Using QuickBLE by Arduino IDE
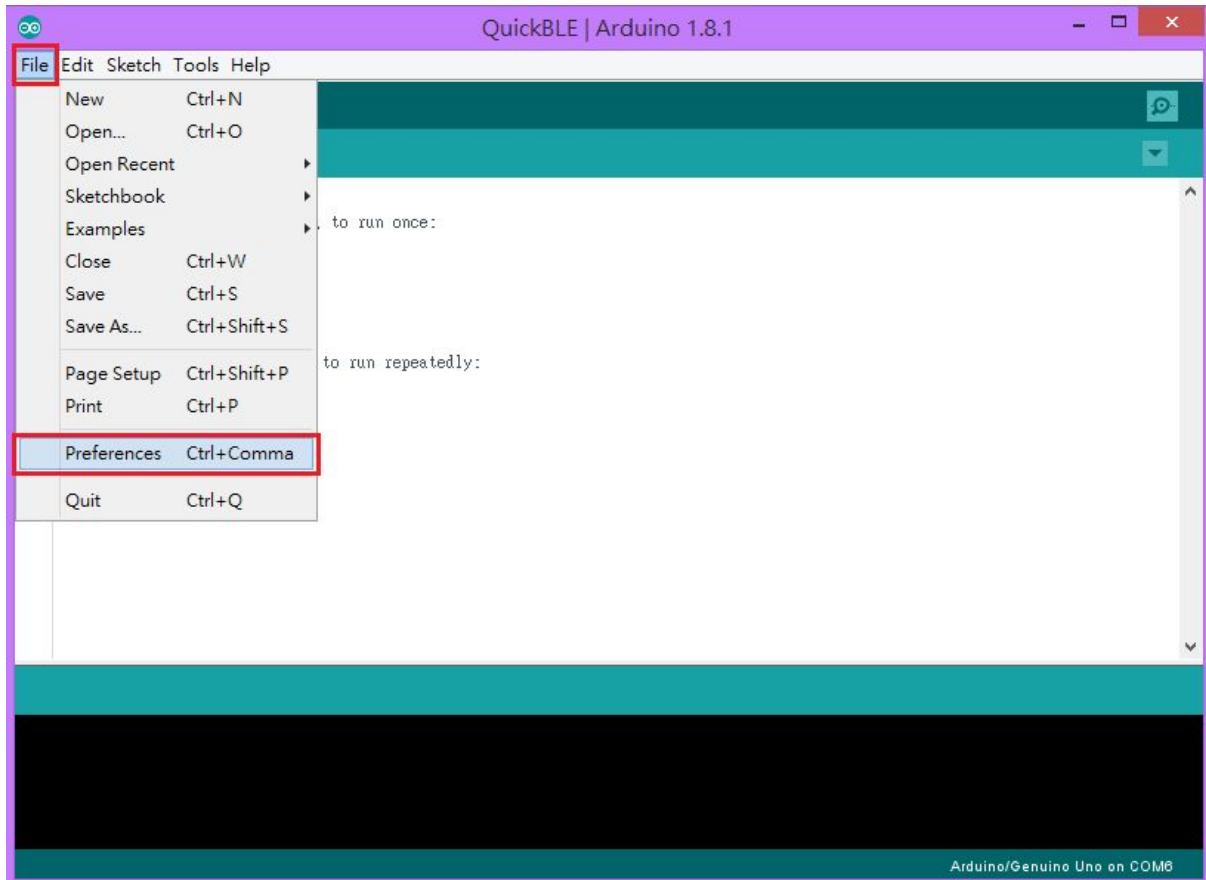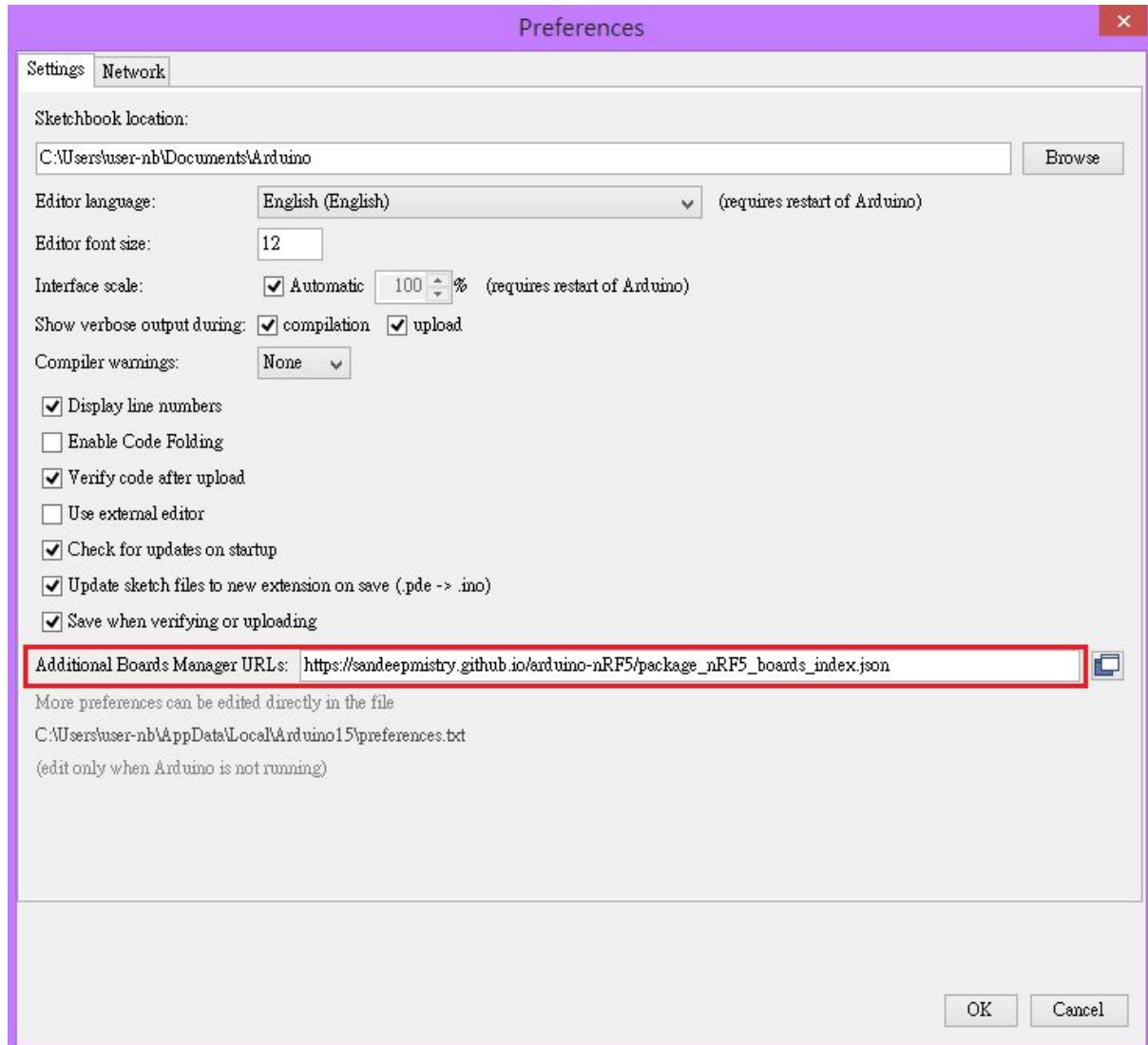
A、Arduino IDE Basic Setting to QuickBLE
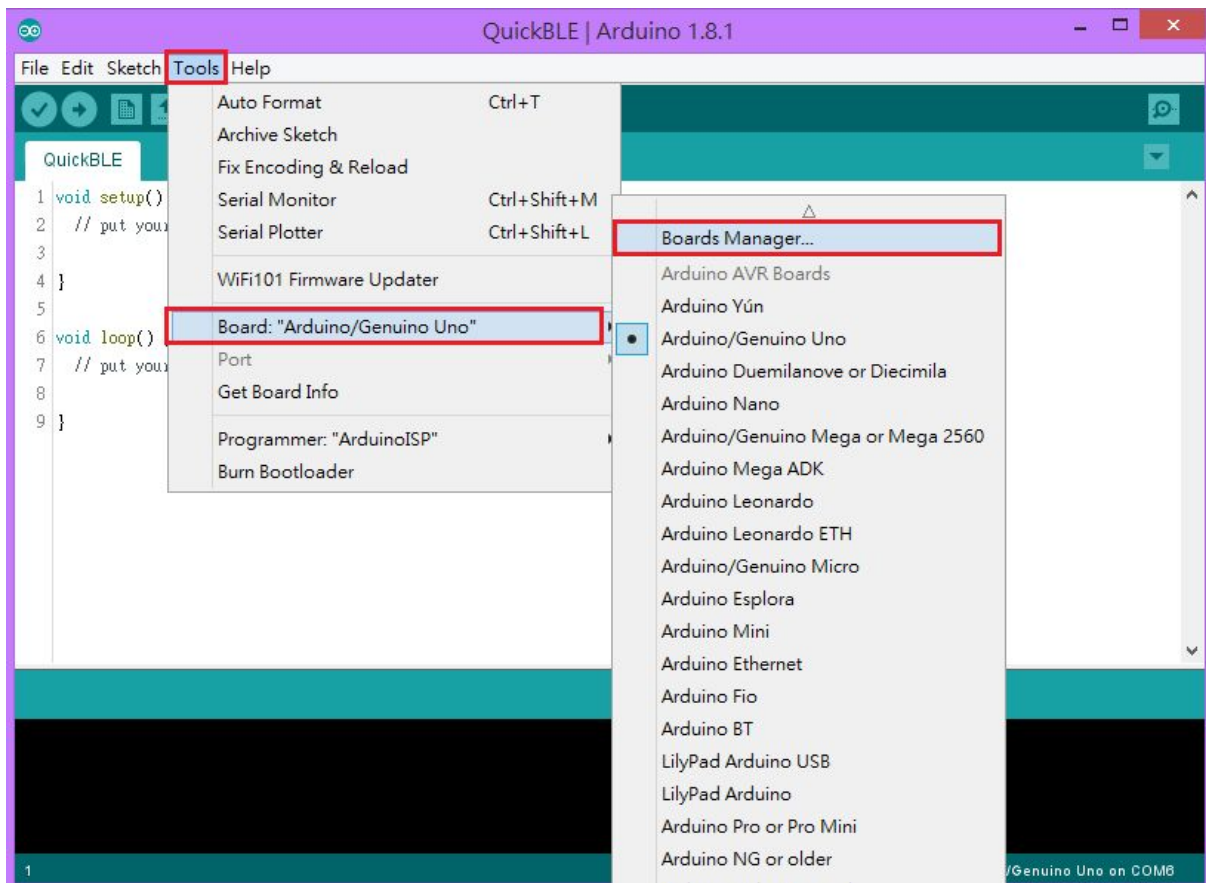
1. Download and install Arduino IDE (At least v1.6.12)
   (Download here https://www.arduino.cc/en/Main/Software)

