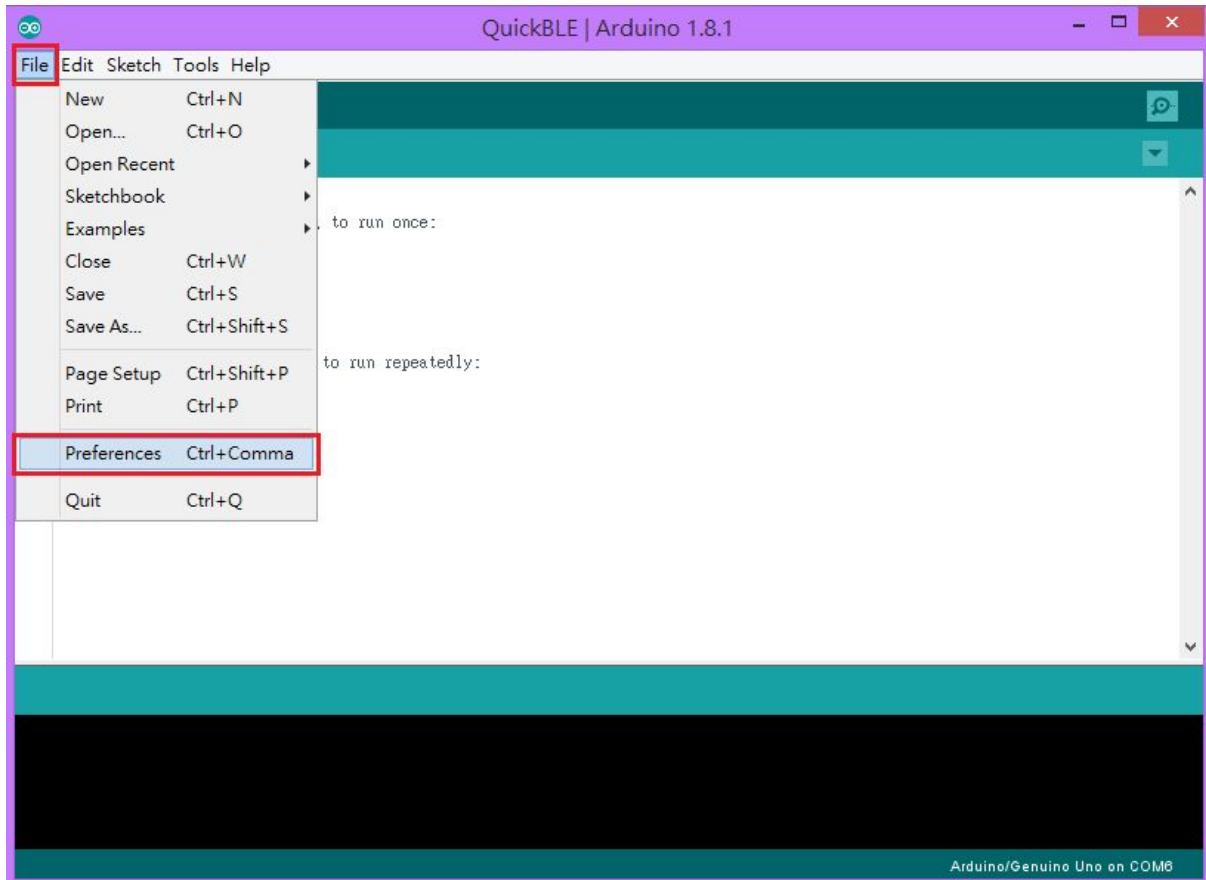


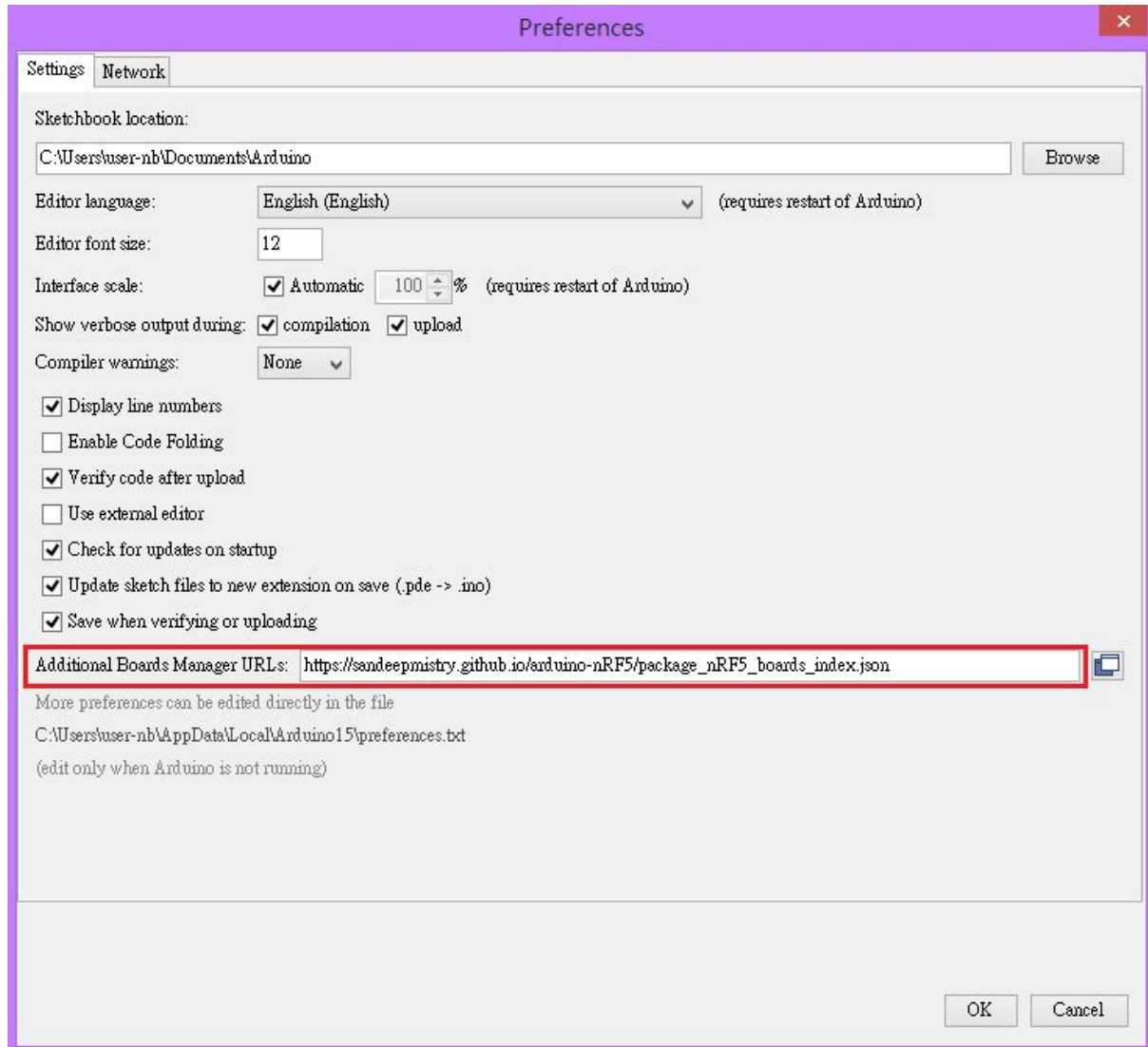
Using QuickBLE by Arduino IDE

A、Arduino IDE Basic Setting QuickBLE

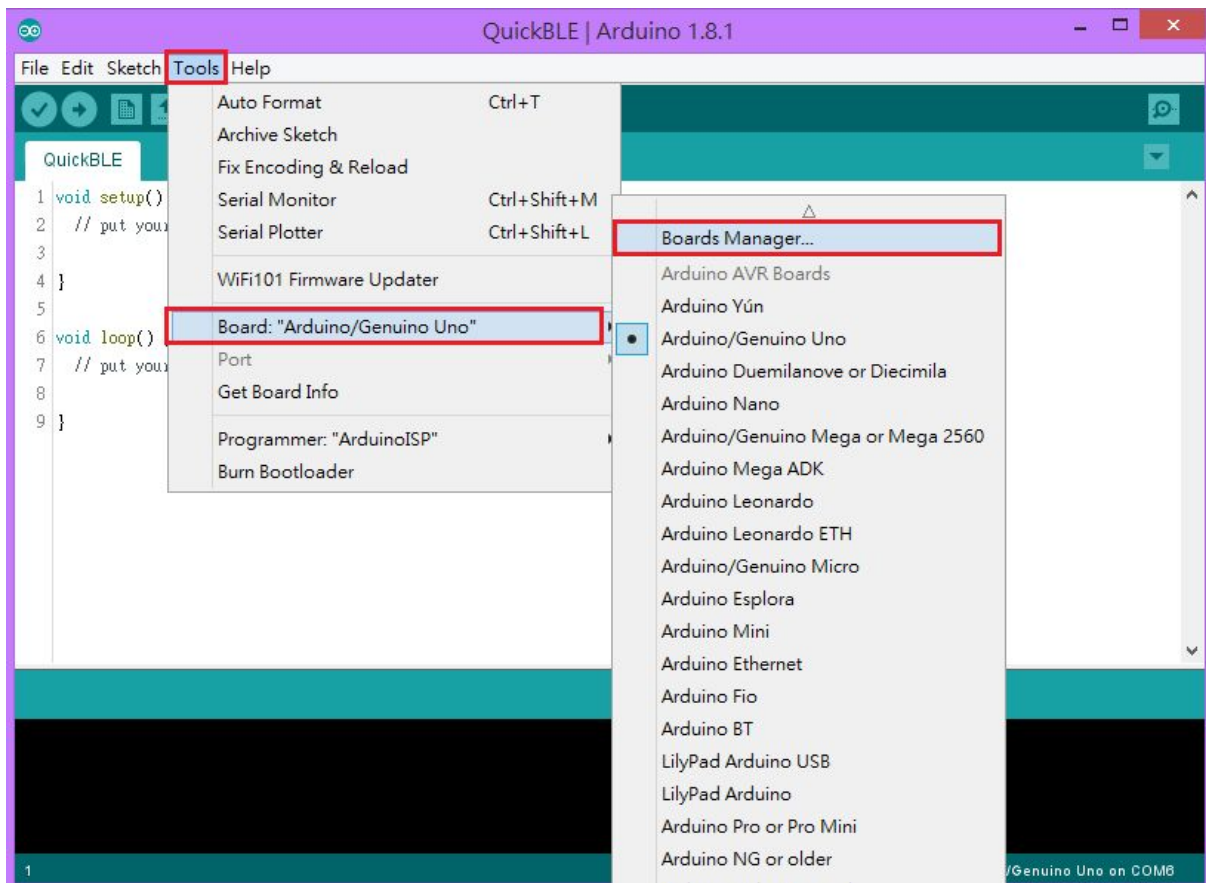
1. Download and install Arduino IDE (At least v1.6.12)
(Download here <https://www.arduino.cc/en/Main/Software>)
2. Open Arduino IDE. Click "**File**" -> select "**Preferences**"



