Se connecter sur un broker MQTT avec un ESP8266

Installer l´ESP8266 sur l´arduino IDE
https://arduino.blaisepascal.fr/arduino-ide-installer-les-cartes-esp32-et-esp8266/

Tutoriel :
https://arduino.blaisepascal.fr/mqtt-avec-arduino/

Code :

```
#include <ESP8266WiFi.h>
#include <ESP8266WiFiMulti.h>
#include <PubSubClient.h>

//WIFI
const char* ssid = "SSID";
const char* password = "mdp";
//MQTT
#define MQTT_BROKER       "maqiatto.com"
#define MQTT_BROKER_PORT  1883
#define MQTT_USERNAME     "your-maqiatto-user-name"
#define MQTT_KEY          "your-maqiatto-broker-pass"

ESP8266WiFiMulti WiFiMulti;
WiFiClient espClient;
PubSubClient client(espClient);

void setup() {

  Serial.begin(115200);
  setup_wifi();
  setup_mqtt();
  client.publish("emailuser@maqiatto/test", "Hello from ESP32");
}

void loop() {
  reconnect();
  client.loop();
  float temp = random(30);
  mqtt_publish("emailuser@maqiatto/test/qqchose",temp);
  Serial.print("qqchose : ");
  Serial.println(temp); delay(10000);
}

void setup_wifi(){
  //connexion au wifi
  WiFiMulti.addAP(ssid, password);
```

```
  while ( WiFiMulti.run() != WL_CONNECTED ) {
    delay ( 500 );
    Serial.print ( "." );
  }
  Serial.println("");
  Serial.println("WiFi connecté");
  Serial.print("MAC : ");
  Serial.println(WiFi.macAddress());
  Serial.print("Adresse IP : ");
  Serial.println(WiFi.localIP());
}

void setup_mqtt(){
  client.setServer(MQTT_BROKER, MQTT_BROKER_PORT);
  reconnect();
}

void reconnect(){
  while (!client.connected()) {
    Serial.println("Connection au serveur MQTT ...");
    if (client.connect("ESPClient", MQTT_USERNAME, MQTT_KEY)) {
      Serial.println("MQTT connecté");
    }
    else {
      Serial.print("echec, code erreur= ");
      Serial.println(client.state());
      Serial.println("nouvel essai dans 2s");
    delay(2000);
    }
  }
}

//Fonction pour publier un float sur un topic
void mqtt_publish(String topic, float t){
  char top[topic.length()+1];
  topic.toCharArray(top,topic.length()+1);
  char t_char[50];
  String t_str = String(t);
  t_str.toCharArray(t_char, t_str.length() + 1);
  client.publish(top,t_char);
}
```