

## Vibration game

### 1. Purpose

In this course, we mainly learn to use 2 micro:bit boards(micro:bit-1, micro:bit-2) and vibration motor module to realize vibration game.

### 2. Programming method

Mode 1 online programming:

First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive:

<http://microbit.org/> to enter the programming interface. Add the Yahboom package: <https://github.com/lzty634158/Croco-Kit> to start programming.

Mode 2 offline programming:

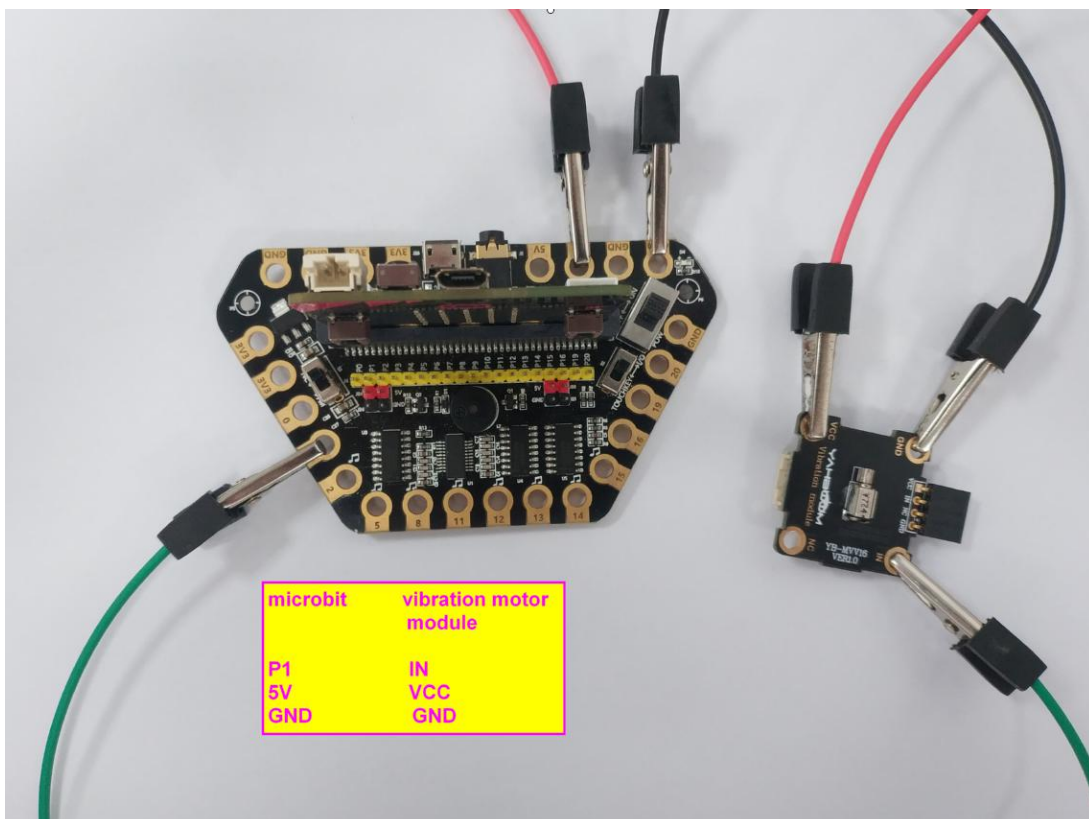
We need to open the offline programming software. After the installation is complete, enter the programming interface, click[New Project]. Add Yahboom package: <https://github.com/lzty634158/Croco-Kit>, you can start programming.

### 3. About wiring

**We just connect module to micro:bit-1.**

vibration motor module	Micro:bit-1
IN	P1
VCC	5V
GND	GND

Note: Because the micro:bit cannot be directly connected to the module, we use the micro:bit alligator clip expansion board. As shown in the figure below.