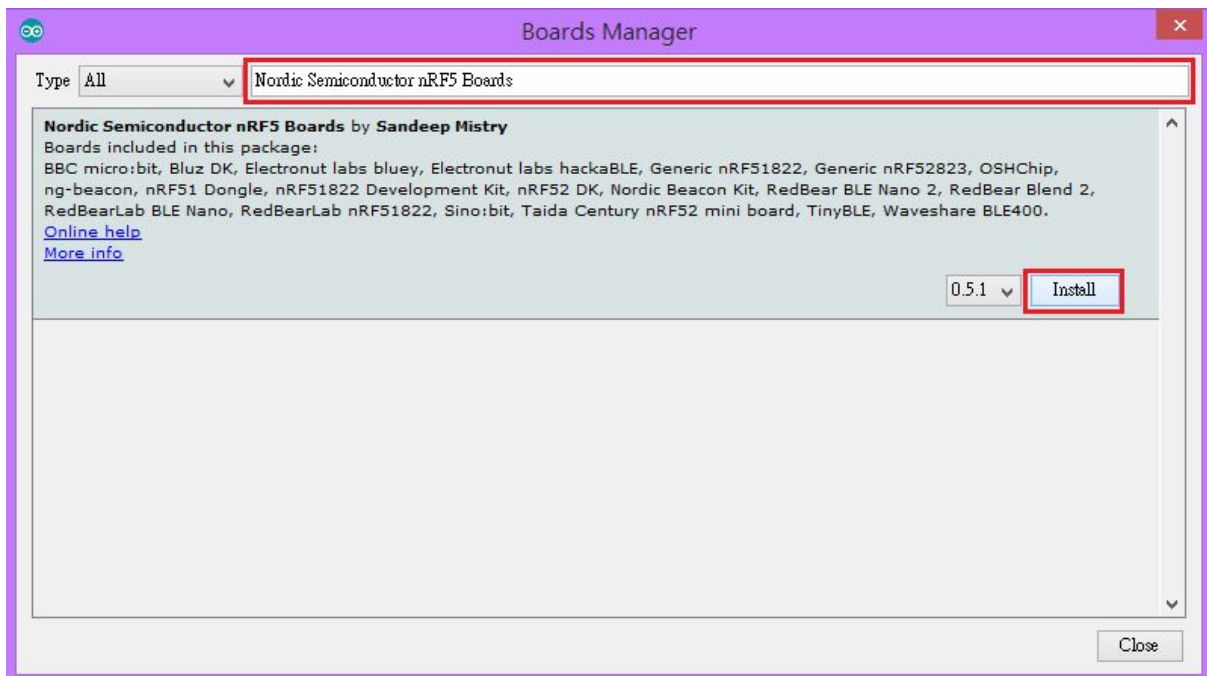
Add https://sandeepmistry.github.io/arduino-nRF5/package_nRF5_boards_index.json to "Additional Board Manager URL"



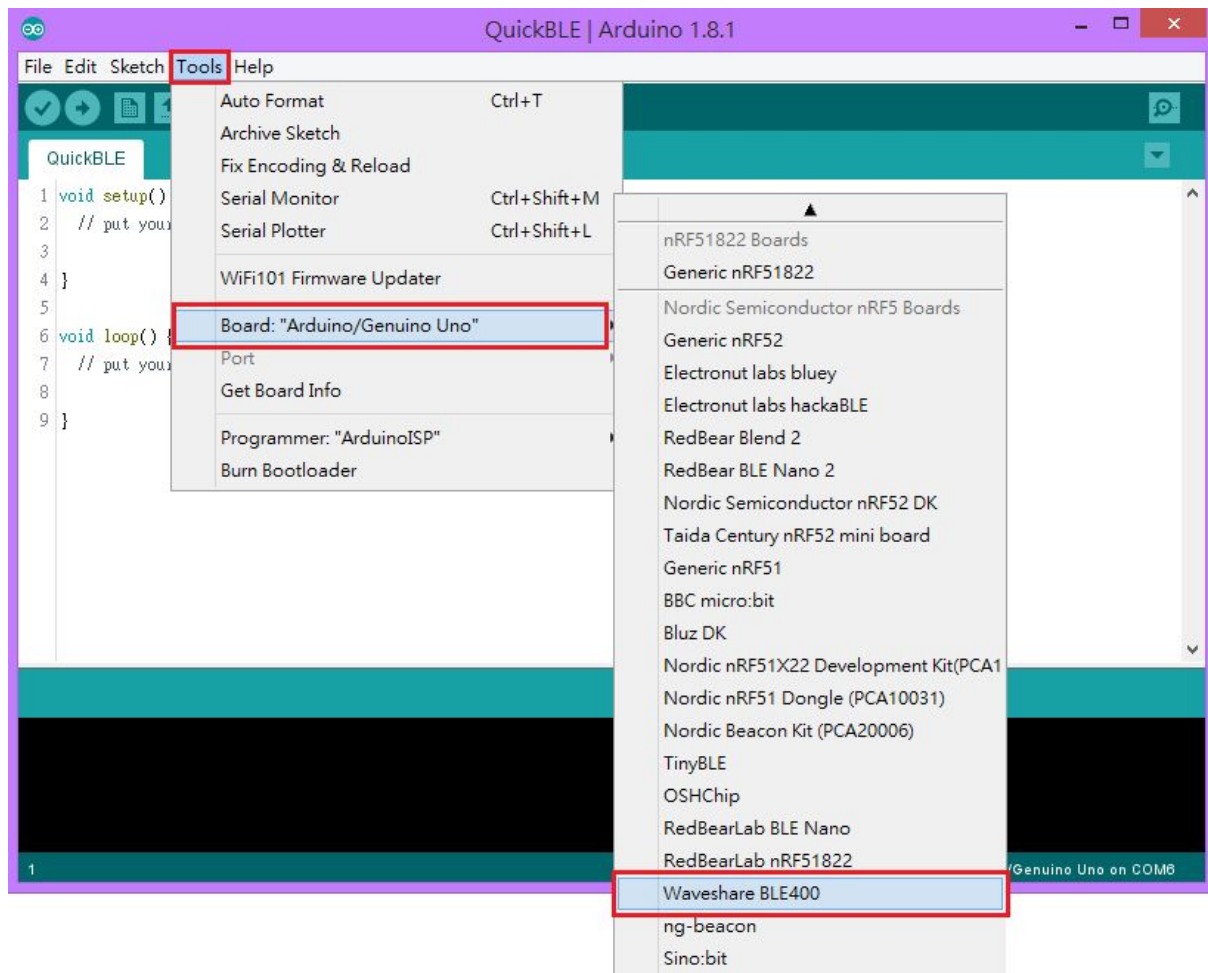
3. Click "Tools" -> "Board" -> select "Boards Manager"



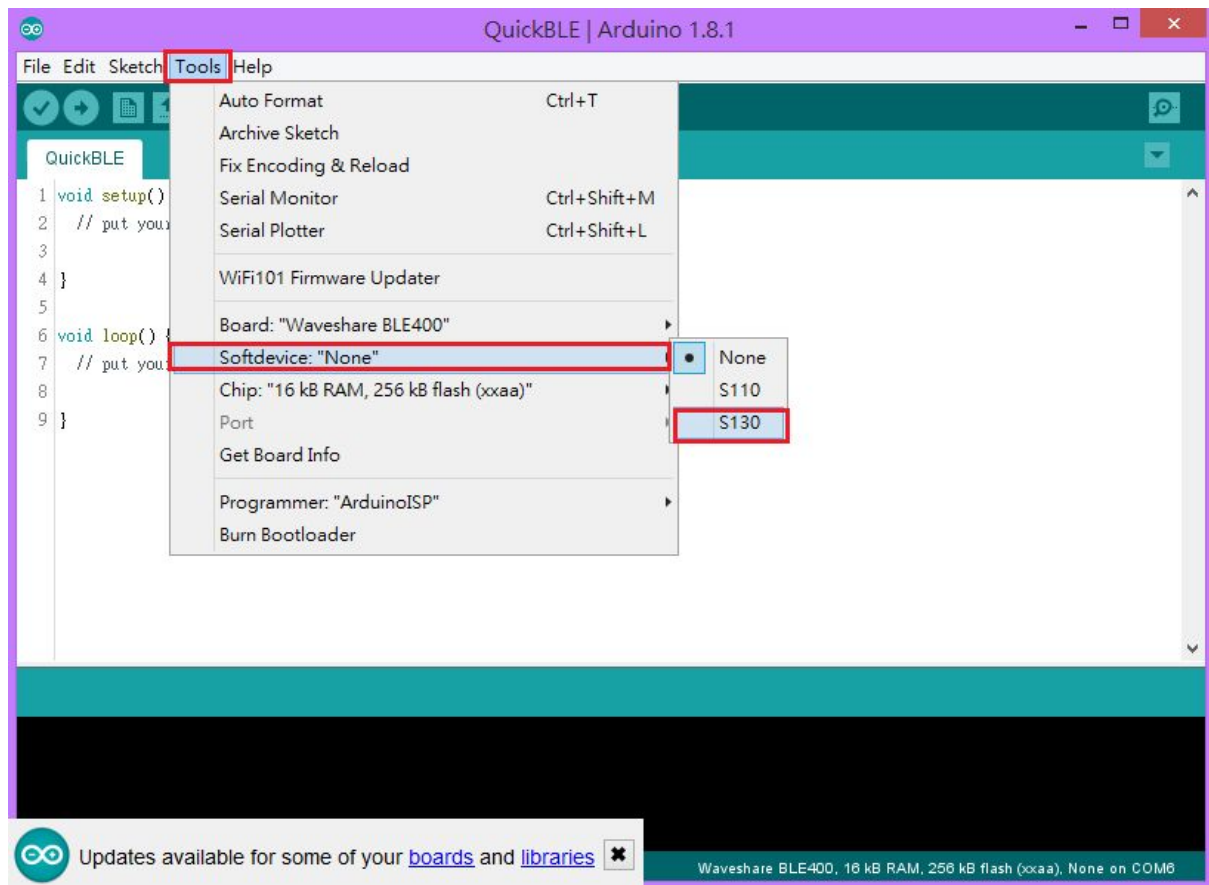
Search and install **Nordic Semiconductor nRF5 Boards**



