

Control speed

1.Learning goals

In this lesson, we mainly learn how to control building block motor by micro:bit and Super:bit expansion board.

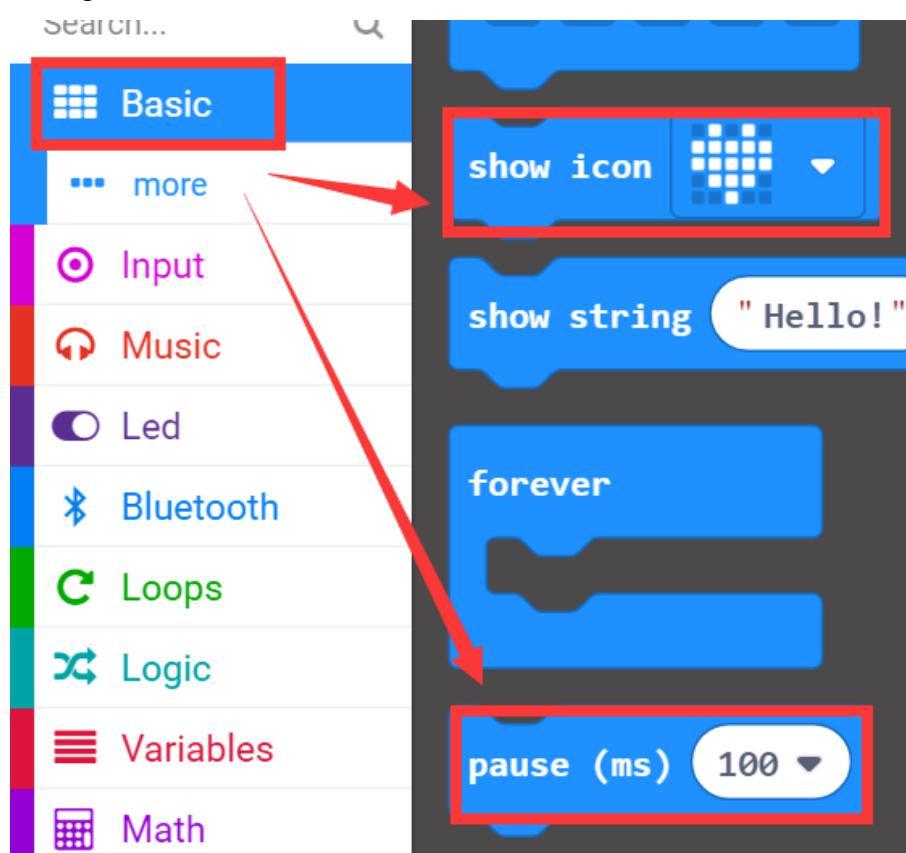
2.Programming method

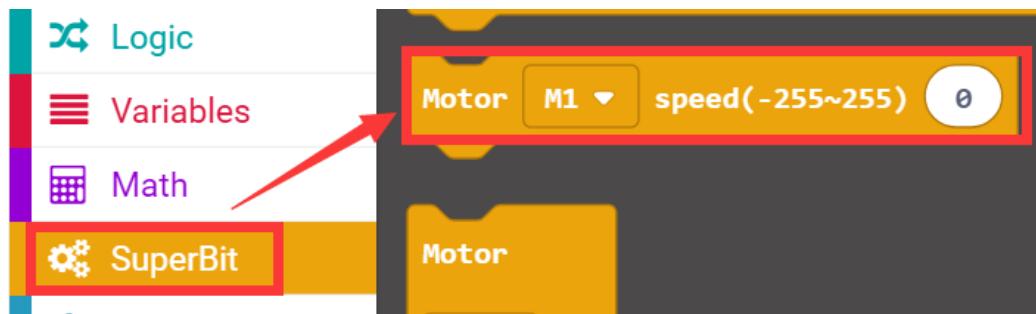
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/lzty634158/SuperBit> 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/lzty634158/SuperBit>, you can program.