#### 4. Combine building blocks

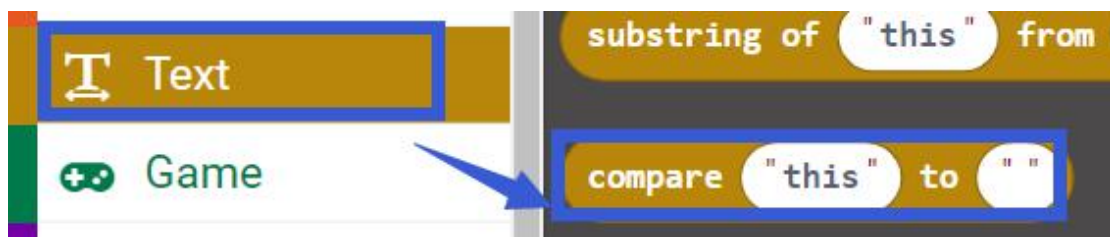
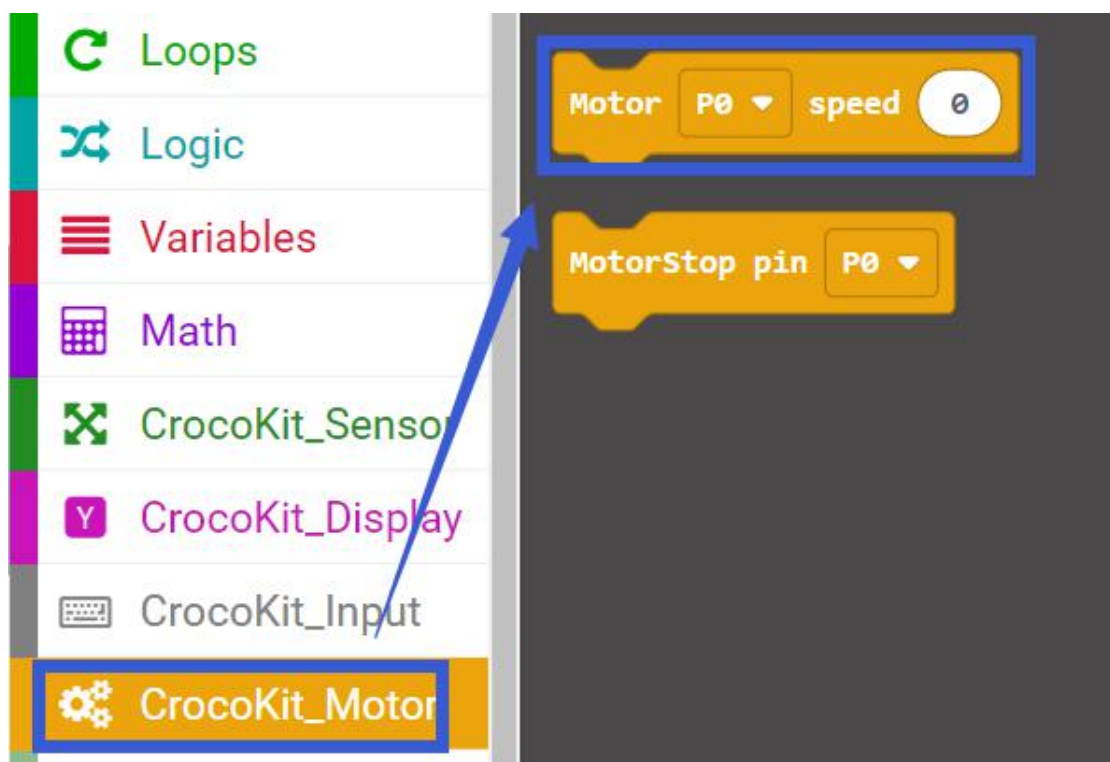