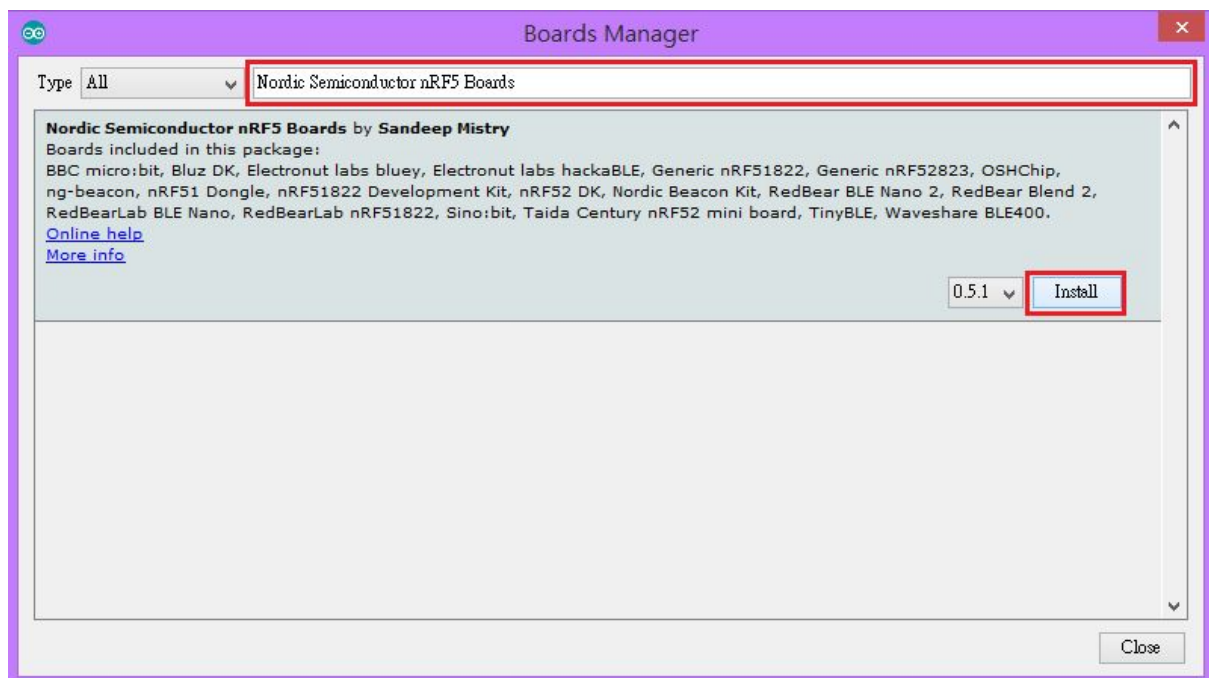2.Open Arduino IDE.Click "**File**" -> select "**Preferences**"

3.Add https://sandeepmistry.github.io/arduino-nRF5/package_nRF5_boards_index.json
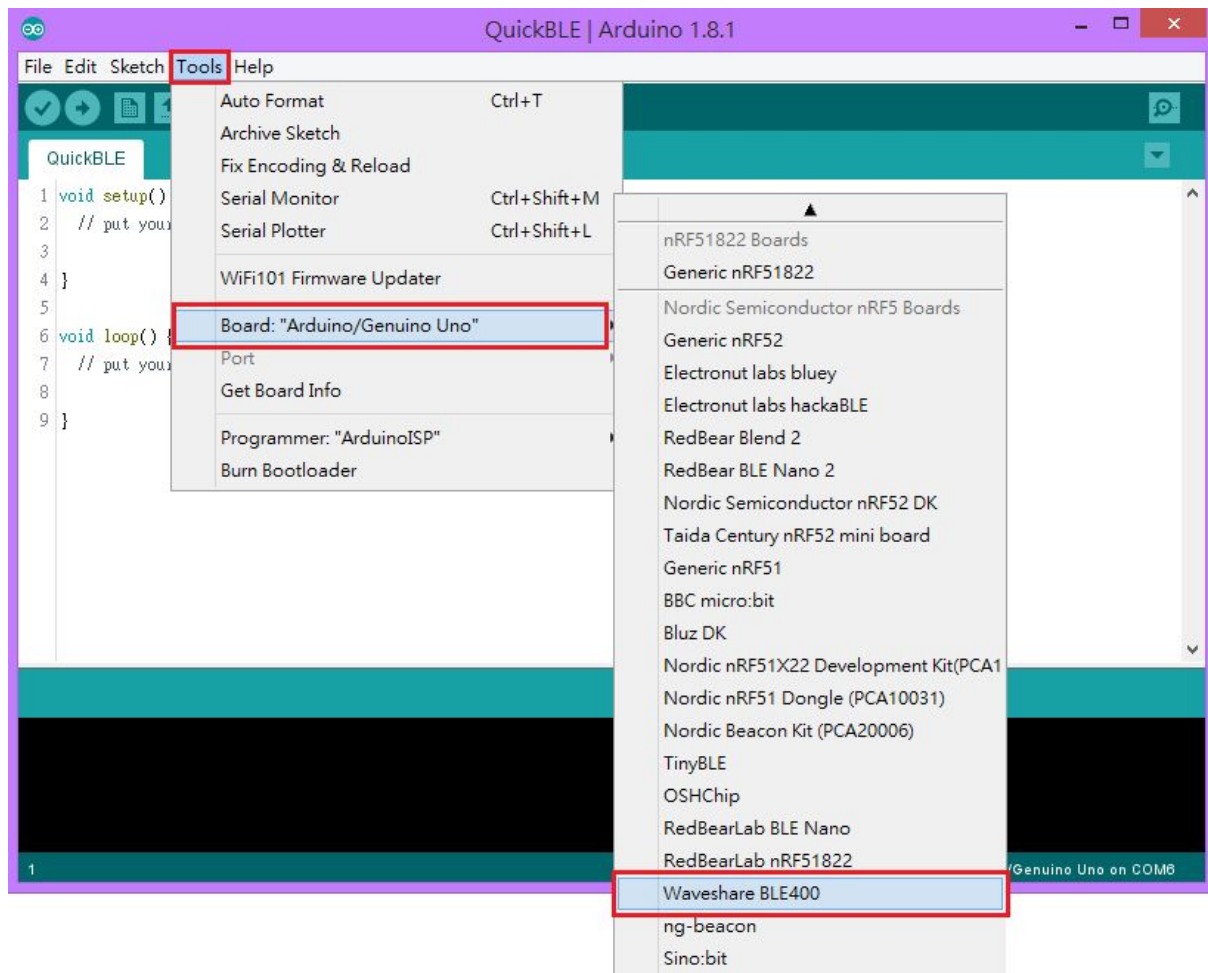to "**Additional Board Manager URL**"

4.Click **"Tools"** -> "**Board**" -> select **"Boards Manager"**

Search and install **Nordic Semiconductor nRF5 Boards**

Boards Manager

Type: All

Nordic Semiconductor nRF5 Boards

Nordic Semiconductor nRF5 Boards by **Sandeep Mistry**
Boards included in this package:
BBC micro:bit, Bluz DK, Electronut labs bluey, Electronut labs hackaBLE, Generic nRF51822, Generic nRF52823, OSHChip, ng-beacon, nRF51 Dongle, nRF51822 Development Kit, nRF52 DK, Nordic Beacon Kit, RedBear BLE Nano 2, RedBear Blend 2, RedBearLab BLE Nano, RedBearLab nRF51822, Sino:bit, Taida Century nRF52 mini board, TinyBLE, Waveshare BLE400.
Online help
More info

0.5.1   Install

Close

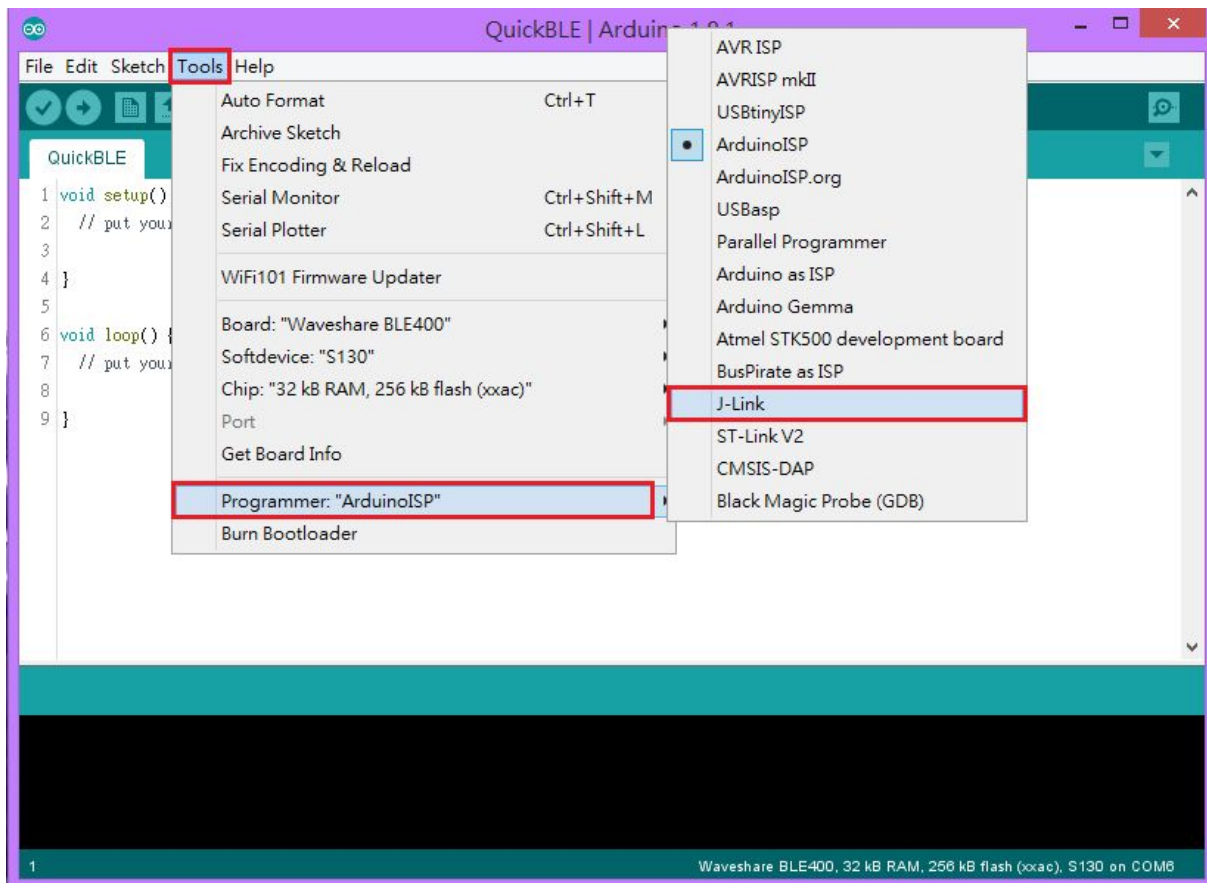5. Click **"Tools"** -> "**Board**" -> select "**Waveshare BLE400**"