3.Looking for blocks

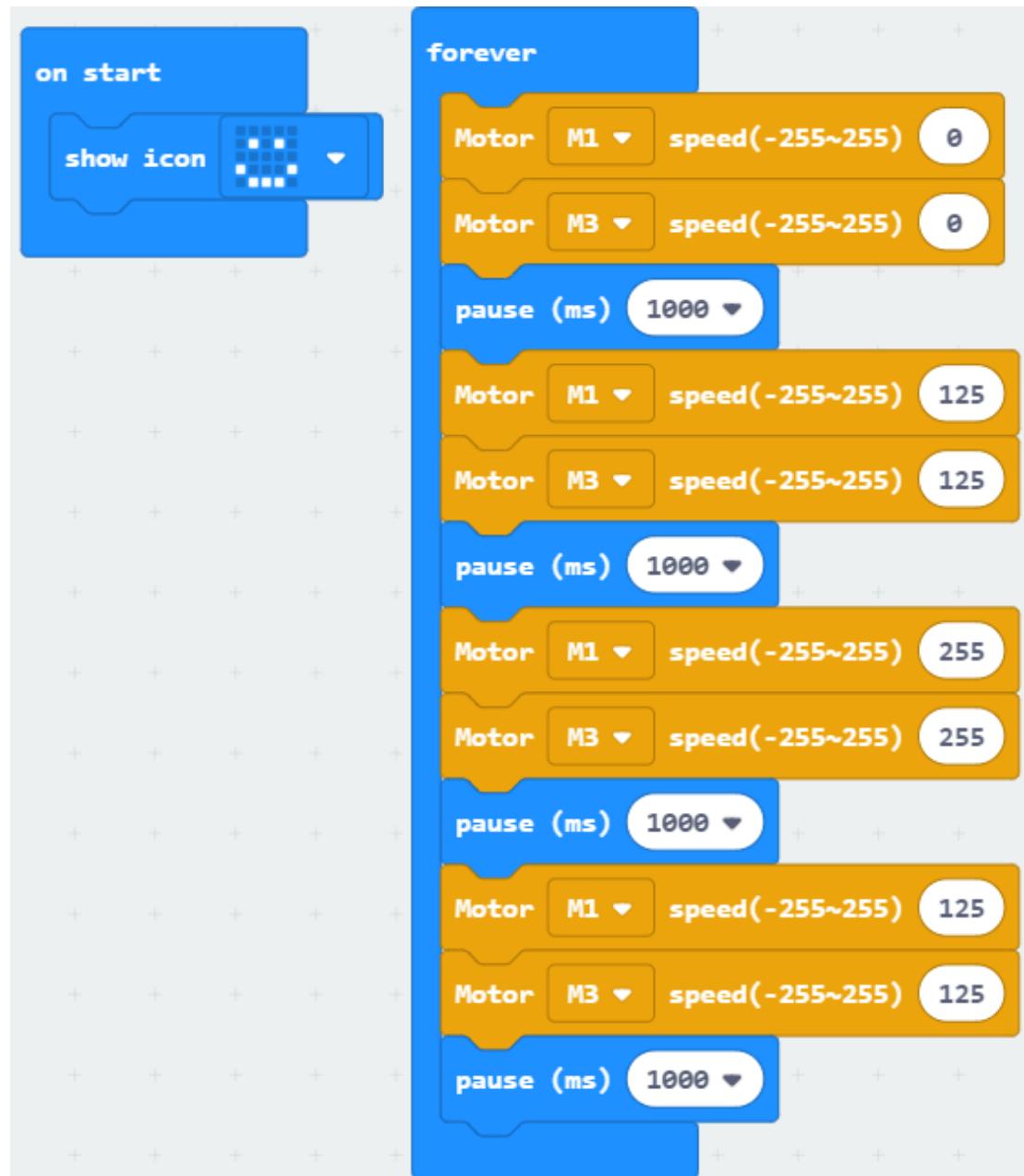
The following is the location of the building blocks required for this programming.