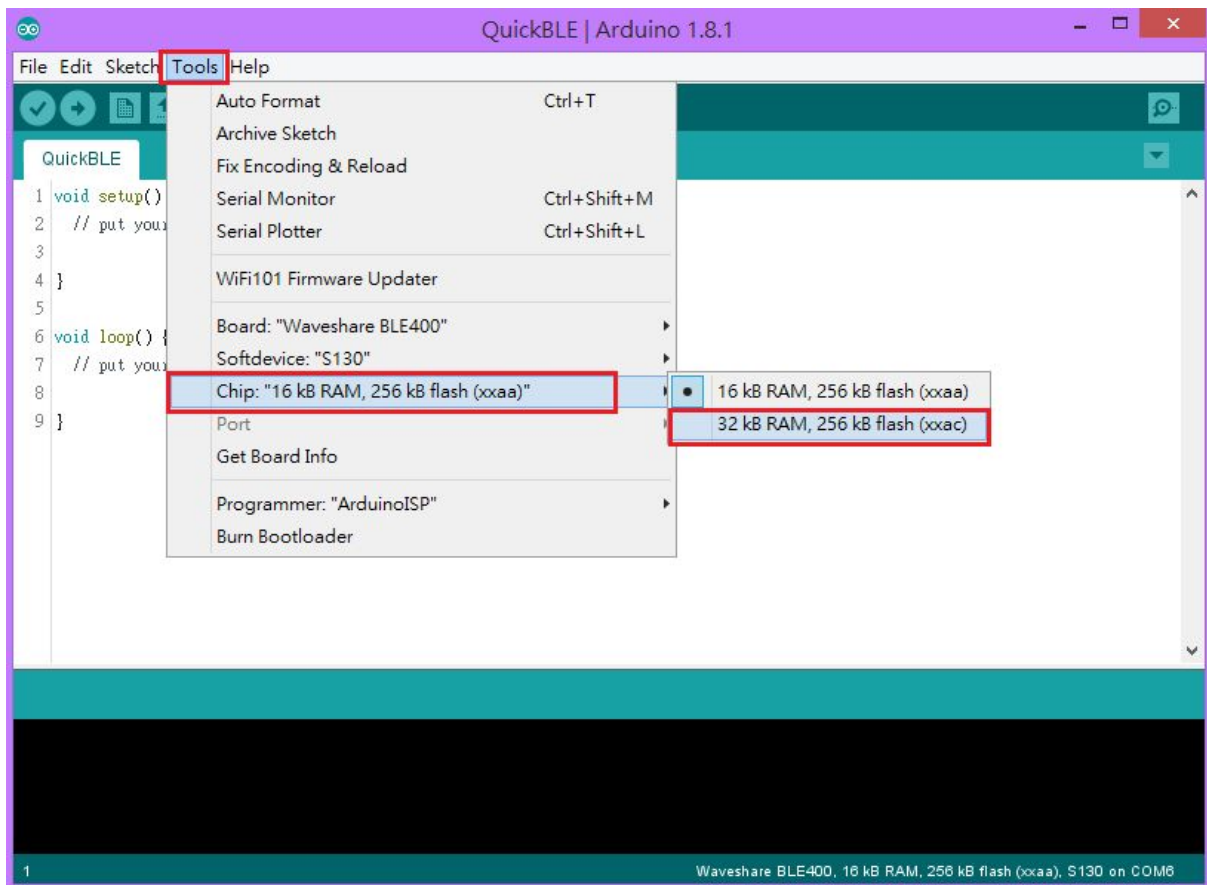
4. Click "Tools" -> "Board" -> select "Waveshare BLE400"



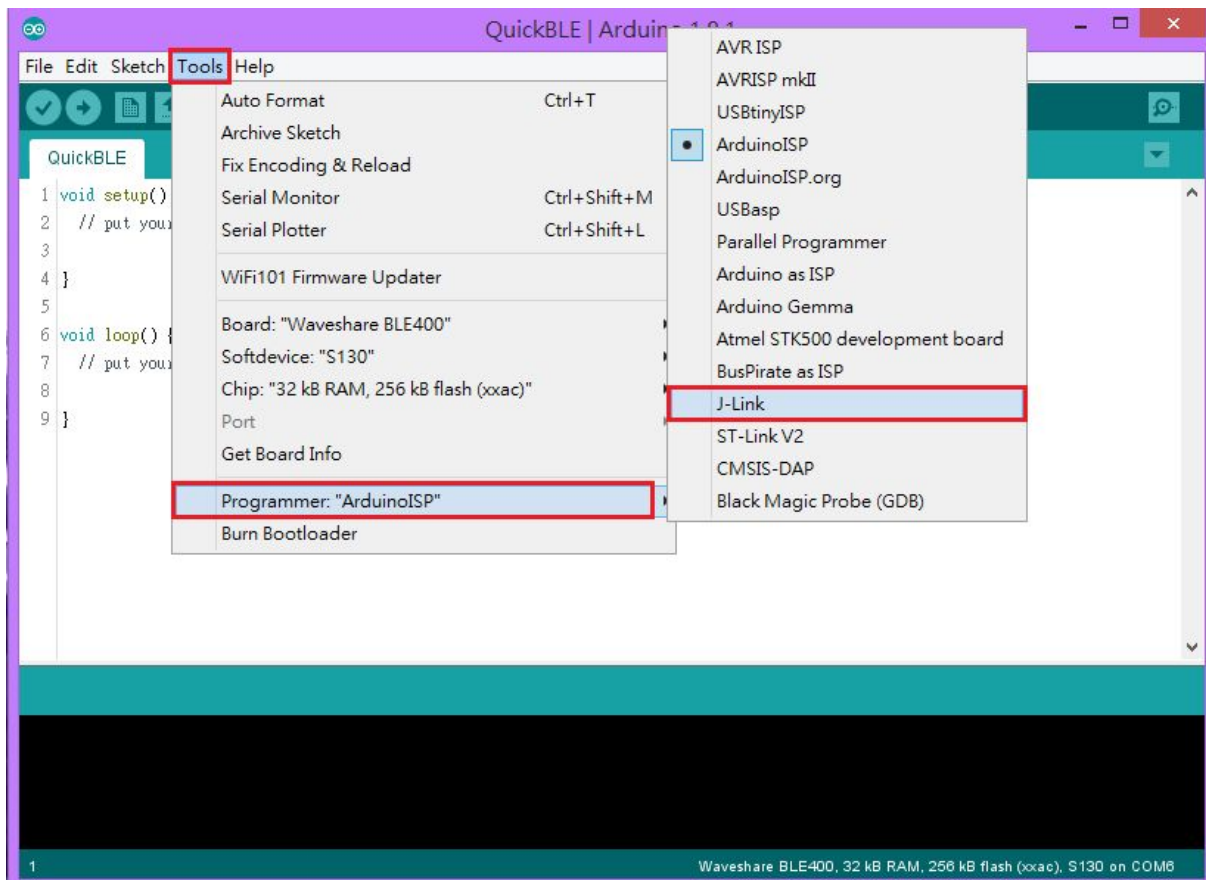
Click **"Tools"** -> **"Soft device"** -> select **"S130"**



Click "Tools" -> "Chip" -> select "32kB RAM 256kB flash(xxac)"

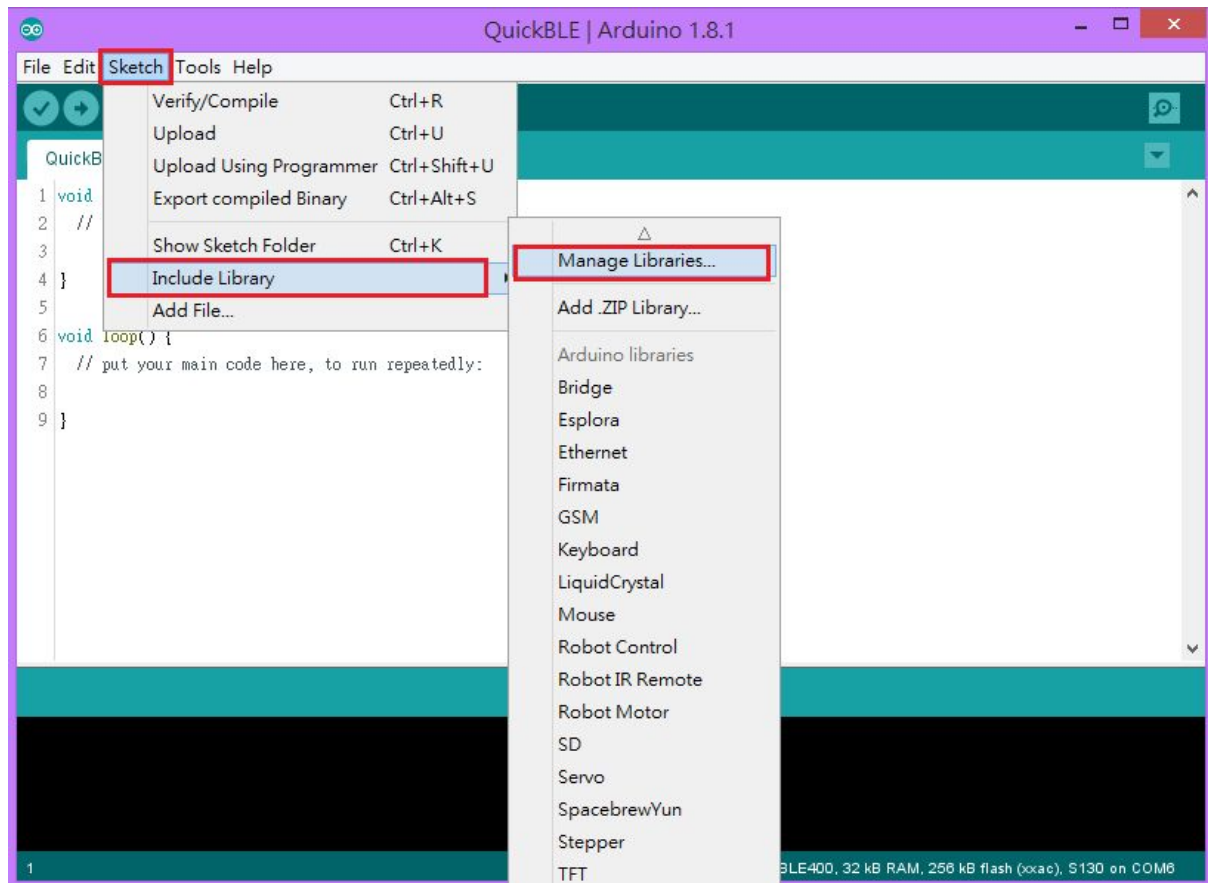


Click "Tools" -> "Programmer" -> select "J_Link"

