

Freestyle advance

1.Learning goals

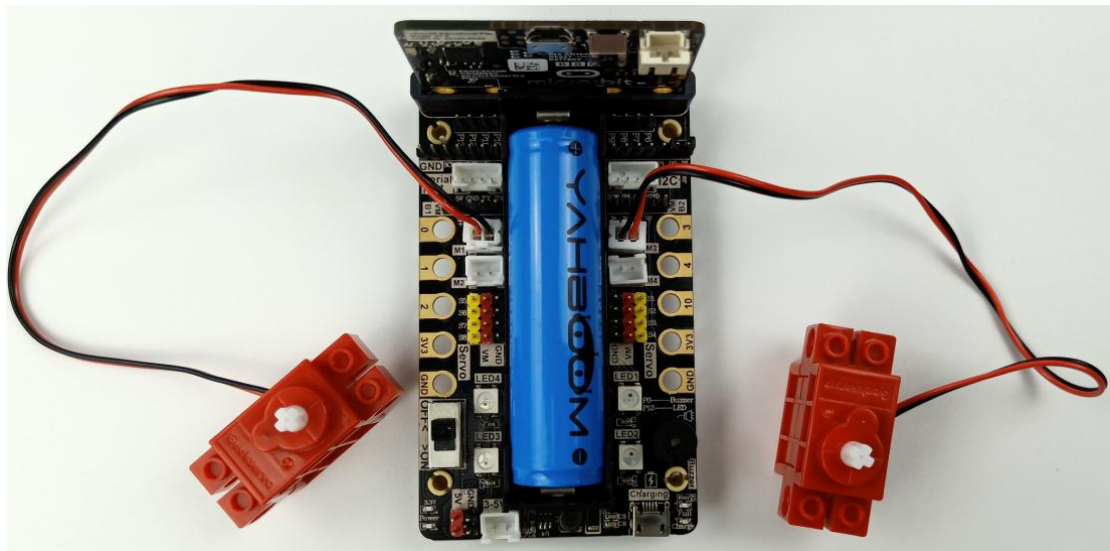
In this course, we mainly learn how to use the MakeCode graphical programming to realize the Freestyle advance all the time.

2.Building block assembly steps

For the building block construction steps, please refer to the installation manual or building block installation picture of [Assembly course]-[Freestyle].

3.Wiring of motor and servo

The motor wiring on the left side of the freestyle is inserted into the M1 interface of the Super:bit expansion board, and the black wire is close to the battery side;
The motor wiring on the right side of the freestyle is inserted into the M3 interface of the Super:bit expansion board, and the black wire is close to the battery side;
As shown below:



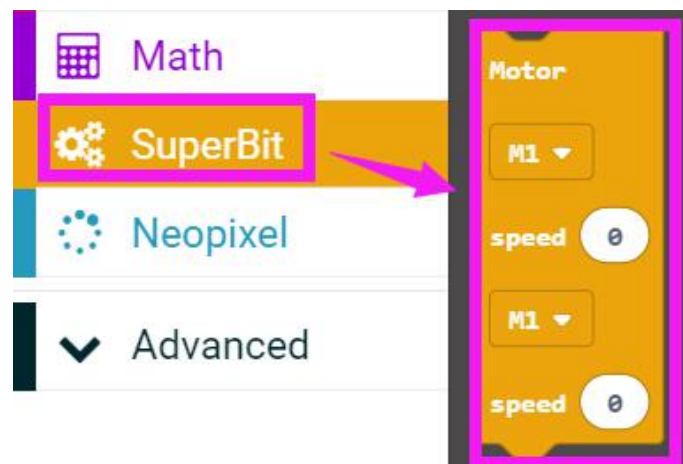
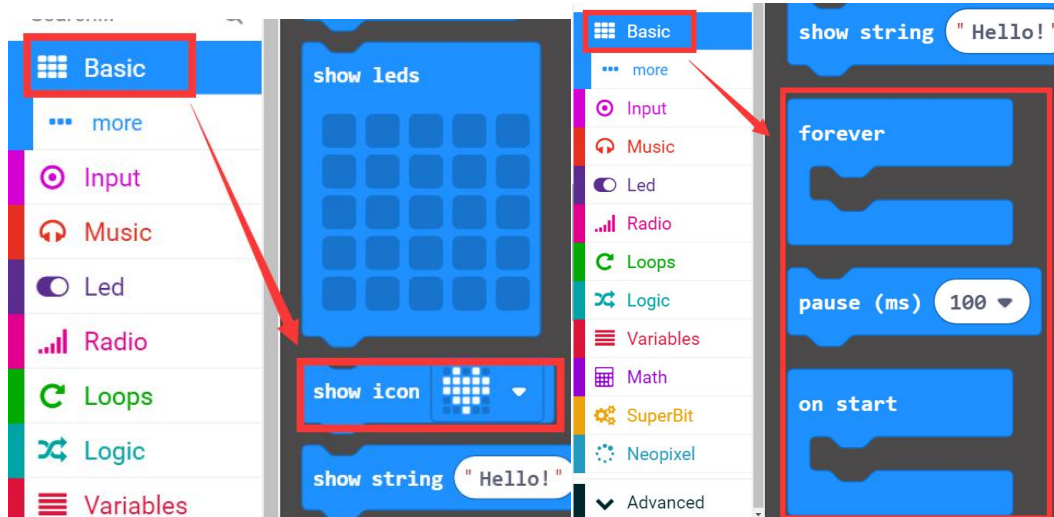
4.Programming method