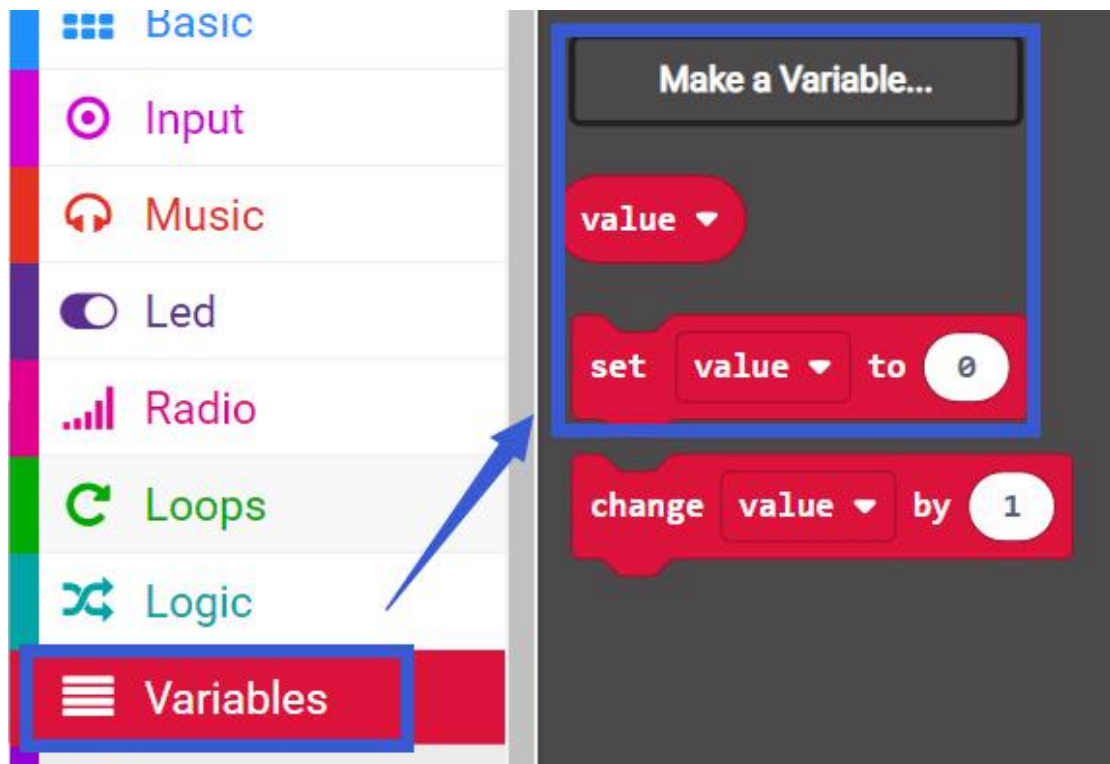
We need to use the following programming building blocks.