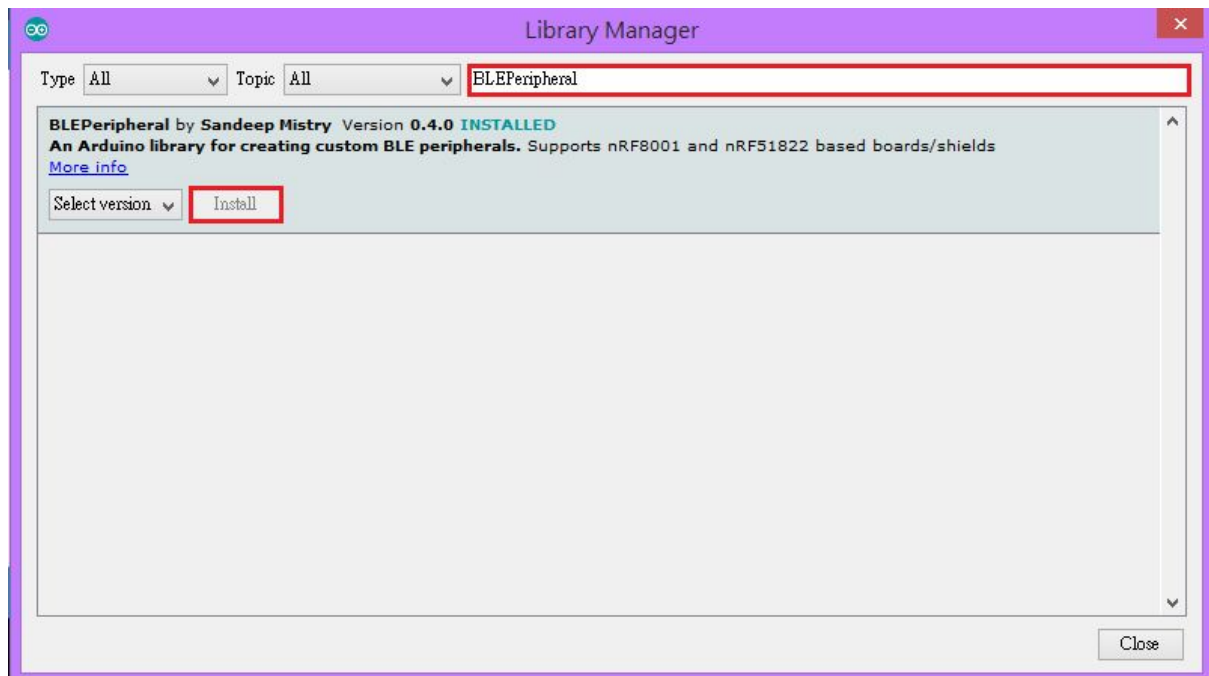


5. Download Arduino BLE library.

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



Search and install BLEPeripheral



B、 Install J_Link Driver

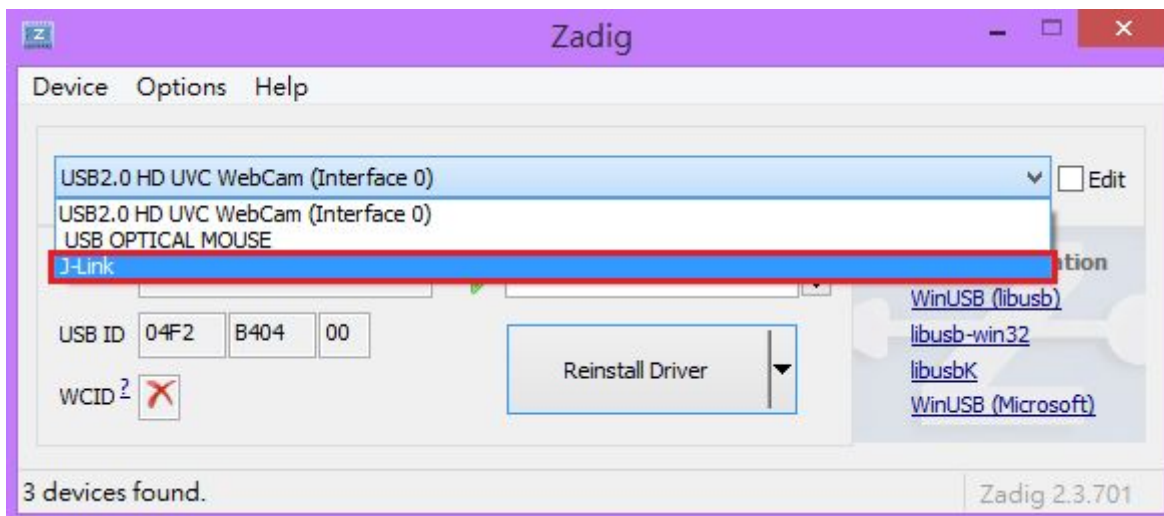
1. Download and install J_Link driver

(Download here <http://zadig.akeo.ie/downloads/zadig-2.3.exe>)

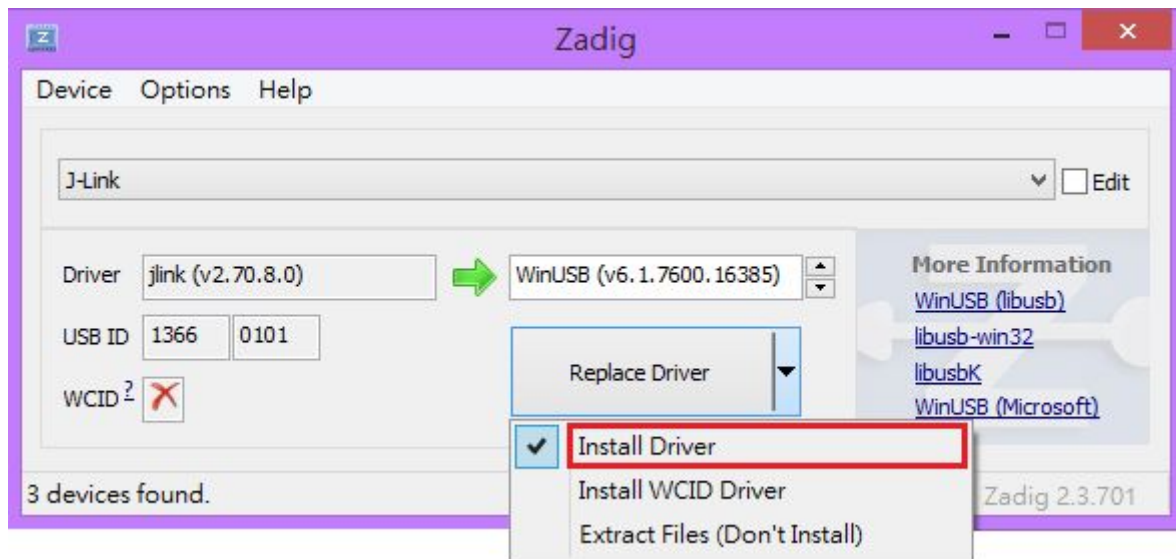
2. Open Zadig. Click “**Options**” -> select “**List All Devices**”



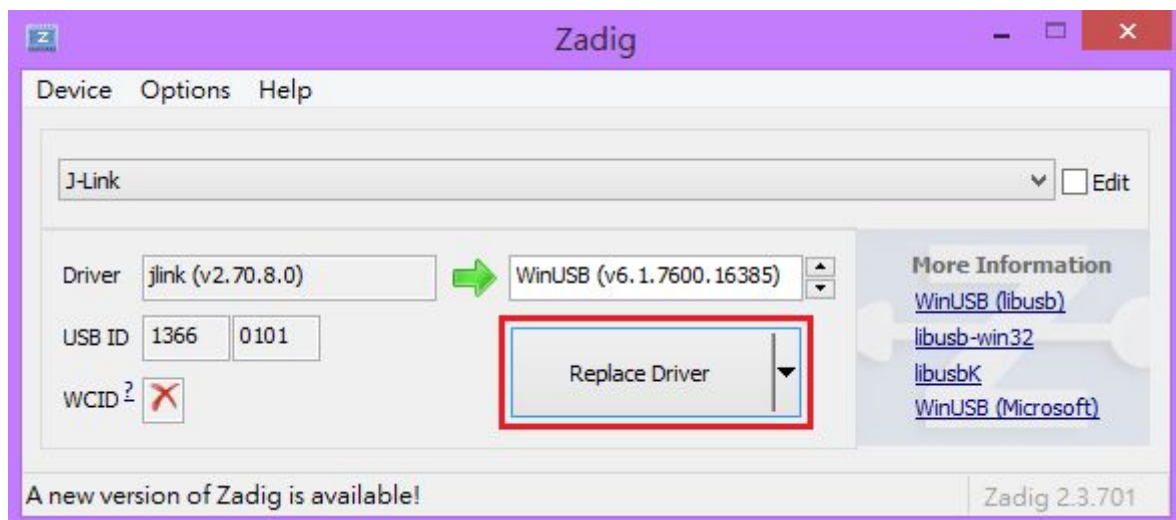
Select J_Link (Please connect J_link device before)



Select "Install Driver"

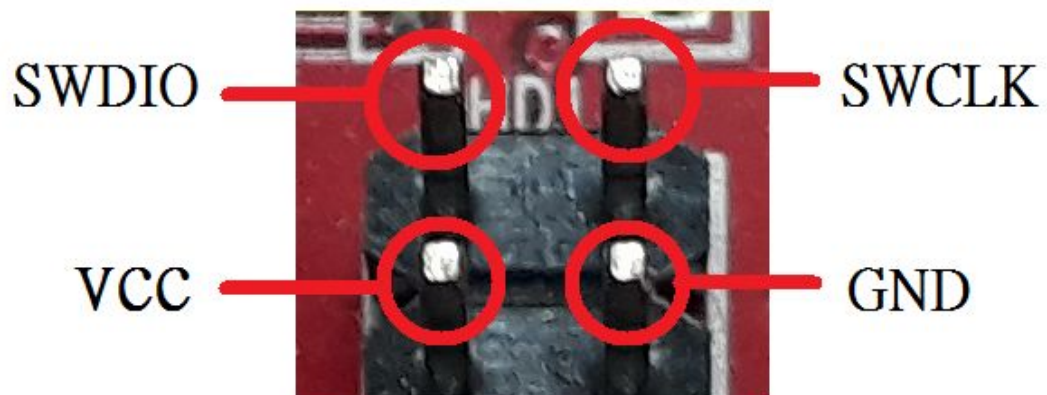
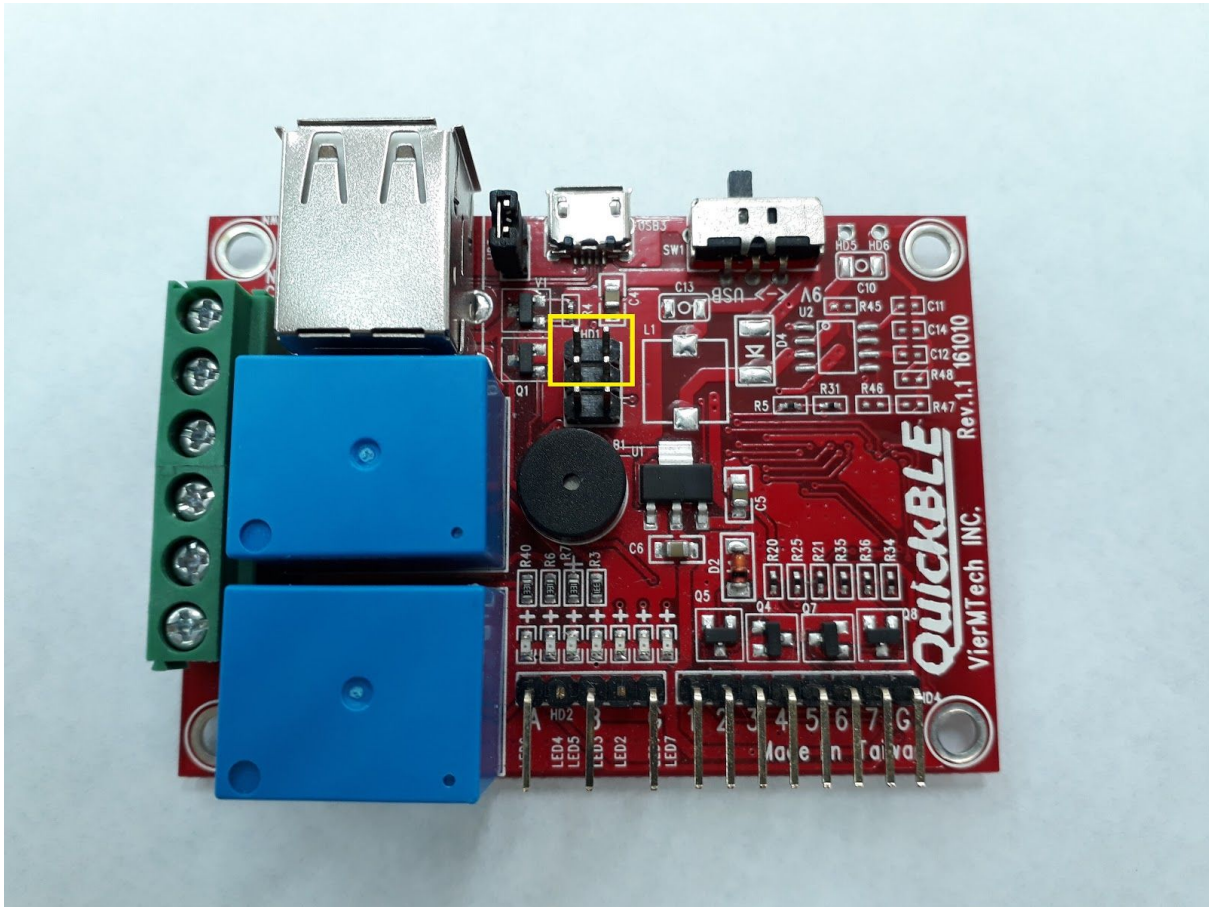


Click "Replace Driver" start



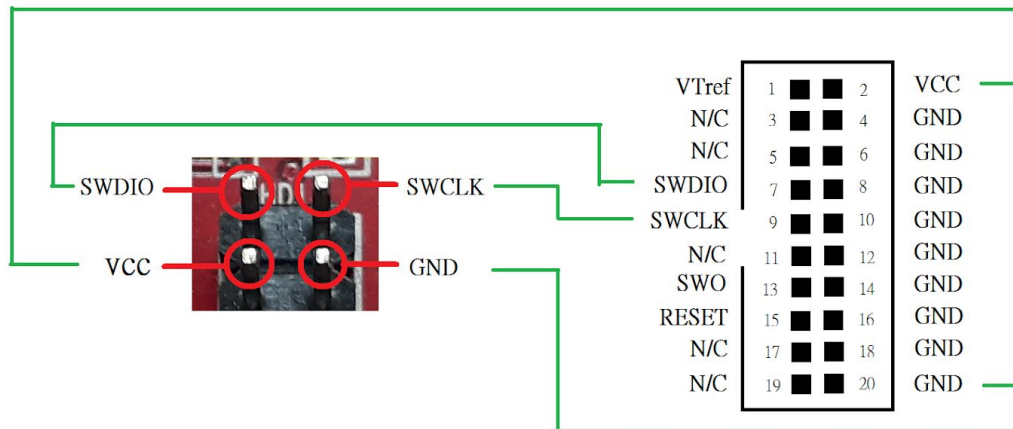
C、Arduino IDE Upload

1.Connect device

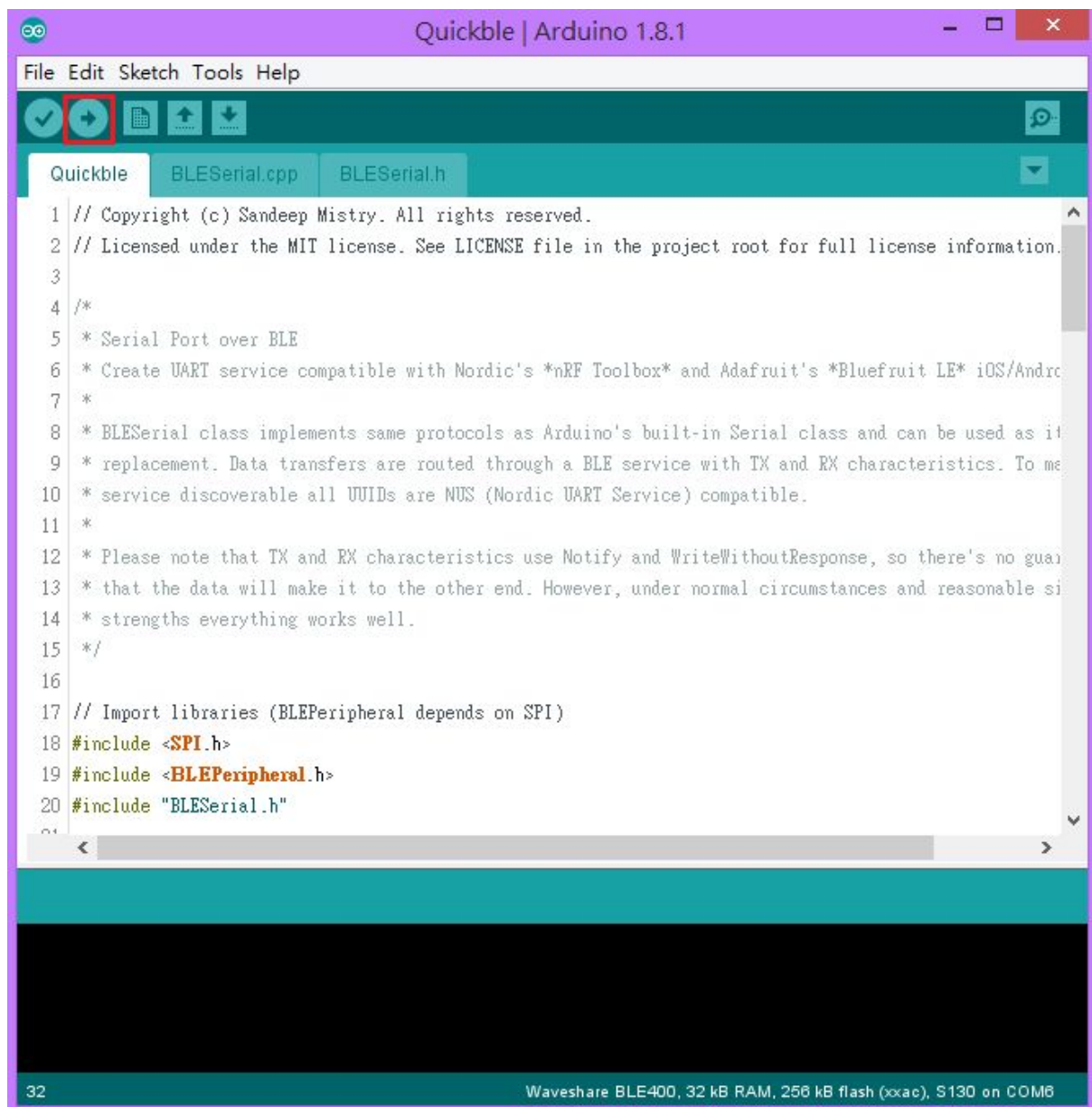




VTref	1	■	■	2	VCC
N/C	3	■	■	4	GND
N/C	5	■	■	6	GND
SWDIO	7	■	■	8	GND
SWCLK	9	■	■	10	GND
N/C	11	■	■	12	GND
SWO	13	■	■	14	GND
RESET	15	■	■	16	GND
N/C	17	■	■	18	GND
N/C	19	■	■	20	GND

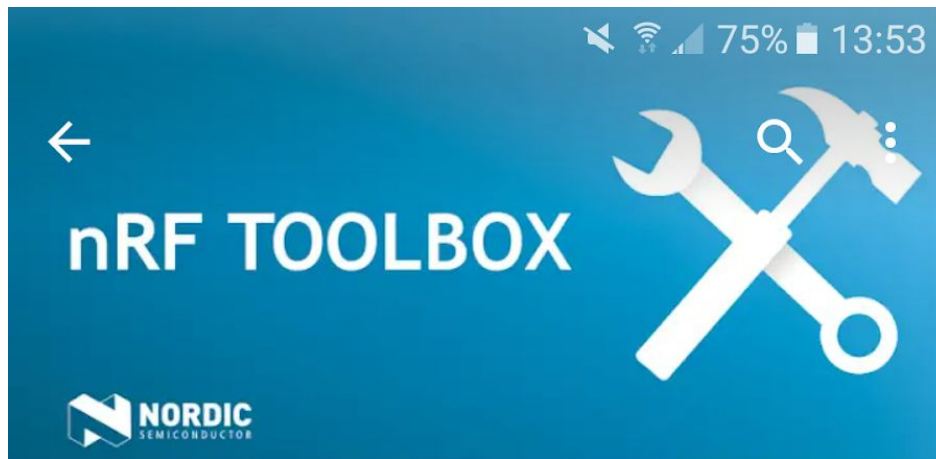


2. Open example "Quickble.ino" and Upload



D、 Install Application

Download and install **nRF Toolbox** Application



nRF Toolbox for BLE

Nordic Semiconductor ASA

3+

UNINSTALL

OPEN



Downloads



158



Tools



Similar

Explore your Bluetooth low energy devices with nRF Toolbox.

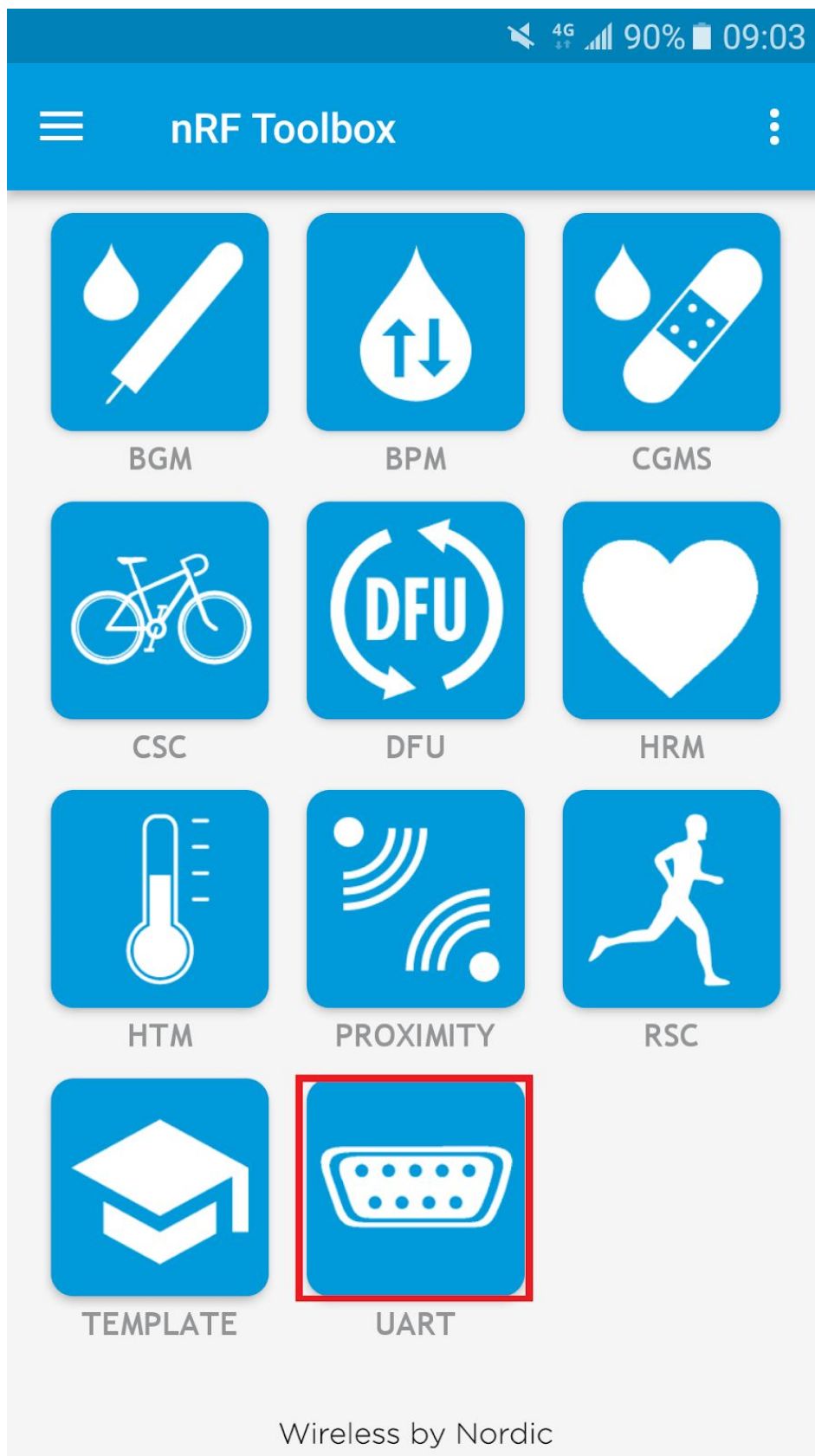


WHAT'S NEW

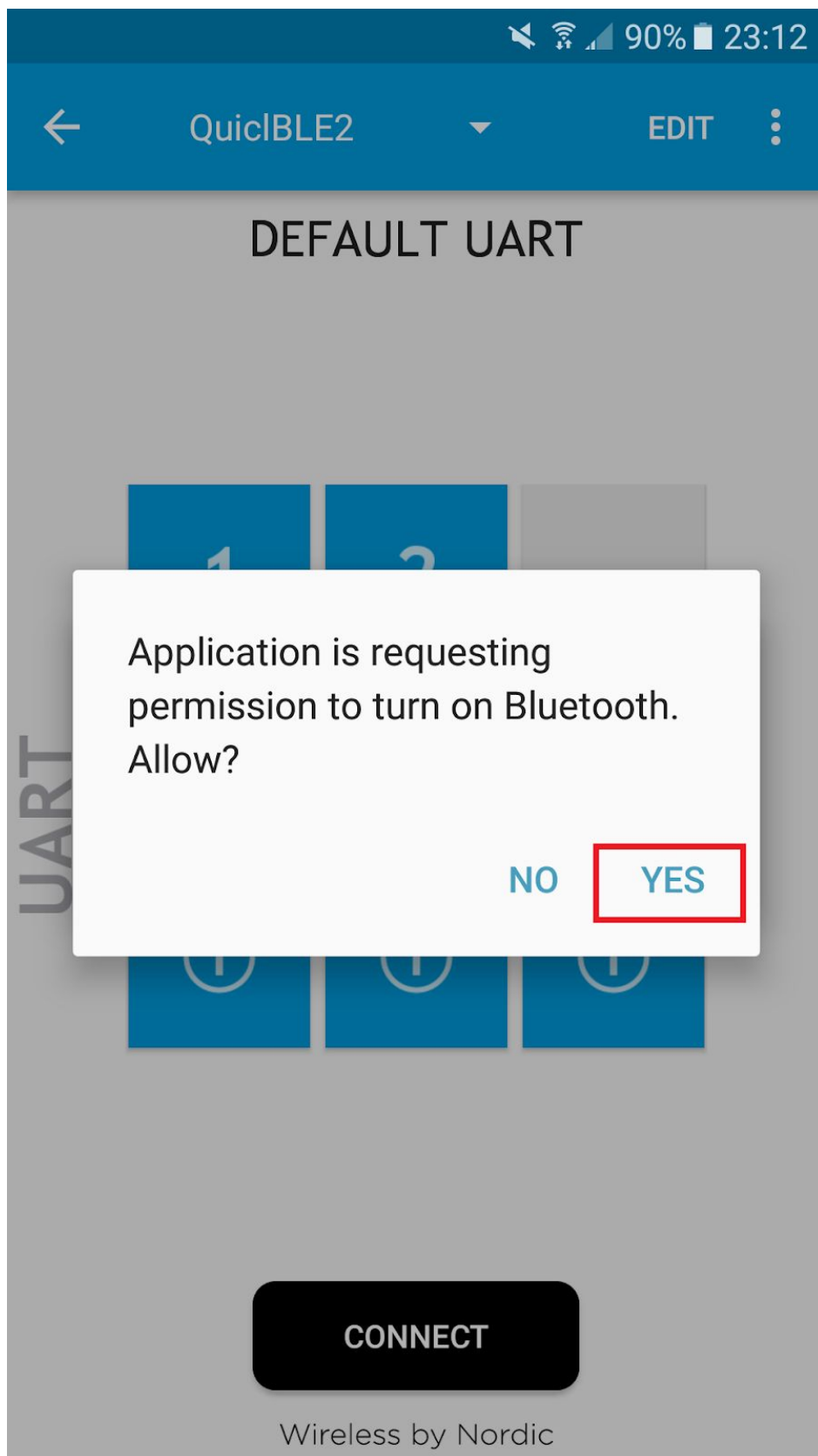
5.01.2018 - version 2.6.0

- BLE Library as a separate module (see GitHub)

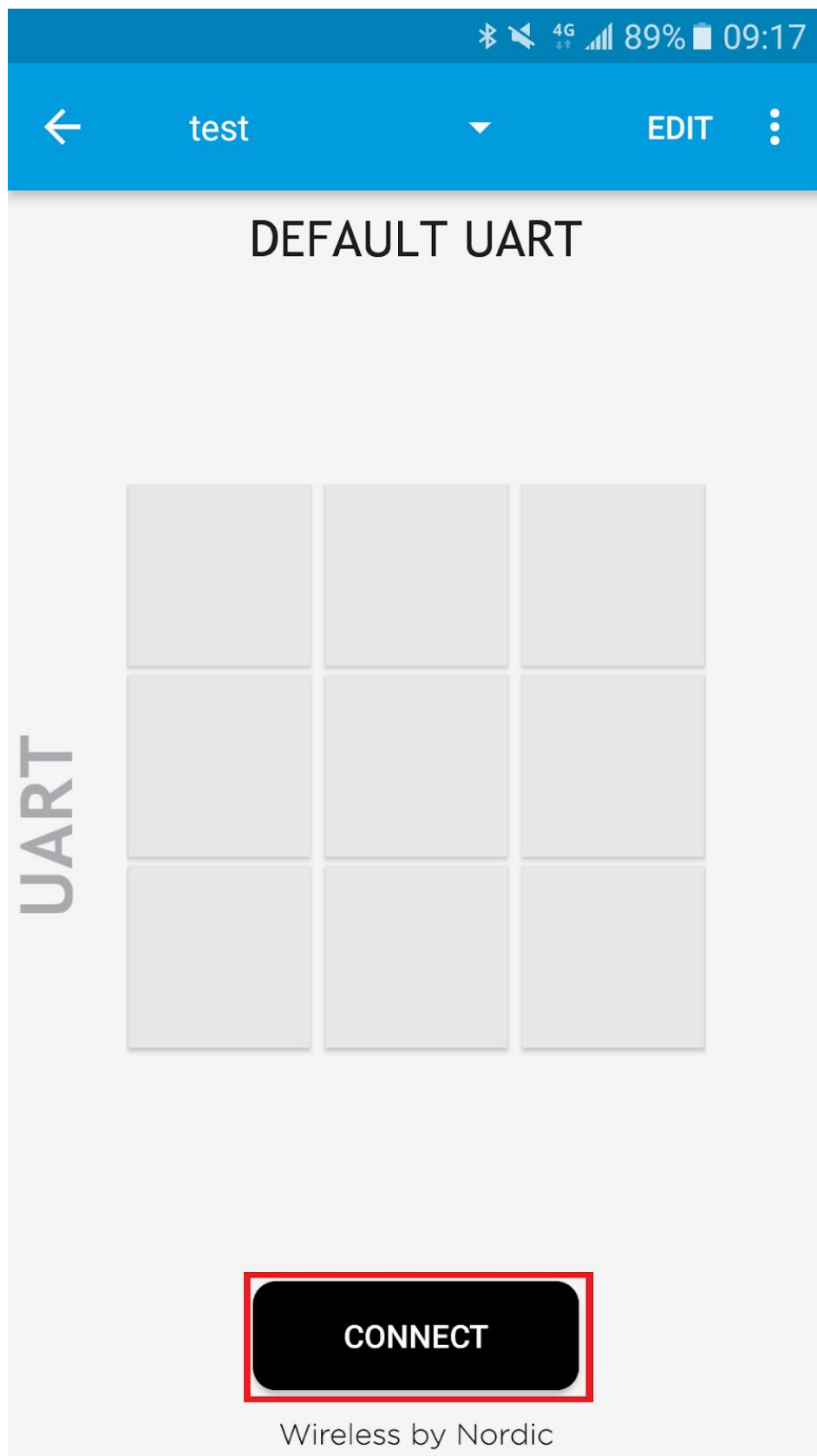
Open **nRF Toolbox** , Click "**UART**"



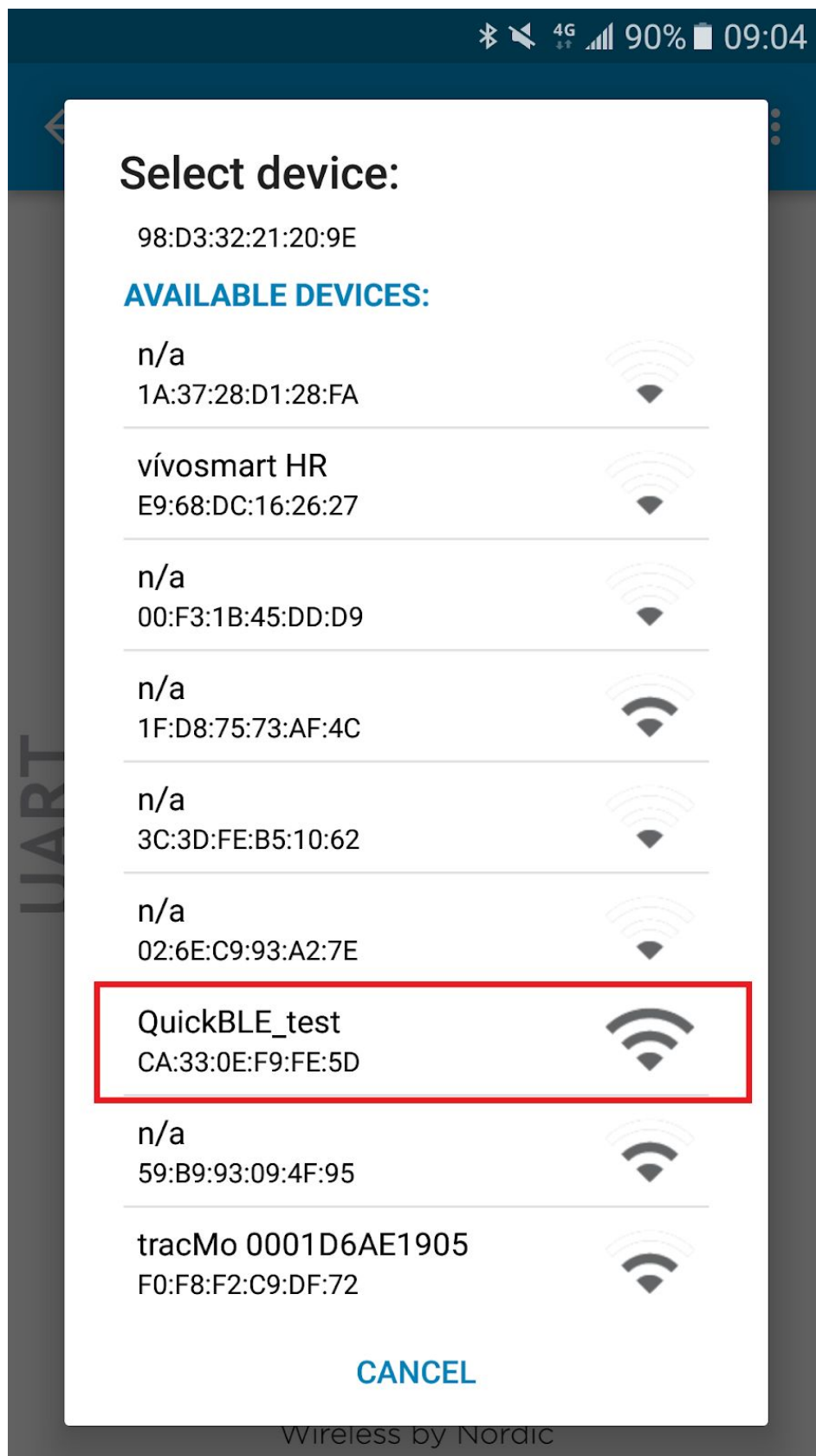
Open **Bluetooth**



Click "CONNECT"



Select your device





test

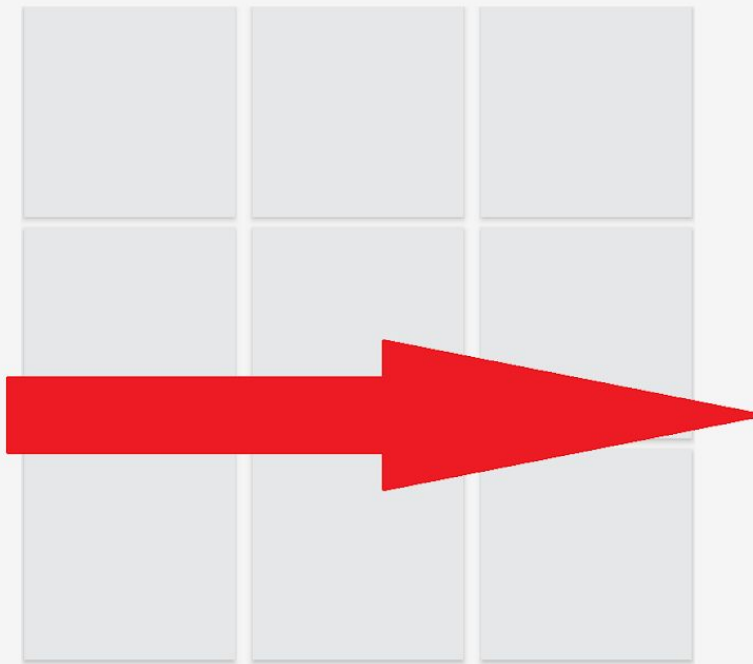


EDIT



QUICK_TEST

UART



CONNECTING...

Wireless by Nordic



QuicBLE2



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.setCharacteristicNotificati
           on(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

