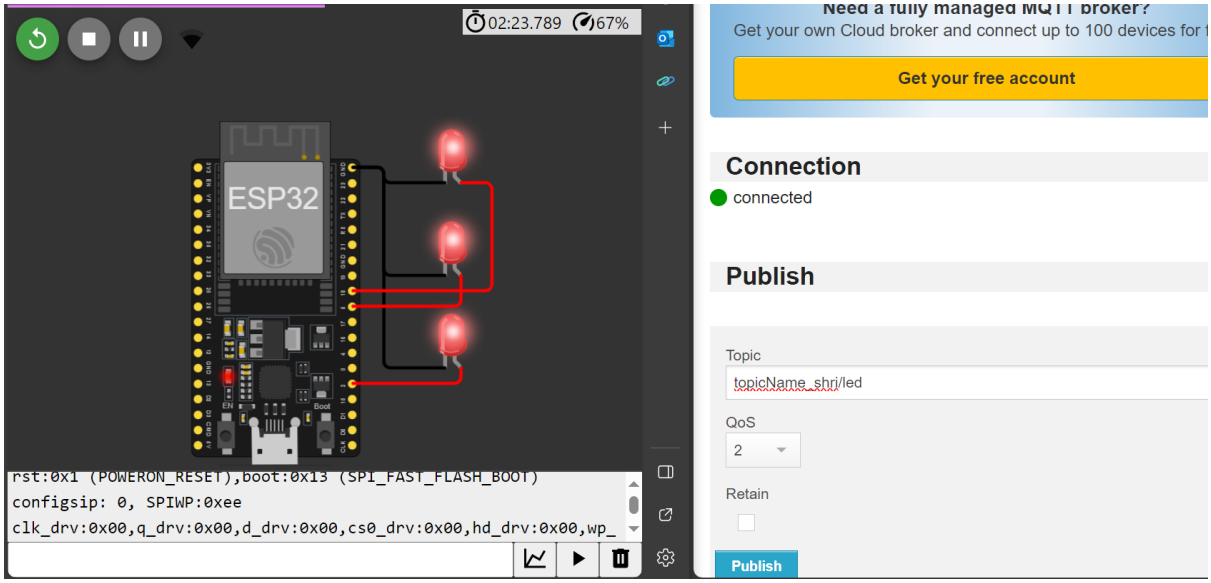

CODE:-

//Main Code:

// From https://randomnerdtutorials.com/esp32-mqtt-publish-subscribe-arduino-ide

//http://www.hivemq.com/demos/websocket-client/

```
#include <WiFi.h>

#include "PubSubClient.h"

const char* ssid = "Wokwi-GUEST";

const char* password = "";

//const char* mqttServer = "broker.emqx.io";

const char* mqttServer = "broker.mqttdashboard.com";

int port = 1883;

String stMac;

char mac[50];

char clientId[50];



WiFiClient espClient;
```

```
PubSubClient client(espClient);


const int ledPin = 2;
const int ledPin1 = 18;
const int ledPin2 = 5;


void setup() {
  Serial.begin(115200);
  randomSeed(analogRead(0));
  delay(10);
  Serial.println();
  Serial.print("Connecting to ");
  Serial.println(ssid);
  wifiConnect();
  Serial.println("");
  Serial.println("WiFi connected");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
  Serial.println(WiFi.macAddress());
  stMac = WiFi.macAddress();
  stMac.replace(":", "_");
  Serial.println(stMac);
  client.setServer(mqttServer, port);
  client.setCallback(callback);
  pinMode(ledPin, OUTPUT);
```

```
  pinMode(ledPin1, OUTPUT);
  pinMode(ledPin2, OUTPUT);
}

void wifiConnect() {
  WiFi.mode(WIFI_STA);
  WiFi.begin(ssid, password);
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }
}

void mqttReconnect() {
  while (!client.connected()) {
    Serial.print("Attempting MQTT connection...");
    long r = random(1000);
    sprintf(clientId, "clientId-%ld", r);
    if (client.connect(clientId)) {
      Serial.print(clientId);
      Serial.println(" connected");
      client.subscribe("topicName_akshaykumar/led");
    } else {
      Serial.print("failed, rc=");
      Serial.print(client.state());
```

```
      Serial.println(" try again in 5 seconds");
      delay(5000);
    }
  }
}

void callback(char* topic, byte* message, unsigned int length) {
  Serial.print("Message arrived on topic: ");
  Serial.print(topic);
  Serial.print(". Message: ");
  String stMessage;
  for (int i = 0; i < length; i++) {
    Serial.print((char)message[i]);
    stMessage += (char)message[i];
  }
  Serial.println();
  if (String(topic) == "topicName_shri/led") {
    Serial.print("Changing output to ");
    if(stMessage == "on1") {
      Serial.println("on1");
      digitalWrite(ledPin, HIGH);
    }
    else if(stMessage == "off1"){
      Serial.println("off1");
      digitalWrite(ledPin, LOW);
```

```
    }
    if(stMessage == "on2") {
      Serial.println("on2");
      digitalWrite(ledPin1, HIGH);
    }
    else if(stMessage == "off2"){
      Serial.println("off2");
      digitalWrite(ledPin1, LOW);
    }
    if(stMessage == "on3") {
      Serial.println("on3");
      digitalWrite(ledPin2, HIGH);
    }
    else if(stMessage == "off3"){
      Serial.println("off3");
      digitalWrite(ledPin2, LOW);
    }
  }
}
void loop() {
  delay(10);
  if (!client.connected()) {
    mqttReconnect();
  }
  client.loop();}
```