EXP-6

#include <DHT.h>

#include <ESP8266WiFi.h>

#include <WiFiClient.h>

#include <ThingSpeak.h>

#define DHTPIN 0

#define DHTTYPE DHT11

DHT dht(DHTPIN, DHTTYPE);

const char\* ssid = "……";

const char\* password = "....";

WiFiClient client;

unsigned long myChannelNumber = **1682**481;

const char \* myWriteAPIKey = "**7YXRHX583B7L73ZU**";

uint8\_t temperature, humidity;

void setup()

{

Serial.begin(115200);

dht.begin();

delay(10);

// Connect to WiFi network

Serial.println();

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");

// Print the IP address

Serial.println(WiFi.localIP());

ThingSpeak.begin(client);

}

void loop()

{

static boolean data\_state = false;

temperature = dht.readTemperature();

humidity = dht.readHumidity();

Serial.print("Temperature Value is :");

Serial.print(temperature);

Serial.println("C");

Serial.print("Humidity Value is :");

Serial.print(humidity);

Serial.println("%");

// Write to ThingSpeak. There are up to 8 fields in a channel, allowing you to store up to 8 different

// pieces of information in a channel. Here, we write to field 1.

if( data\_state )

{

ThingSpeak.writeField(myChannelNumber, 1, temperature, myWriteAPIKey);

data\_state = false;

}

else

{

ThingSpeak.writeField(myChannelNumber, 2, humidity, myWriteAPIKey);

data\_state = true;

}

delay(16000); // ThingSpeak will only accept updates every 15 seconds.

}