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/Izty634158/SuperBit> to program.

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/Izty634158/SuperBit>, you can program.

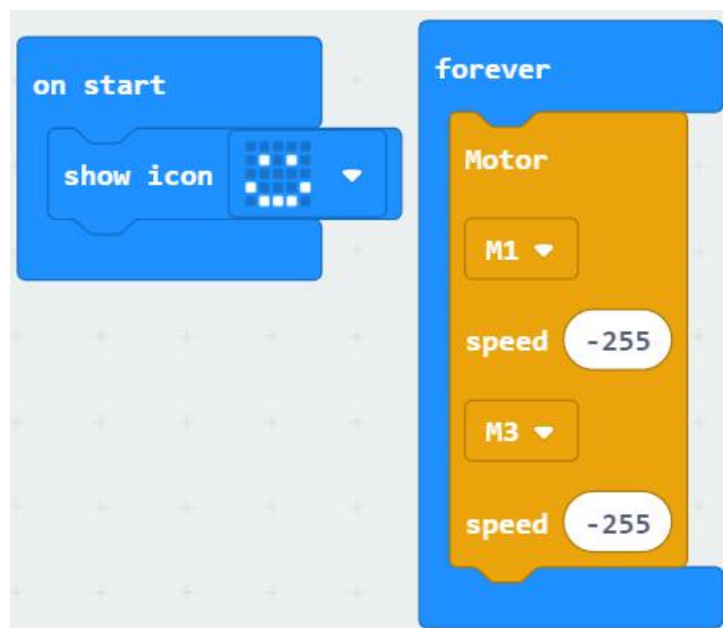
5.Looking for blocks

The following is the location of the building blocks required for this programming.



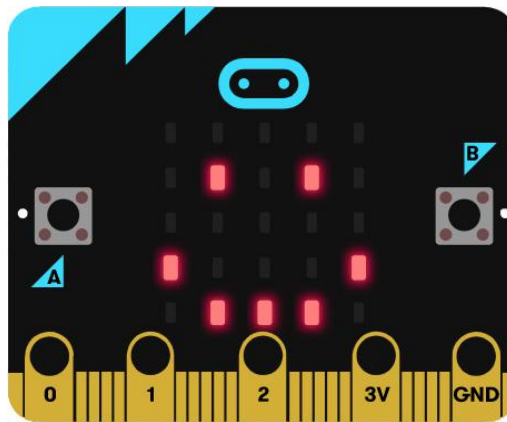
6.Combine block

The summary program is shown below.



7.Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display the smile pattern, as shown below. Open the power switch, the Freestyle robot will keep advance.



If you need to restart, press the reset button on the back of the micro:bit board.