Click "**Tools**" ->"**Soft device**" -> select "**S130**"
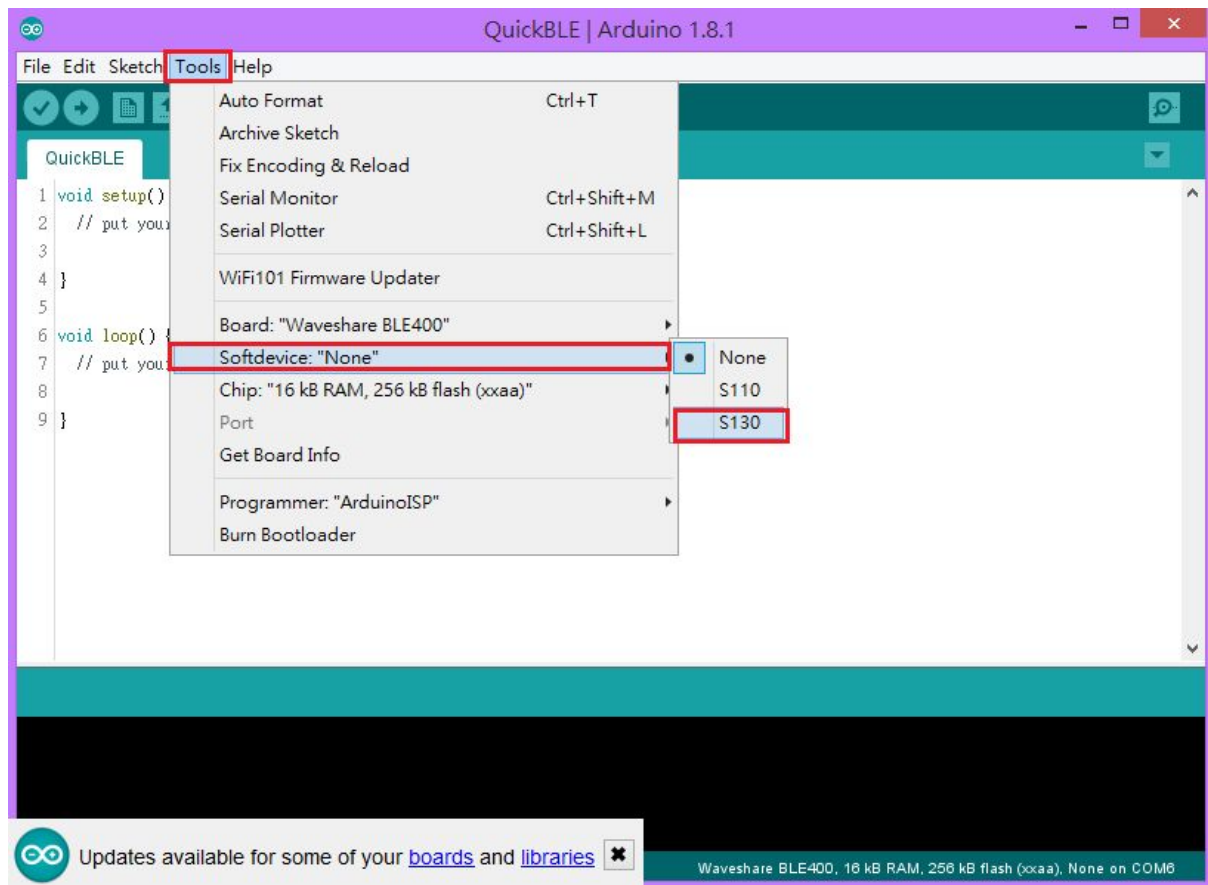
Click "**Tools**" ->"**Chip**" -> select "**32kB RAM 256kB flash(xxac)**"
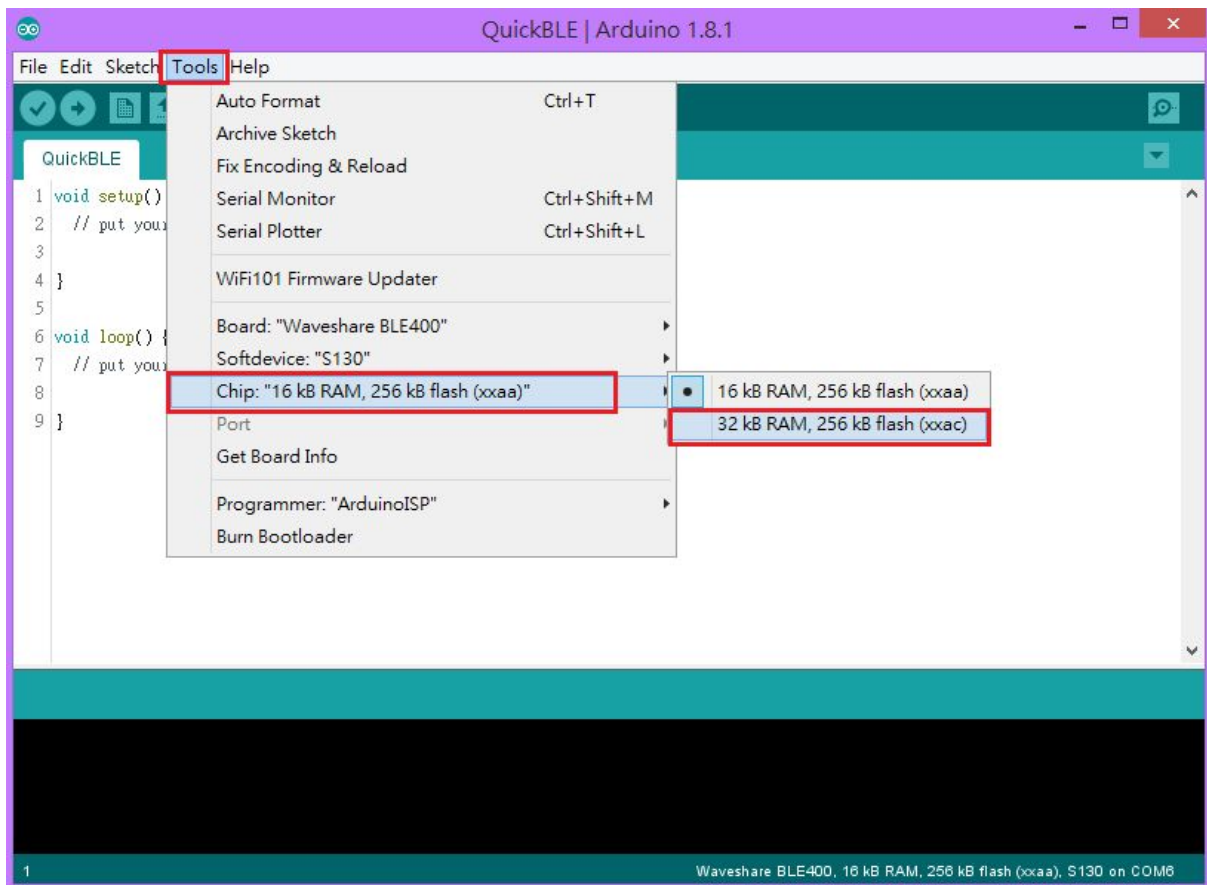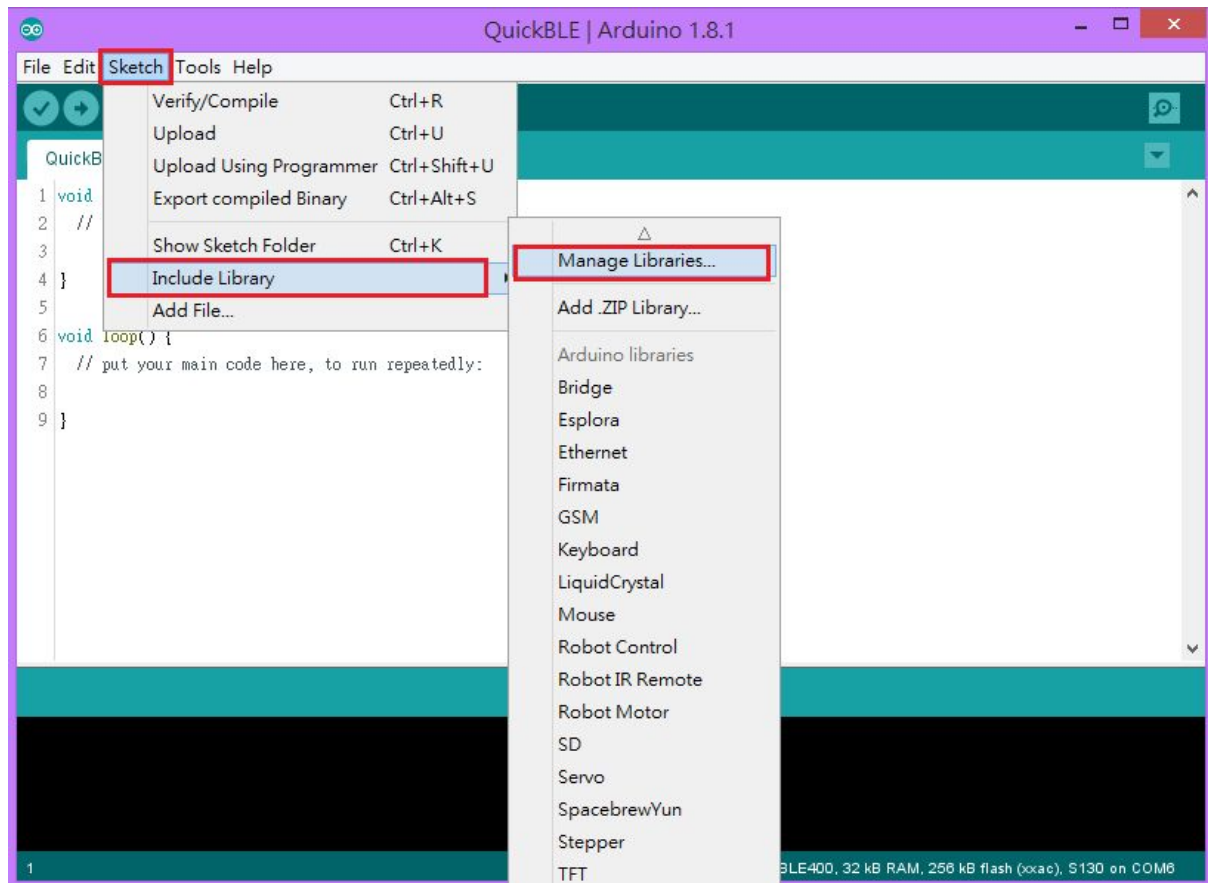
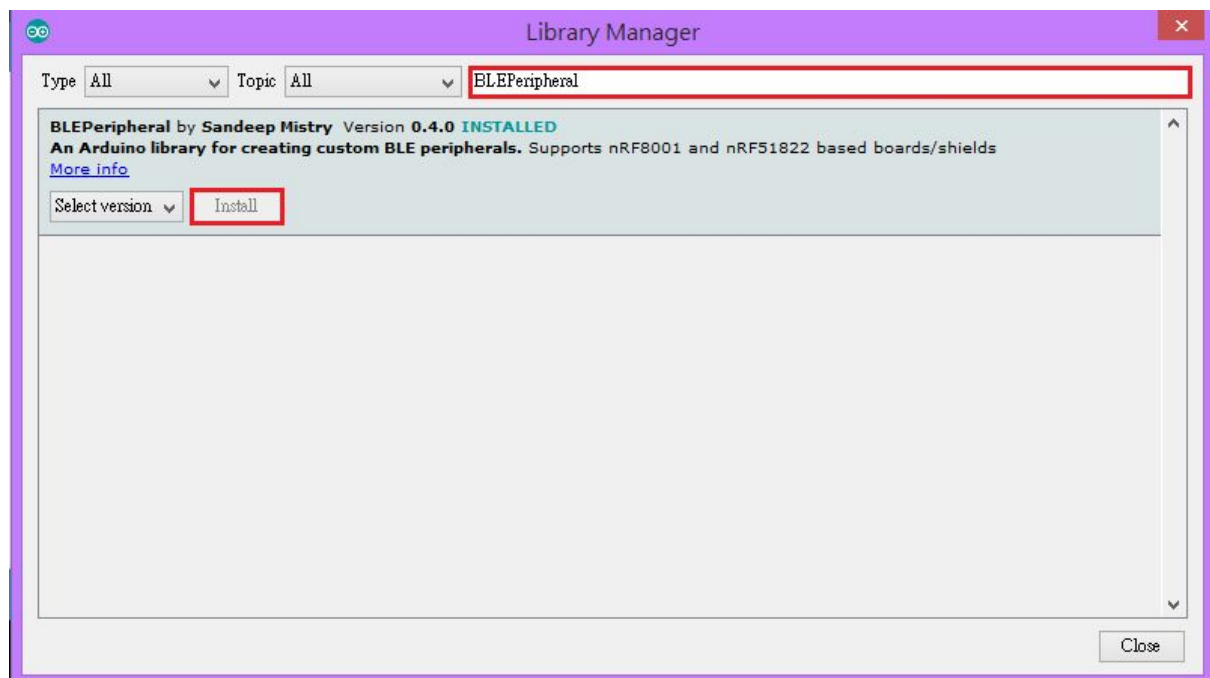Click "**Tools**" ->"**Programmer**" -> select "**J_Link**"

6. Download Arduino BLE library。

Click "**Sketch**" ->"**Include Library**" -> select "**Manage Libraries**"

Search and install **BLEPeripheral**

BLEPeripheral by **Sandeep Mistry** Version **0.4.0** INSTALLED
An Arduino library for creating custom BLE peripherals. Supports nRF8001 and nRF51822 based boards/shields

B、Install J_Link Driver

1. Download and install J_Link driver
   (Download here http://zadig.akeo.ie/downloads/zadig-2.3.exe)
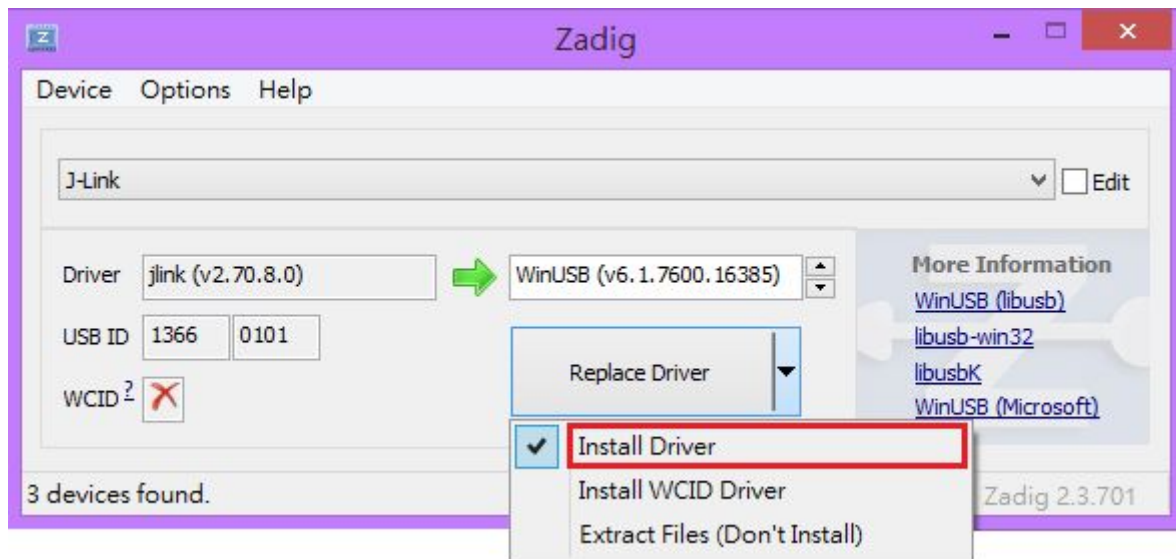
2.Open Zadig.Click "**Options**" -> select "**List All Devices**"
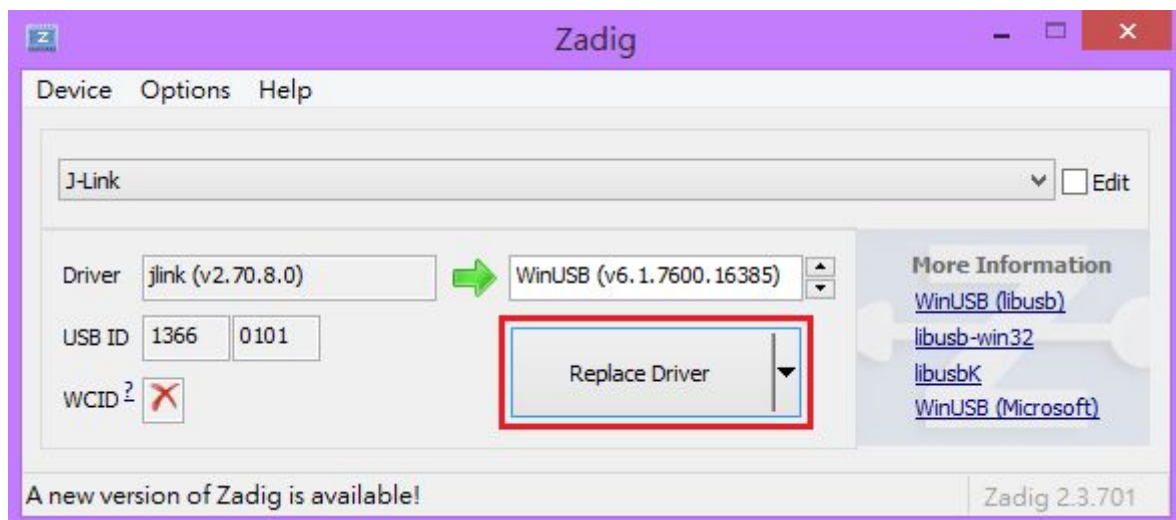

Select **J_Link** (Please connect J_link device before you select)
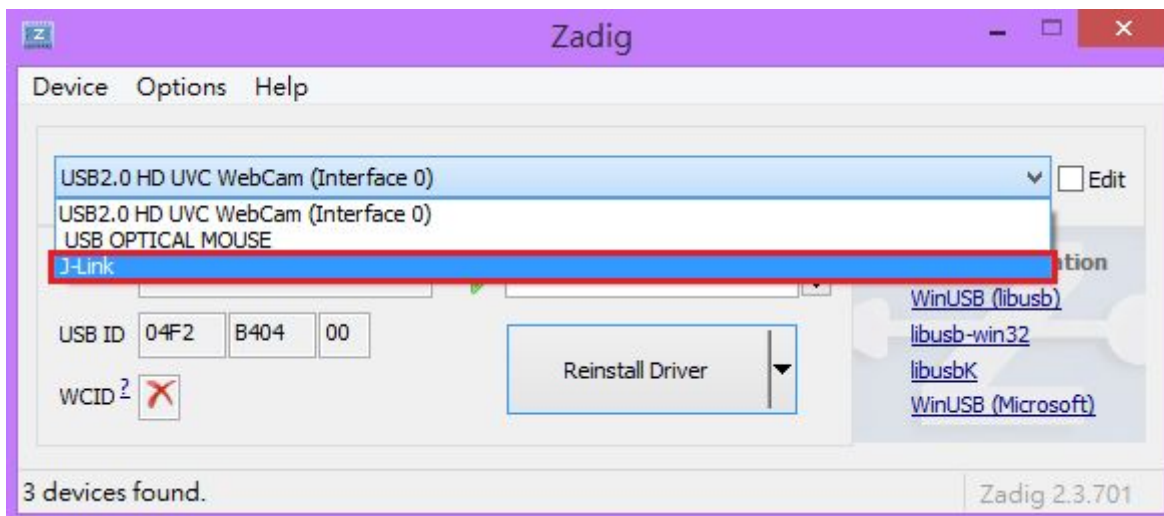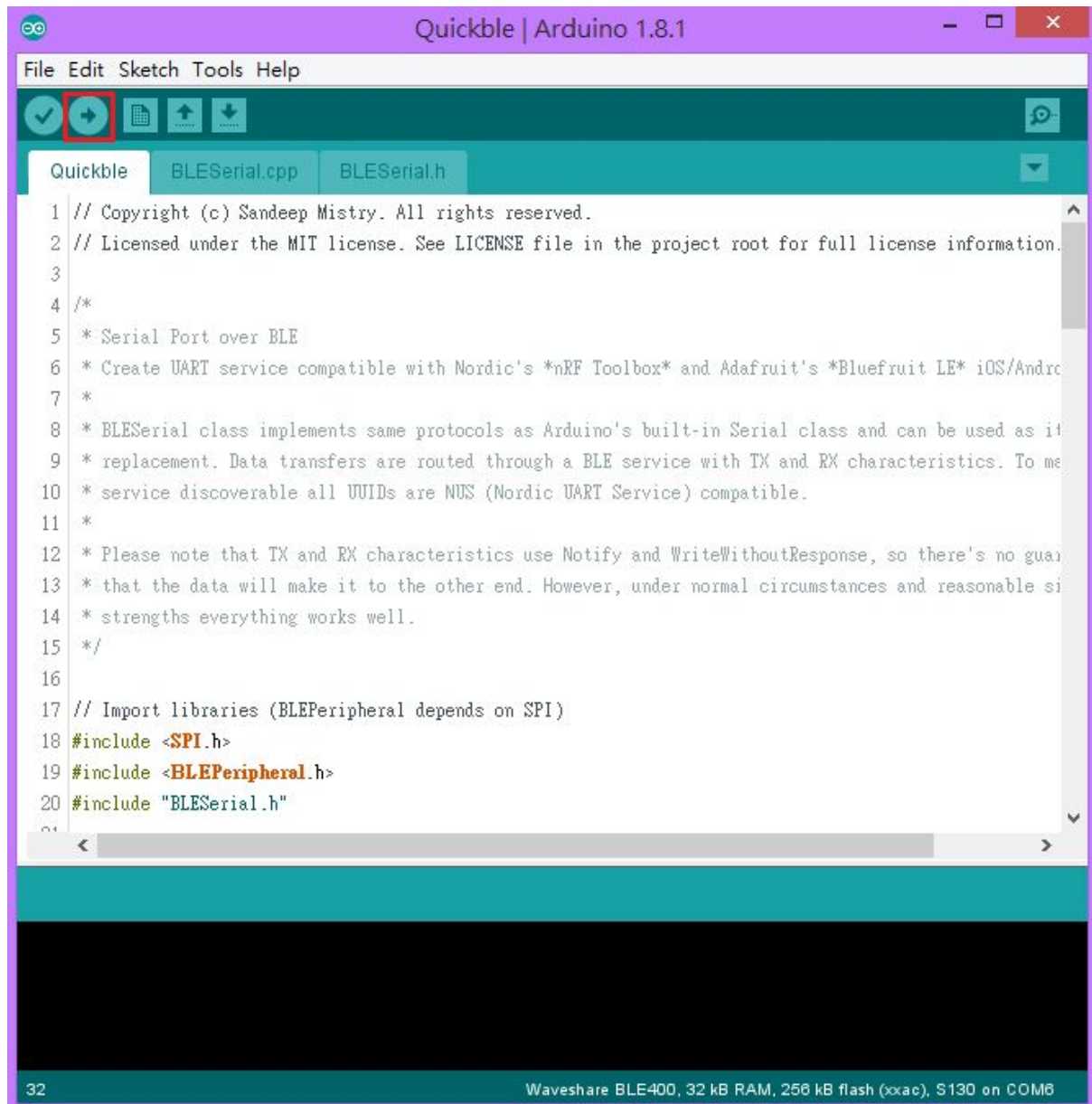
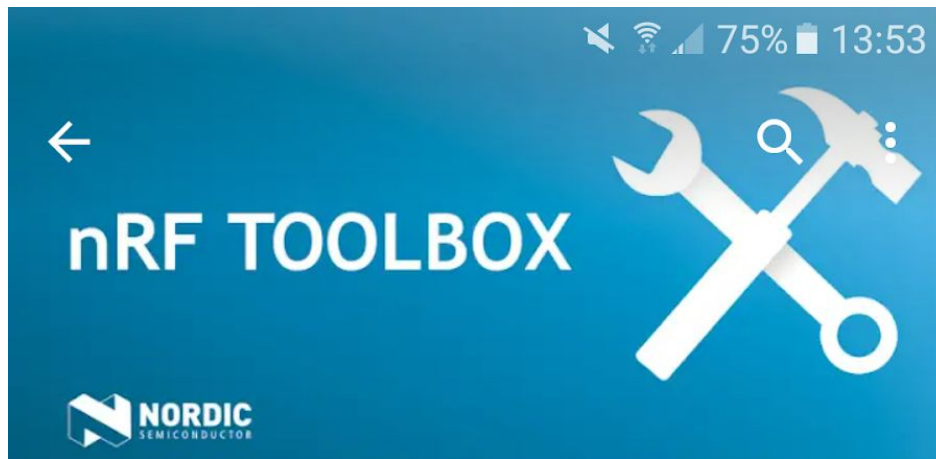Select "**Install Driver**"

Click "**Replace Driver**" start install

C、Arduino IDE Upload

Open example "**Quickble.ino**" and Upload

D、Install Application

Download and install **nRF Toolbox** Application

Open **nRF Toolbox** , Click **"UART"**
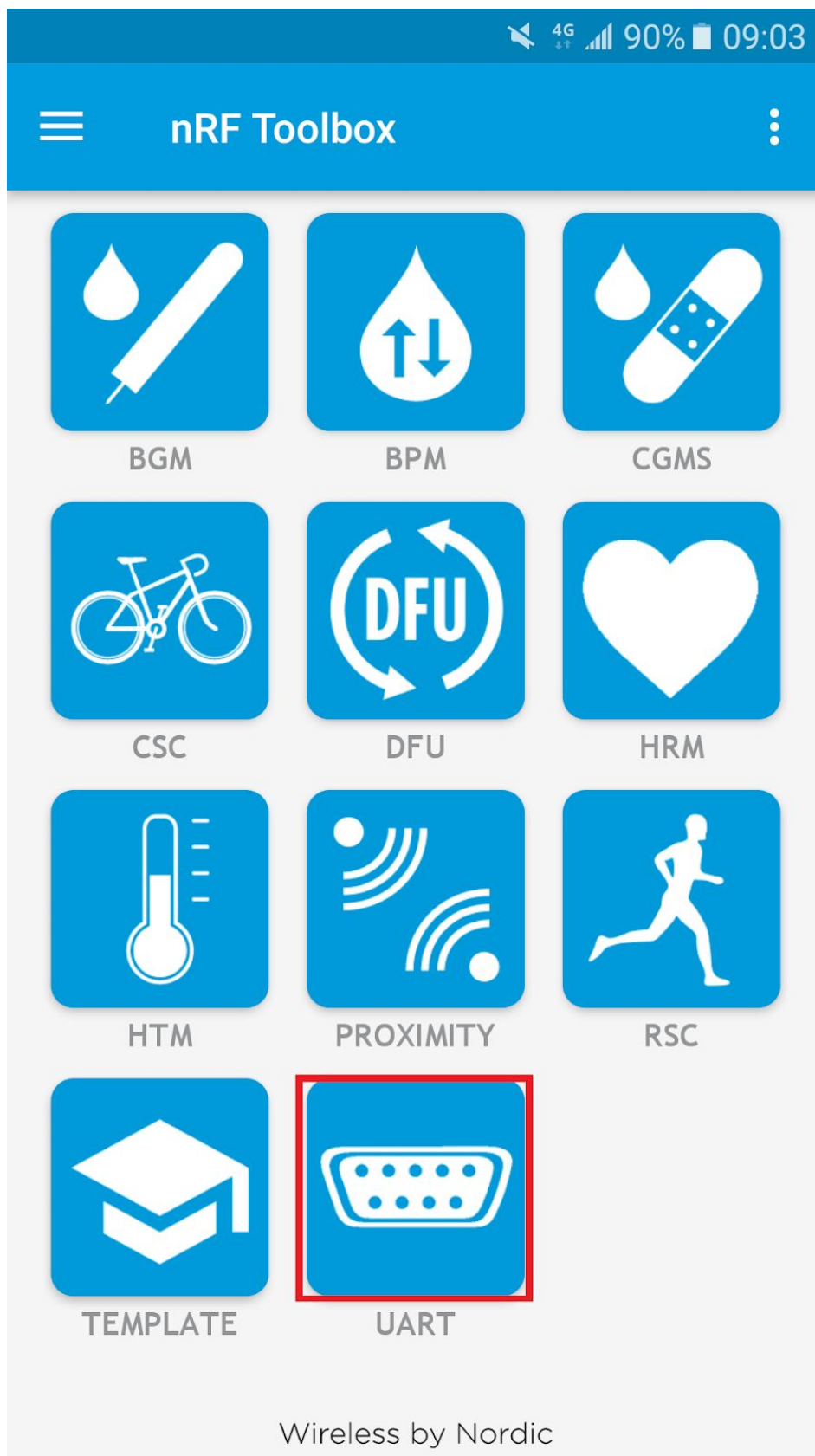
Open **Bluetooth**
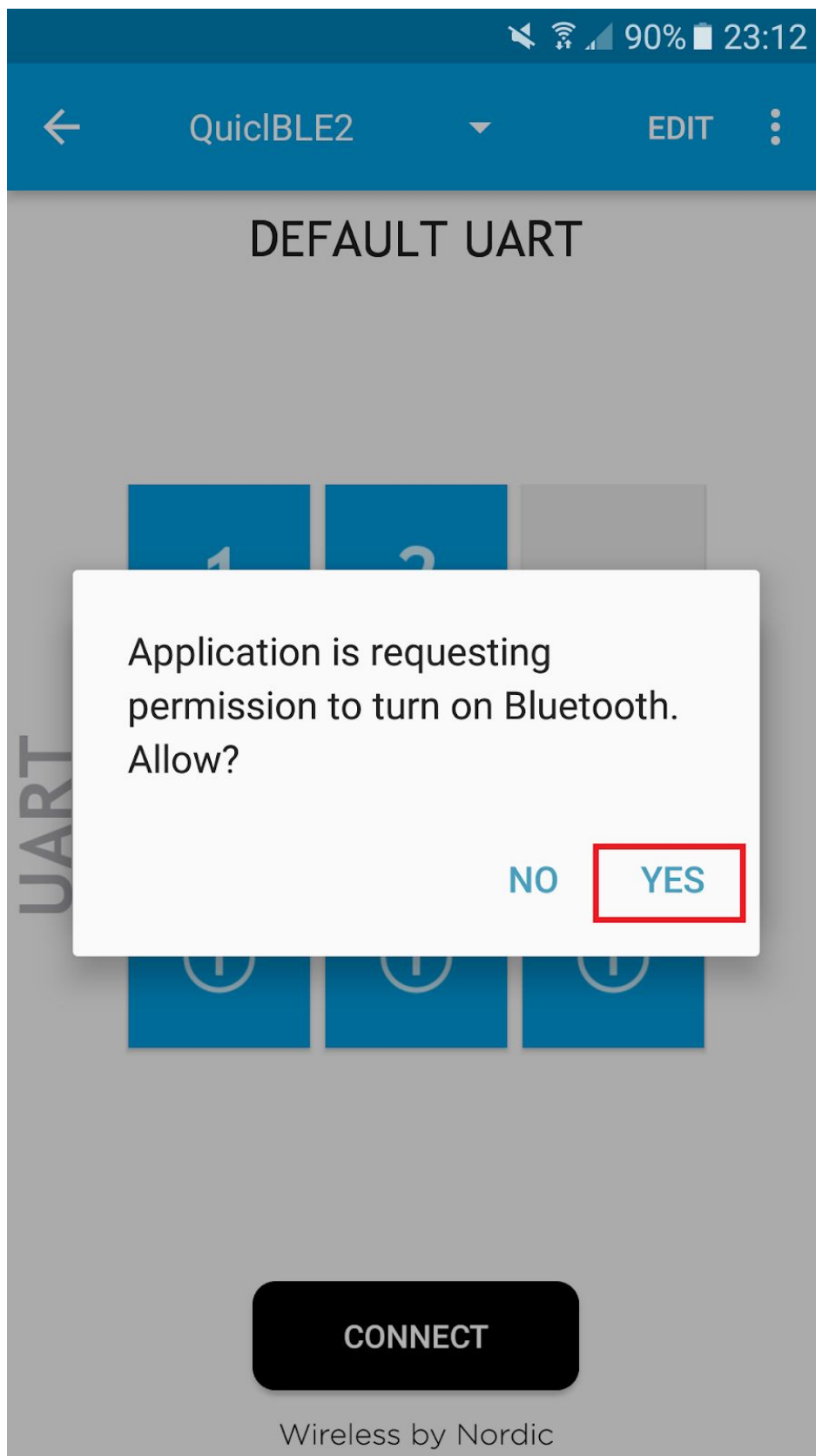
Click "**CONNECT**"

Select your device

Connect success

← QuiclBLE2 ▼ EDIT ⋮
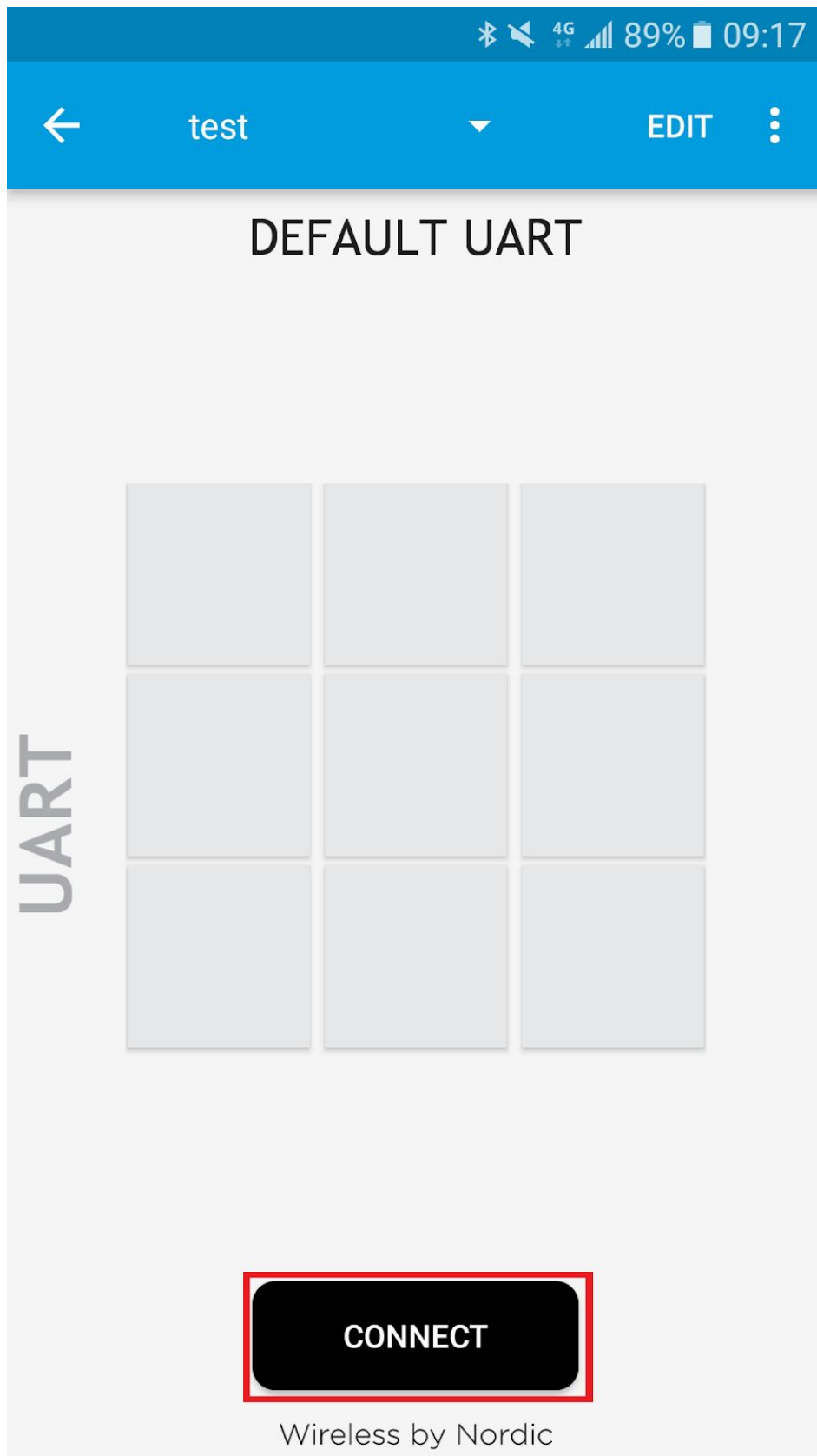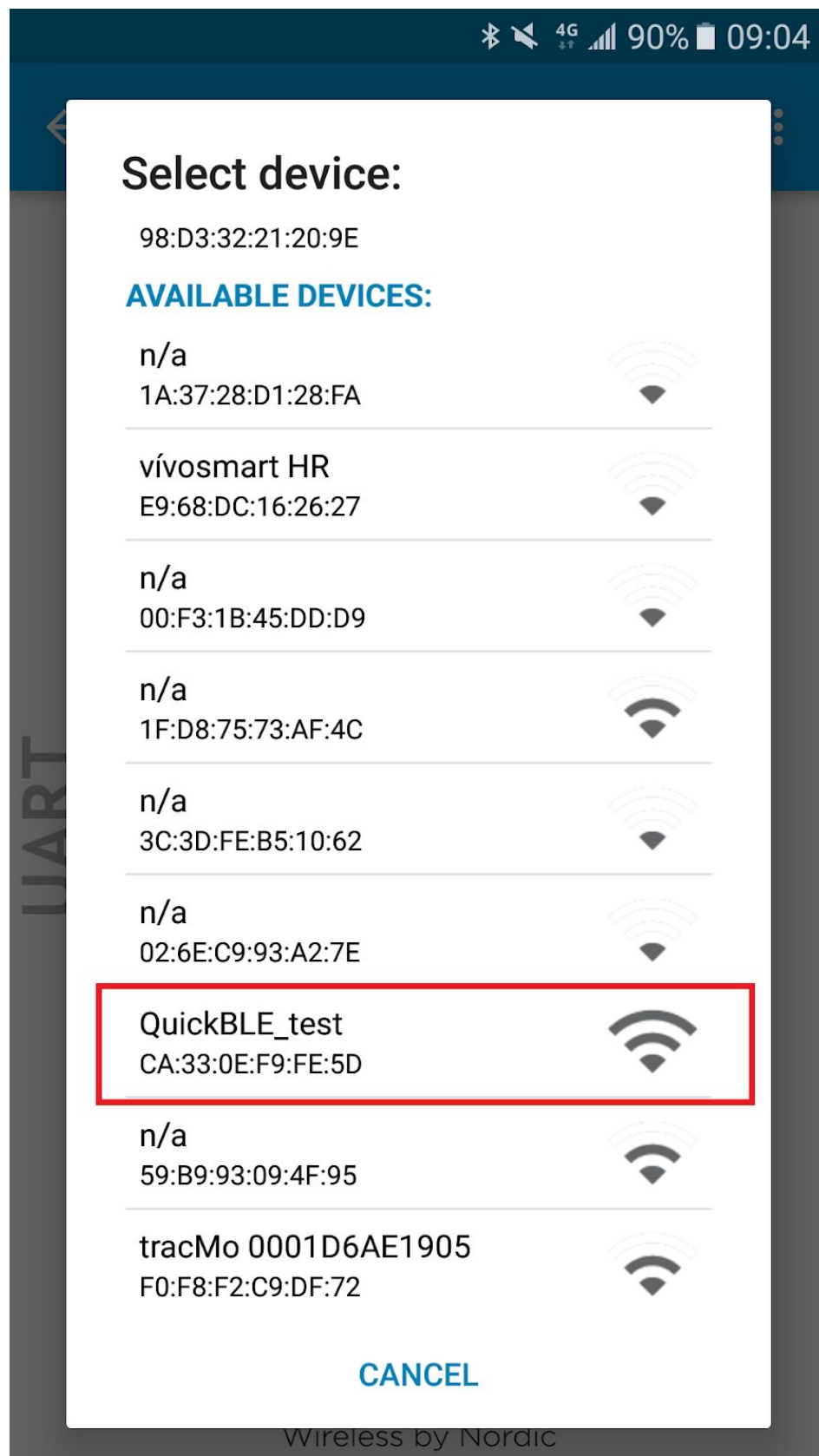
09:04:27.919 Creating service...
09:04:27.931 Binding to the service...
09:04:27.951 Service started
09:04:27.969 Connecting...
09:04:27.977 gatt = device.connectGatt(autoConnect = false)
09:04:28.089 Activity bound to the service
09:04:28.816 [Callback] Connection state changed with status: 0 and new state: 2 (CONNECTED)
09:04:28.830 Connected to CA:33:0E:F9:FE:5D
09:04:28.899 Discovering Services...
09:04:28.907 gatt.discoverServices()
09:04:28.968 Services Discovered
09:04:28.973 Primary service found
09:04:29.030 gatt.setCharacteristicNotification(6e400003-b5a3-f393-e0a9-e50e24dcca9e, true)
09:04:29.041 Enabling notifications for 6e400003-b5a3-f393-e0a9-e50e24dcca9e
09:04:29.099 gatt.writeDescriptor(00002902-0000-1000-8000-00805f9b34fb, value=0x01-00)
09:04:29.217 Data written to descr. 00002902-0000-1000-8000-00805f9b34fb, value: (0x) 01-00
09:04:29.225 Notifications enabled

UART

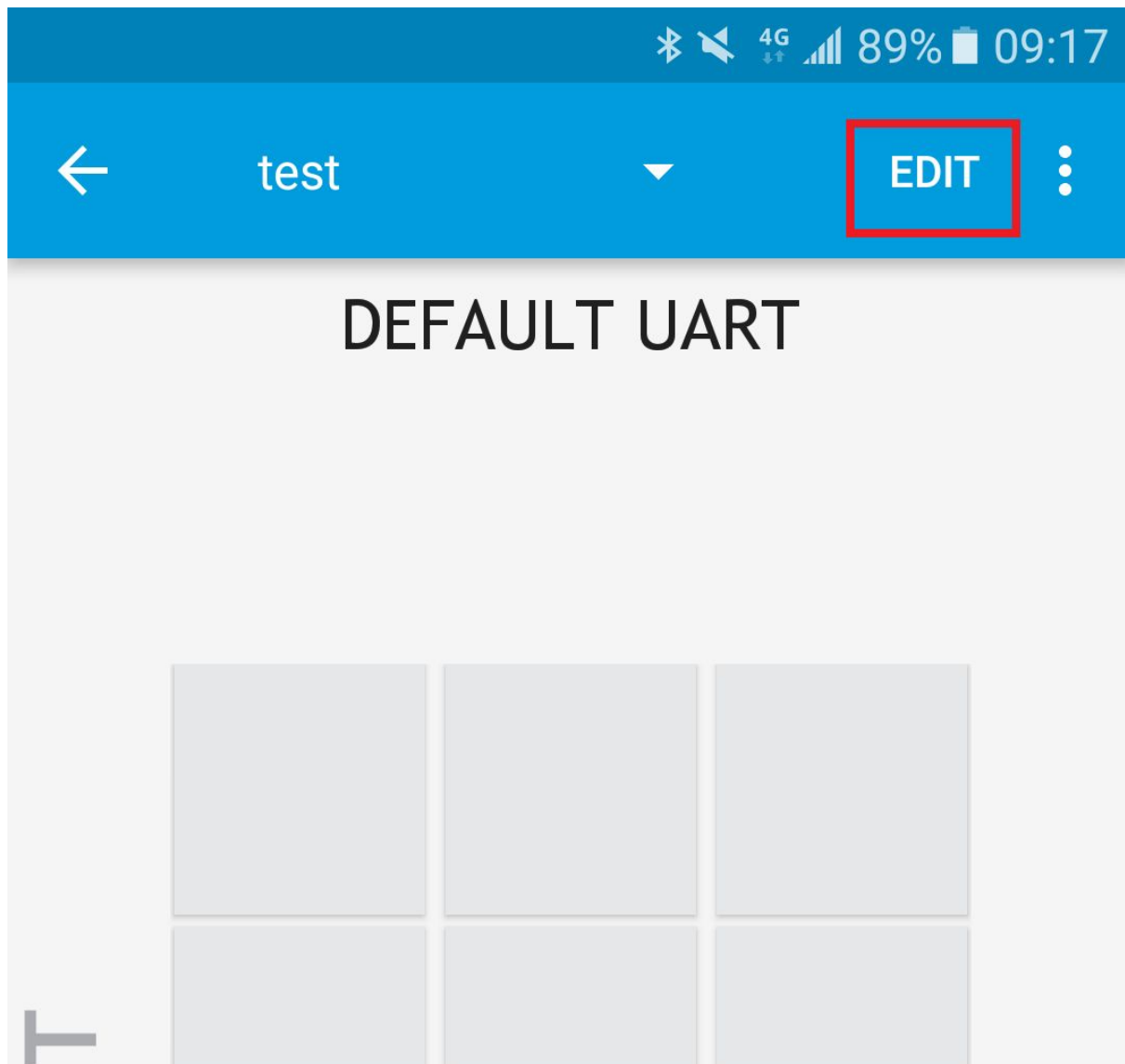Write command   SEND

The QuickBLE device can be controlled by entering the instruction below **"Write command"** and clicking **"SEND"** to transfer the command.
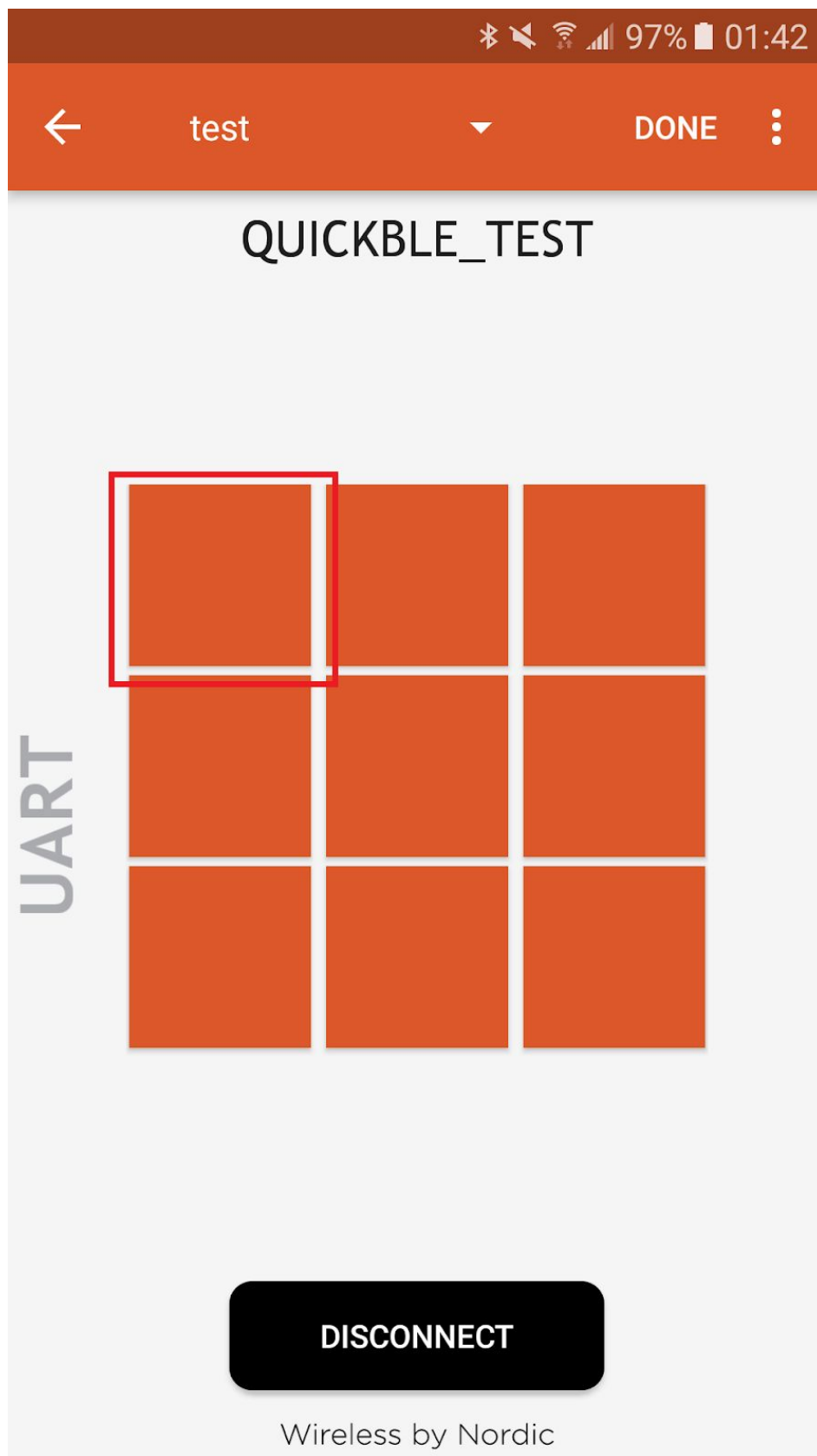
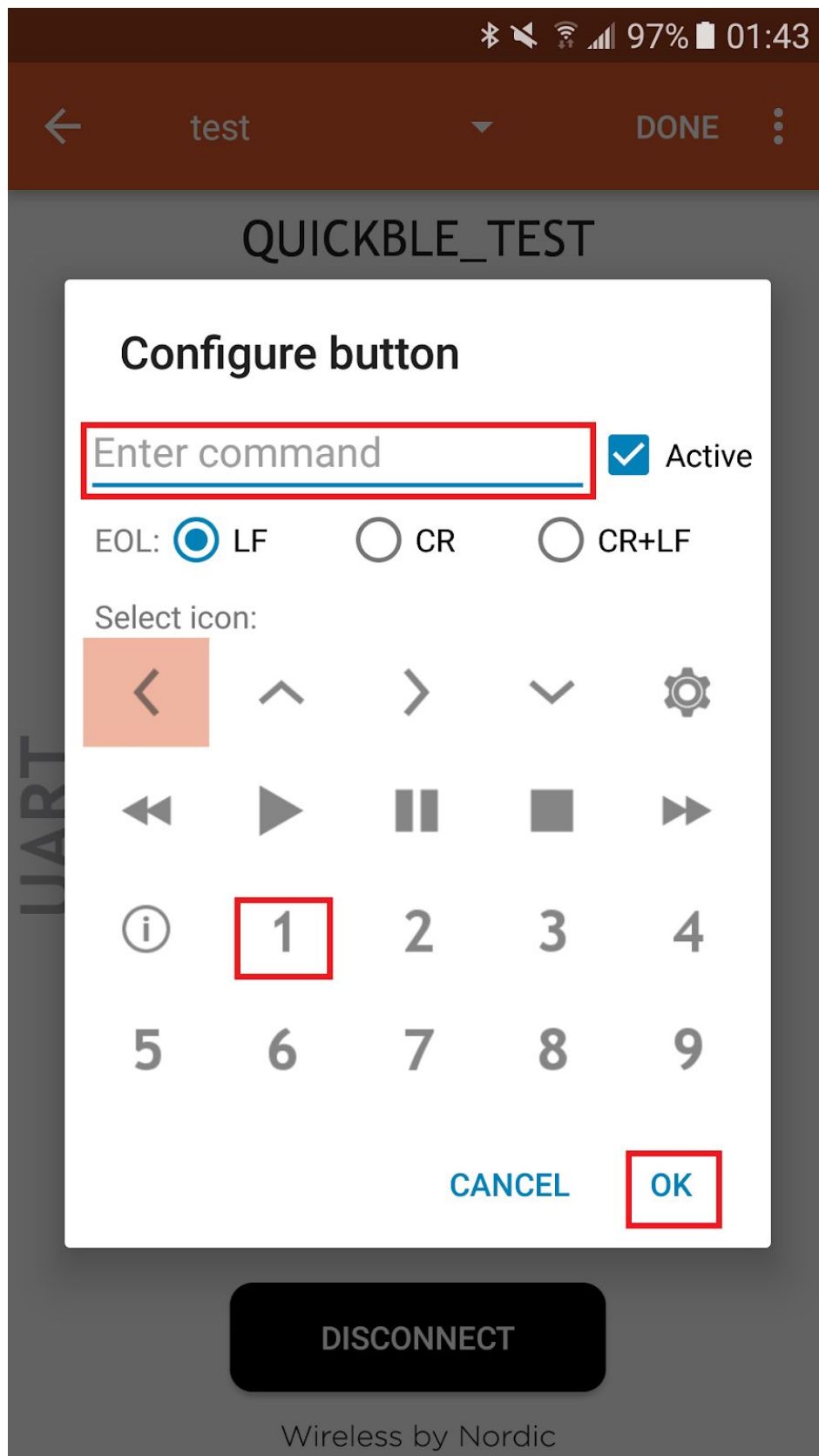| Write command	SEND

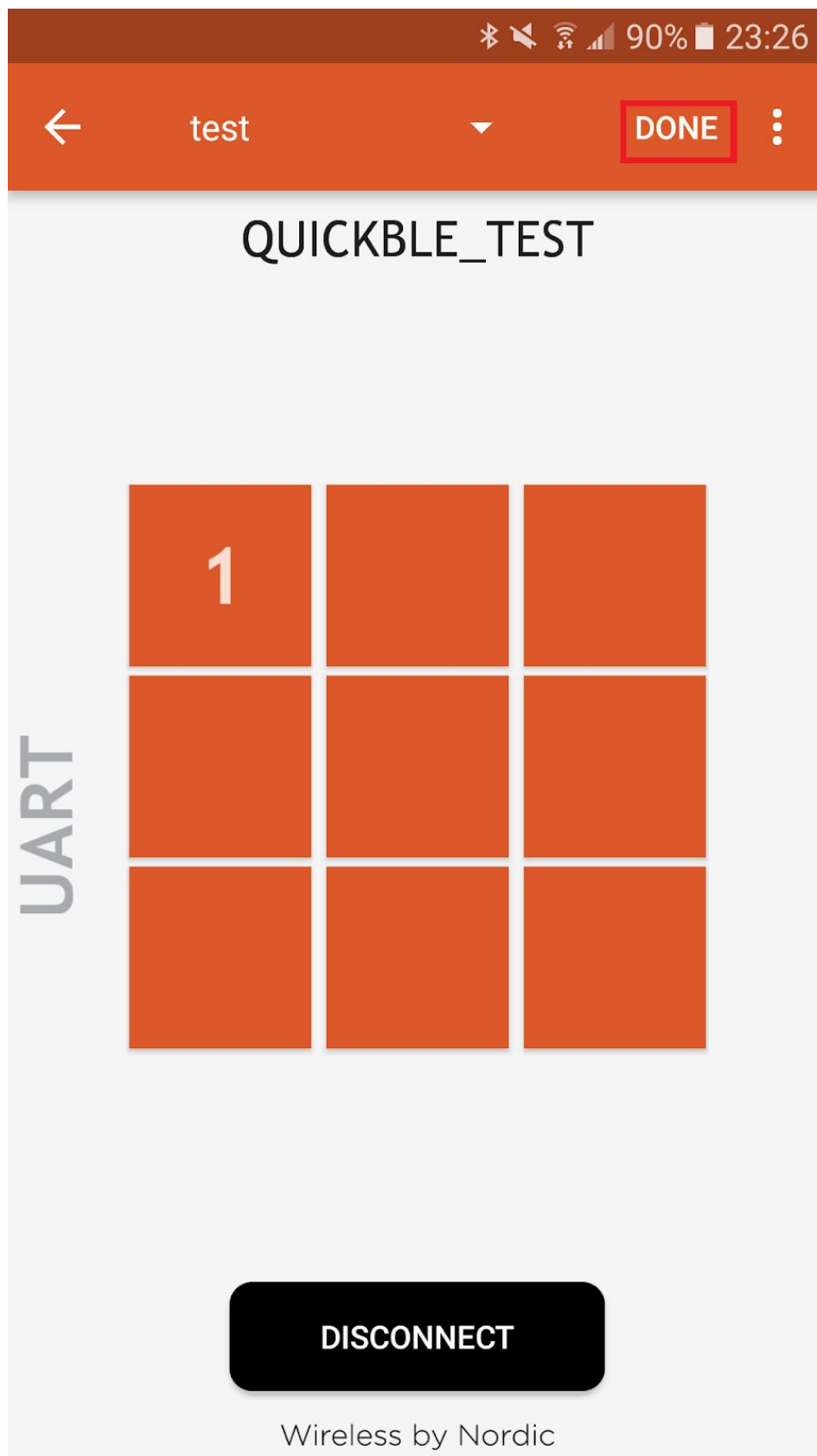Or click on the **"EDIT"** to edit button
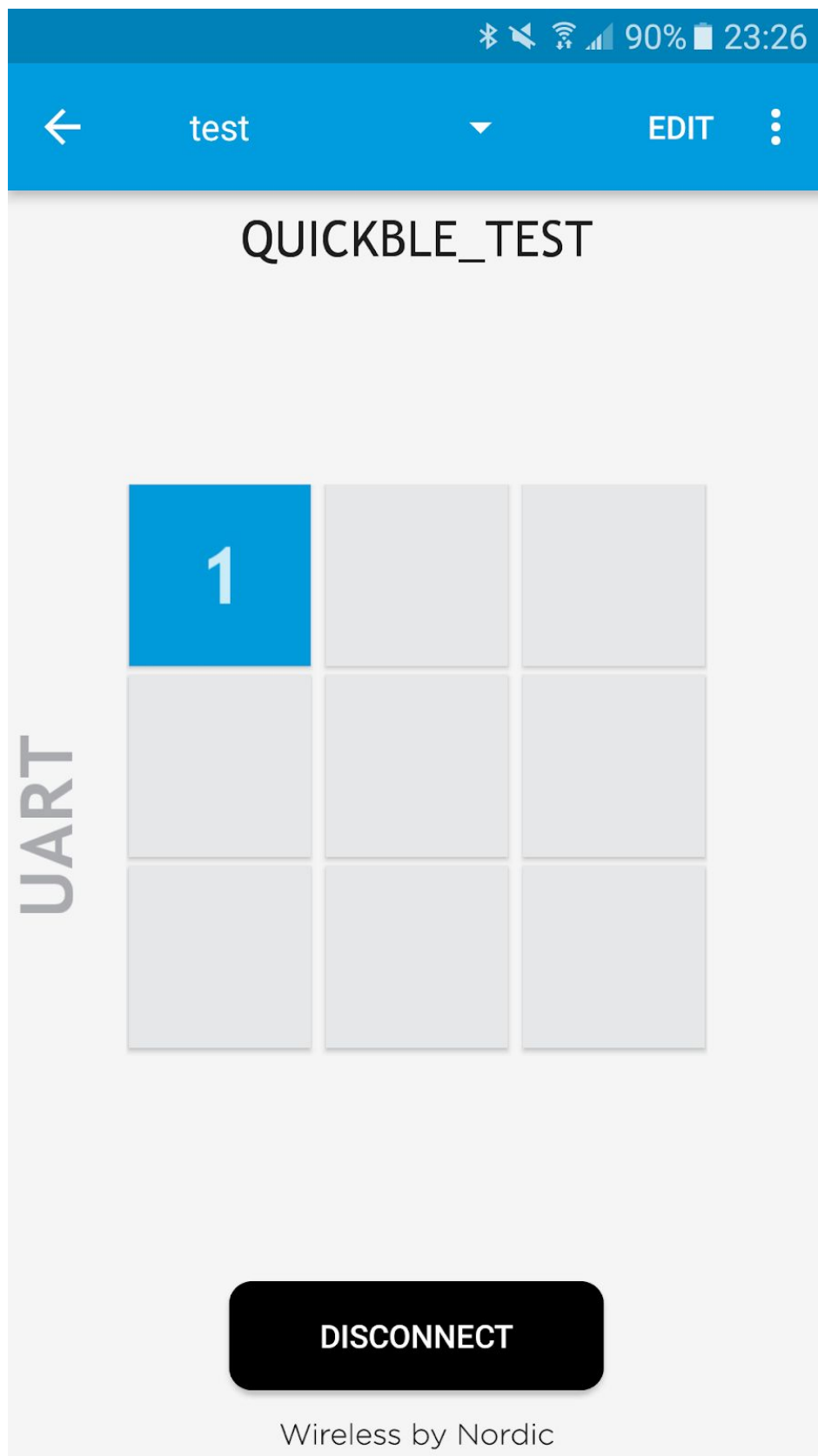
Click on any square to create button.

To "**Enter command**" enter the instruction, select the button symbol in "**Select icon**", and click "**OK**" when the setting is completed.

Click "**DONE**" to complete the button settings.

The QuickBLE device can be controlled by clicking the button.

E、Command

Command	Action
buzzerON	Open Buzzer
buzzerOFF	Close Buzzer
usb1ON	Open USB1
usb1OFF	Close USB1
usb2ON	Open USB2
usb2OFF	Close USB2
relay1ON	Open Relay1
relay1OFF	Close Relay1
relay2ON	Open Relay2
relay2OFF	Close Relay2
DO1HIGH	Pin6 Output 5V
DO1LOW	Pin6 Output 0V
DO2HIGH	Pin7 Output 5V
DO2LOW	Pin7 Output 0V
Pin1State	Pin 1 Input 5V,Respond "**PIN1 is HIGH**" Pin 1 Input 0V,Respond "**PIN1 is LOW**"
Pin2State	Pin 2 Input 5V,Respond "**PIN2 is HIGH**" Pin 2 Input 0V,Respond "**PIN2 is LOW**"
Pin3State	Pin 3 Input 5V,Respond "**PIN3 is HIGH**" Pin 3 Input 0V,Respond "**PIN3 is LOW**"