00&field2=68.00&status=MQTTPUBLISH
14:59:29.808 -> Publish ok
14:59:30.219 -> [WiFiEsp] Disconnecting 3
14:59:50.328 -> [WiFiEsp] Connecting to mqtt3.thingspeak.com
14:59:53.185 -> Connected to MQTT broker
14:59:53.218 -> Topic is: channels/2689823/publish
14:59:53.294 -> Sending payload: field1=33.00&field2=90.00&status=MQTTPUBLISH
14:59:54.647 -> Publish ok
14:59:55.514 -> [WiFiEsp] Disconnecting 3
15:00:15.610 -> [WiFiEsp] Connecting to mqtt3.thingspeak.com
15:00:18.197 -> Connected to MQTT broker
15:00:18.231 -> Topic is: channels/2689823/publish
15:00:18.266 -> Sending payload: field1=32.00&field2=86.00&status=MQTTPUBLISH
15:00:19.382 -> Publish ok
15:00:20.654 -> [WiFiEsp] Disconnecting 3
```