The screenshot displays the YAHBOOM programming environment. At the top, a search bar is visible. Below it, the 'Basic' category is selected in the left sidebar, and a 'show icon' block is shown in the workspace. The 'Radio' category is then selected, and a series of blocks are added to the workspace:

- radio set group** (value: 1)
- radio send number** (value: 0)
- radio send value** (variable: "name", value: 0)
- radio send string** (value: " ")
- on radio received** (variable: receivedString)

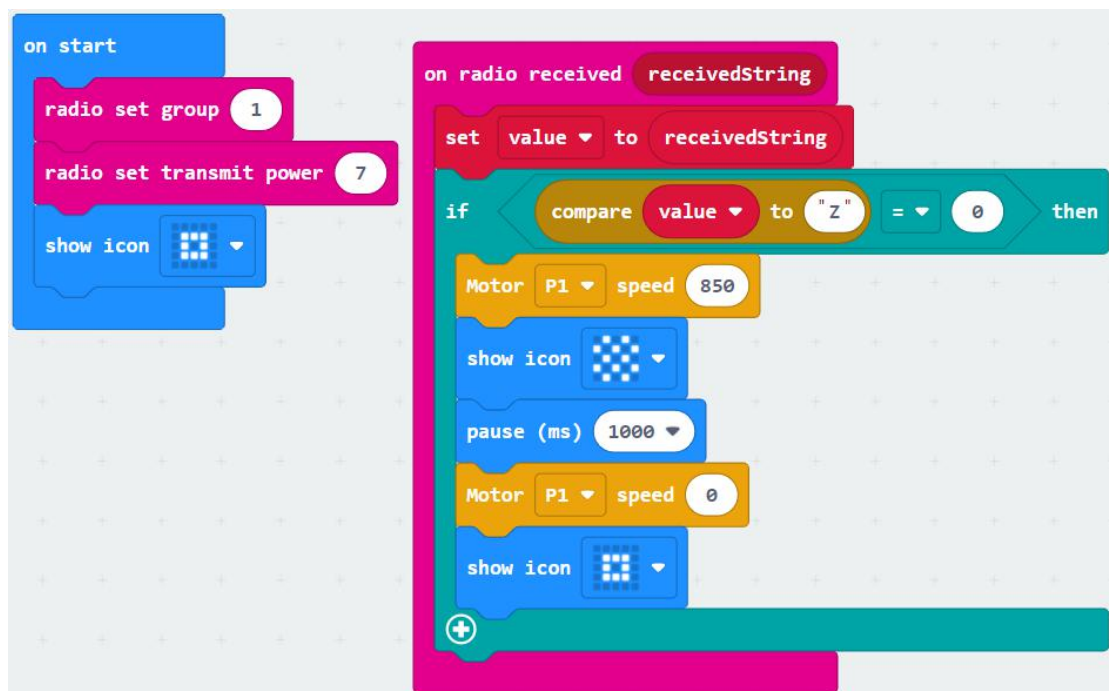
Below this, the 'more' option is selected, revealing additional blocks:

- radio set transmit power** (value: 7)
- radio set transmit serial number**
- radio set frequency band** (value: 0)
- radio raise event**

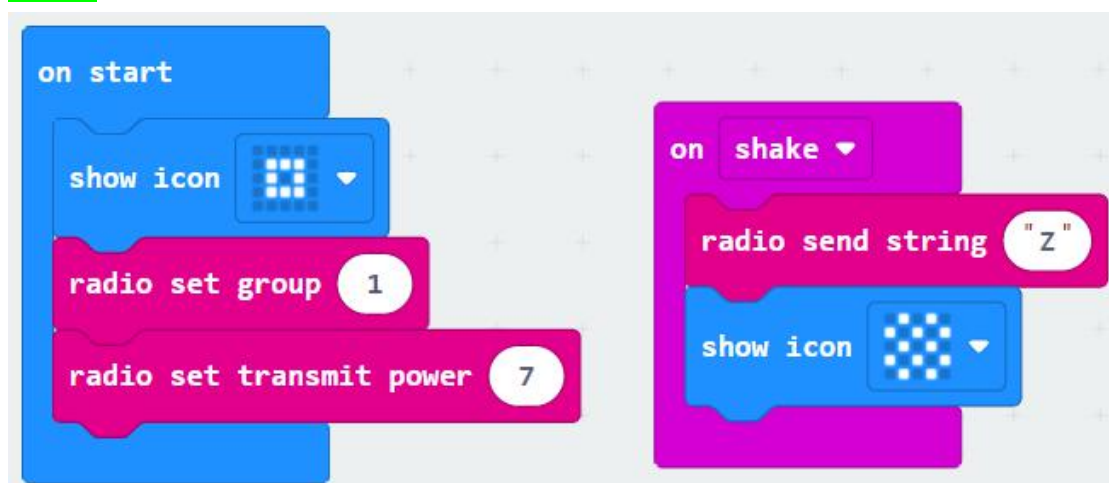




code-1



code-2



## 5. Experimental phenomenon



We need to download Vibration-game\_1.hex into a micro:bit board-1,  
download Vibration-game\_2.hex into another micro:bit board-2.  
After the program is downloaded successfully, when you shake micro:bit board-2,  
vibration motor module will shock.