Wokwi Code

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Team ID	PNT2022TMID06107
Project Name	Personal Assistance For Seniors Who Are Self-Reliant

SOURCE CODE:

```
#include <WiFi.h>
#include <PubSubClient.h>
#include <LiquidCrystal_I2C.h>
void callback(char* subscribetopic, byte* payload, unsigned int
        payloadLength);
#define ORG "vf1g00"
#define DEVICE_TYPE "DeviceType"
#define DEVICE_ID "54321"
#define TOKEN "Du@CS0CS9phctYRacI"
String data3;
LiquidCrystal_I2C lcd(0x27,16,2);
char server[] = ORG ".messaging.internetofthings.ibmcloud.com";
char publishTopic[] = "iot-2/evt/Data/fmt/json";
char subscribetopic[] = "iot-2/cmd/test/fmt/String";
char authMethod[] = "use-token-auth";
char token[] = TOKEN;
char clientId[] = "d:" ORG ":" DEVICE_TYPE ":" DEVICE_ID;
WiFiClient wifiClient;
PubSubClient client(server, 1883, callback, wifiClient);

void setup() {
  lcd.init();
  lcd.backlight();
  Serial.begin(115200);
  Wire.begin(4,2);
  lcd.setCursor(1,0);
  lcd.print("Hi");
  wificonnect();
  mqttconnect();
}
void loop()
```

```
{

  Serial.println("Take this medicine-Digene");
  delay(1000);
}

void mqttconnect() {
  if (!client.connected()) {
    Serial.print("Reconnecting client to ");
    Serial.println(server);
    while (!!!client.connect(clientId, authMethod, token)) {
      Serial.print(".");
      delay(500);
    }
    initManagedDevice();
    Serial.println();
  }
}
void wificonnect()
{
  Serial.println();
  Serial.print("Connecting to ");
  WiFi.begin("Wokwi-GUEST", "", 6);
  while (WiFi.status() != WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  }
  Serial.println("");
  Serial.println("WiFi connected");
  Serial.println("IP address: ");
  Serial.println(WiFi.localIP());
}
void initManagedDevice() {
  if (client.subscribe(subscribetopic)) {
    Serial.println((subscribetopic));
    Serial.println("subscribe to cmd OK");
  } else {
    Serial.println("subscribe to cmd FAILED");
  }
}
void callback(char* subscribetopic, byte* payload, unsigned int payloadLength)
{
```

```
  Serial.print("callback invoked for topic: ");
  Serial.println(subscribetopic);
  for (int i = 0; i < payloadLength; i++) {
    //Serial.print((char)payload[i]);
    data3 += (char)payload[i];
  }
  Serial.println("data: " + data3);
  data3 = "";
}
```

OUTPUT: