**Tutorial**

This tutorial is to teach you how to use the provided code to communicate between two Arduino devices.

1. Prepare two Arduino Devices A and B (for example Arduino Nano 33 BLE).
2. Download [ArduinoBLE library](https://www.arduino.cc/reference/en/libraries/arduinoble/) in your *Manage Libraries* of Arduino IDE.
3. Modify the ArduinoBLE Library (refer to this [link](https://github.com/arduino-libraries/ArduinoBLE/issues/123)):
   1. For BLEDevice.h: add this code

int getAdvertisement(uint8\_t value[], int length);

* 1. For BLEDevice.cpp: add this code

int BLEDevice::getAdvertisement(uint8\_t value[], int length)

{

if (\_eirDataLength > length) return 0; // Check that buffer size is sufficient

if (\_eirDataLength) {

memcpy(value, \_eirData, \_eirDataLength);

}

return \_eirDataLength;

}

1. Upload the *Sender* project to Arduino A (as a Peripheral Device). We set the name of this BLE as "Sender\_2", and the advertised data is 216925511012345.

(If you use the smartphone to scan, then you can see Sender\_2 in the Bluetooth list, which means the advertisement works successfully.)

图形用户界面, 应用程序

描述已自动生成

1. Upload the *Receiver* project to Arduino B (as a central device). We search name of BLE started with "Sender" and print out the received customed data. The figure shows that the advertisement is 216925511012345, which is exactly same as the data we advertised.

图形用户界面, 文本, 应用程序, Word, 电子邮件

描述已自动生成

1. For more information about Arduino BLE, please see this [link](https://www.arduino.cc/reference/en/libraries/arduinoble/). For more examples using Arduino BLE, please see this [link](https://github.com/arduino-libraries/ArduinoBLE).
2. Have fun!