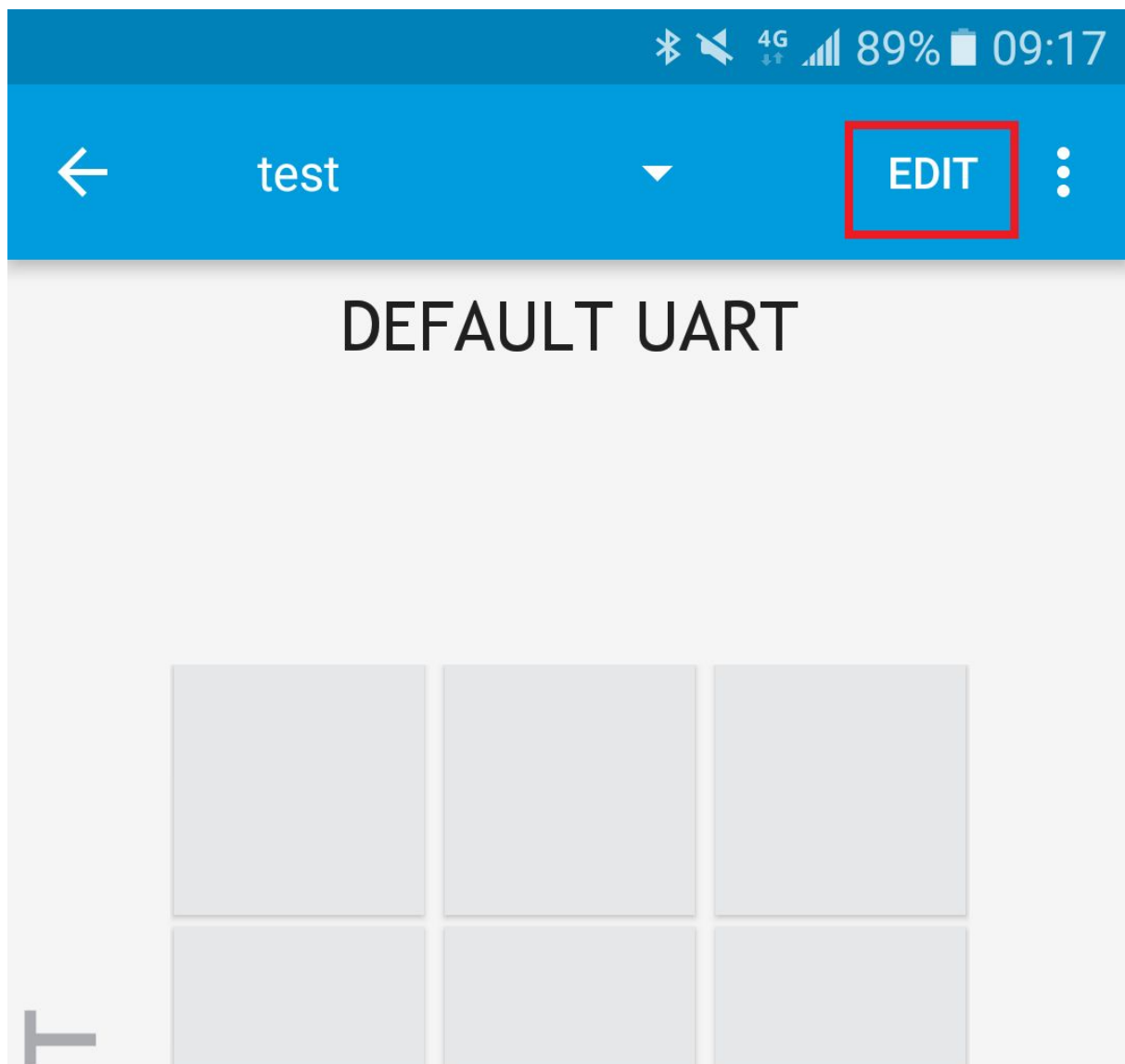
SEND

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

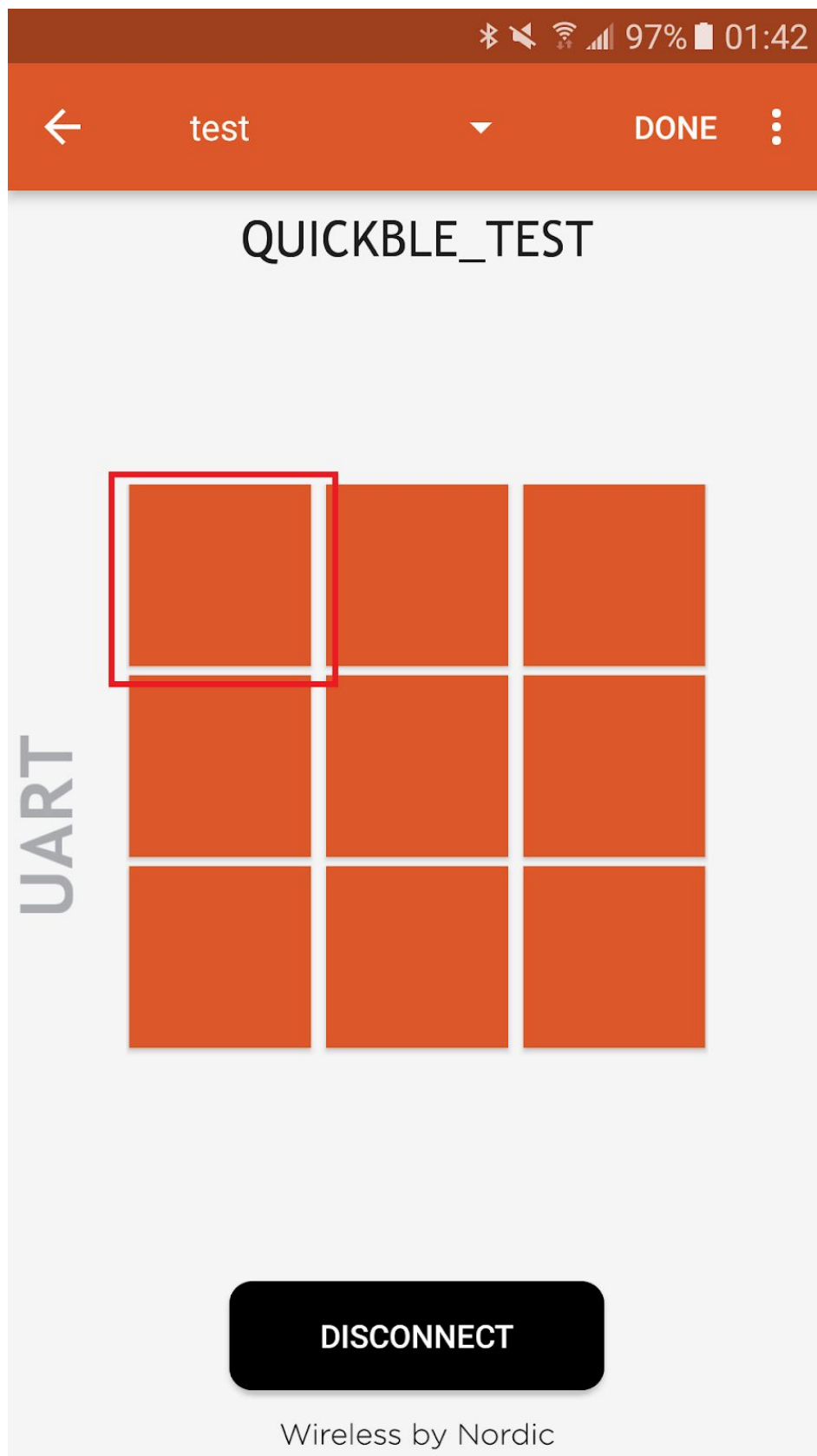
Write command

SEND

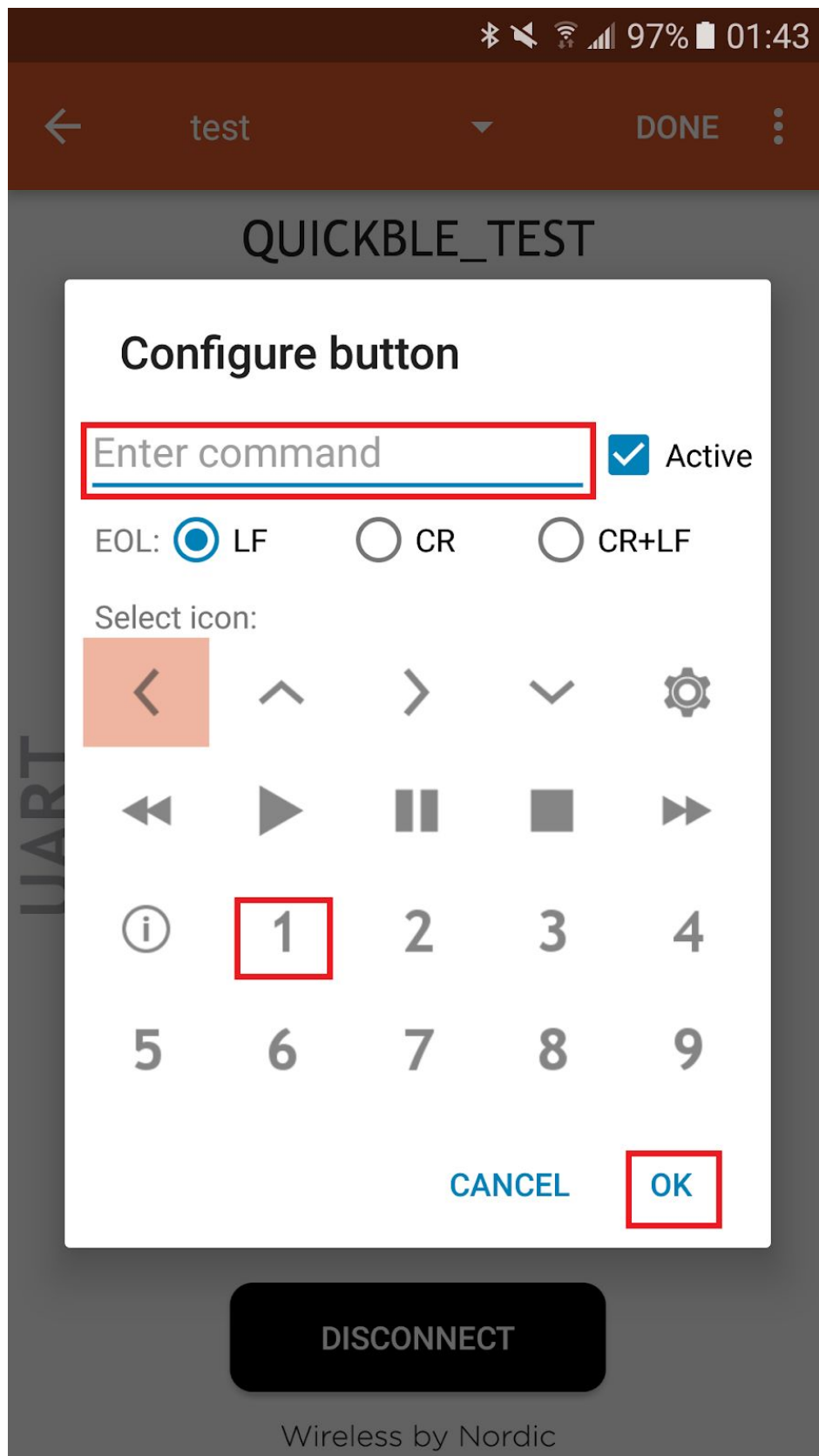
Or click the "**EDIT**" to edit button



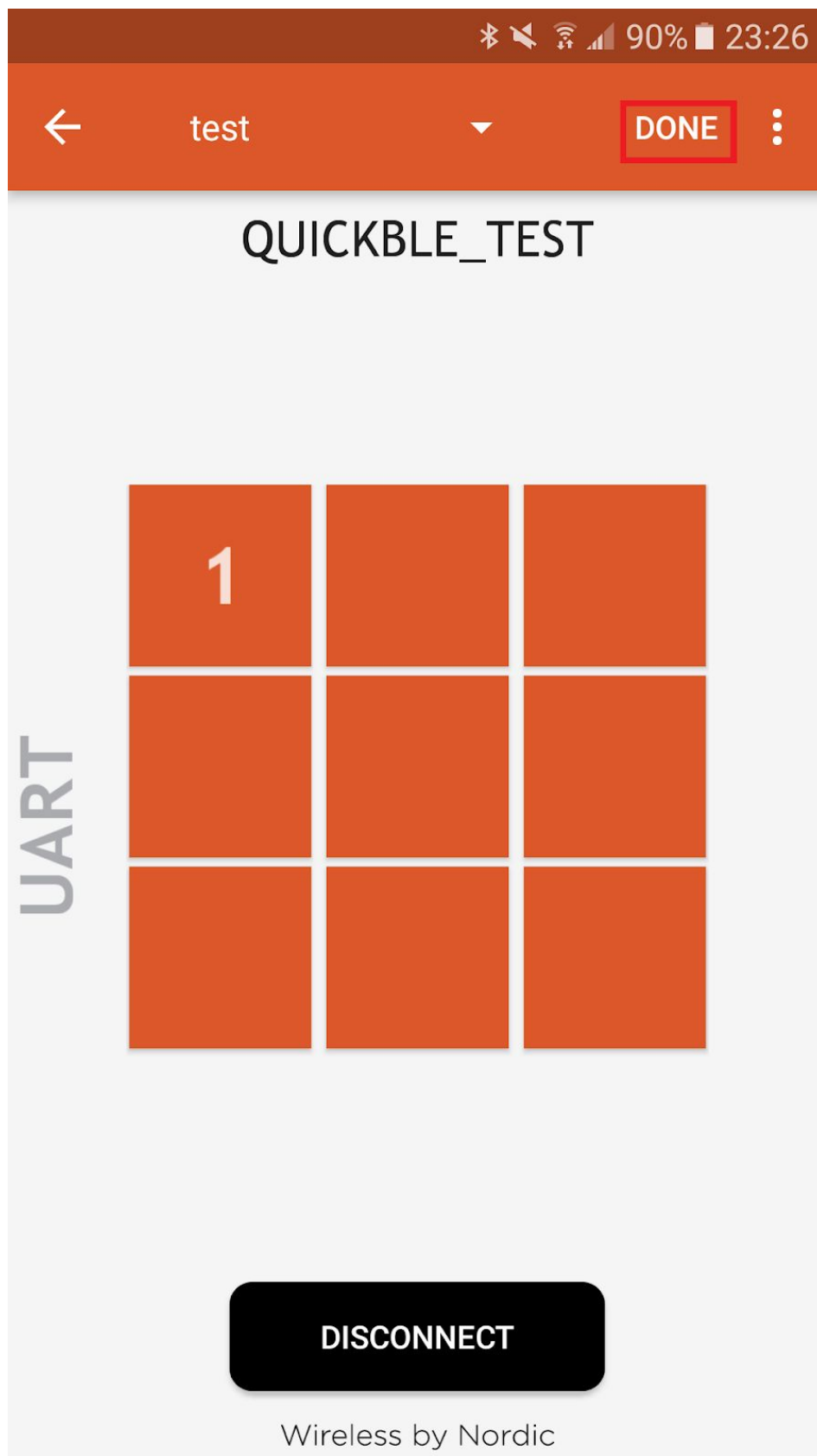
Click any square to create button.



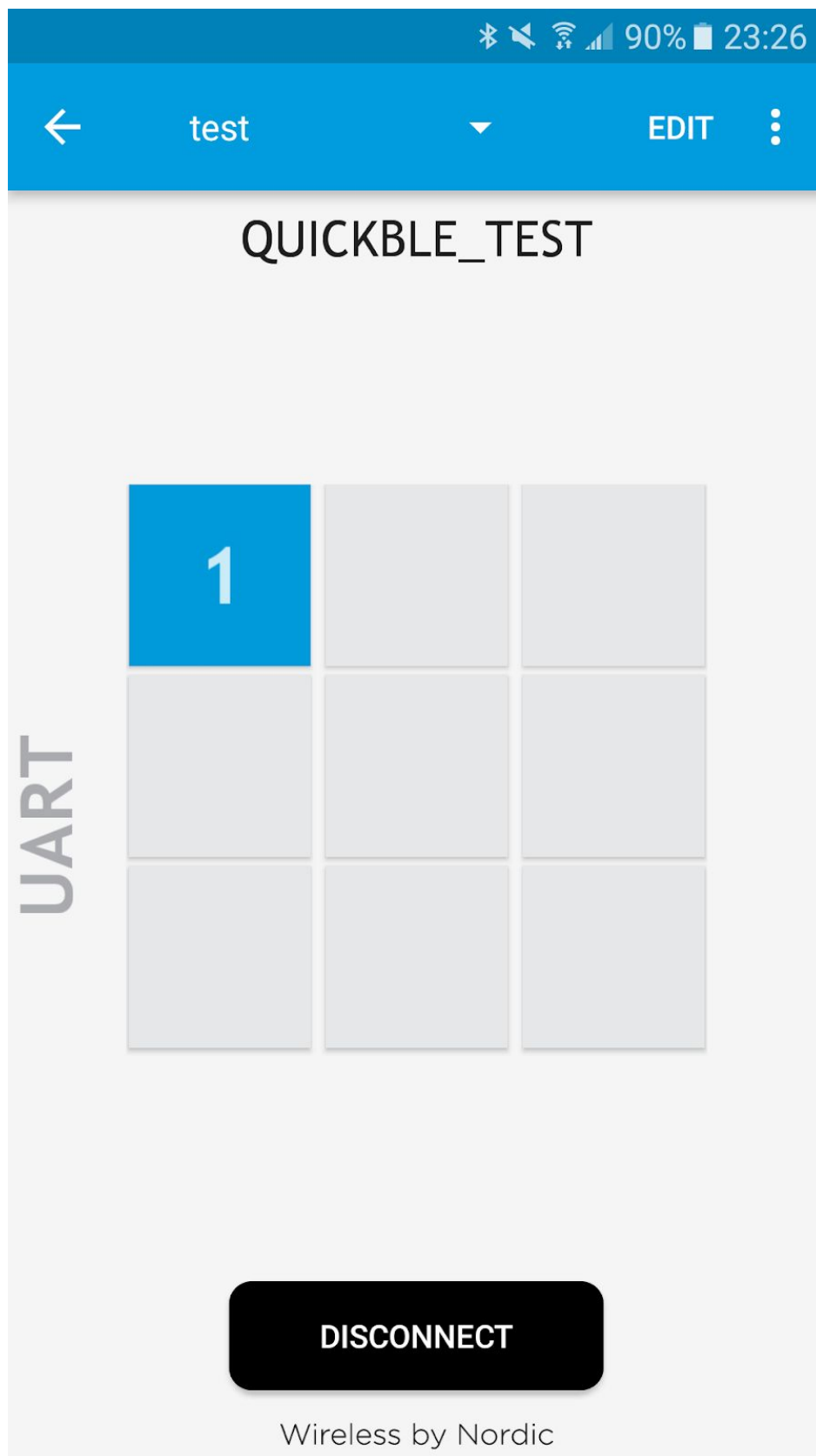
To "**Enter command**" enter the instruction, select the button symbol in "**Select icon**", and click "**OK**" when the setting is completed.



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



The QuickBLE 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 "