4. Combine building block

The summary program is shown below:



5. Assembly steps

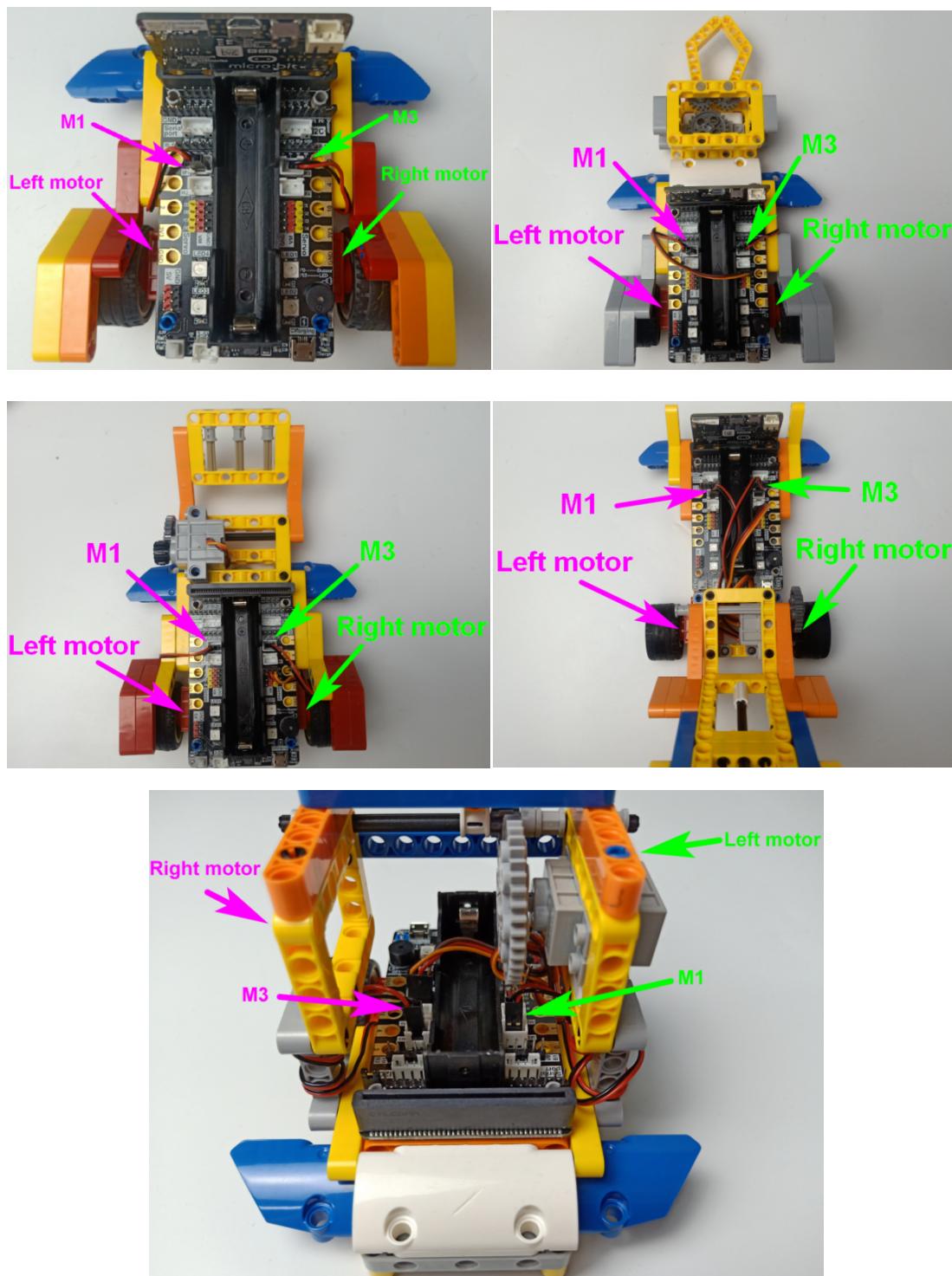
Please refer to the **assembly steps** in the **Assembly instructions** folder for building blocks assembly steps.

4. About wiring:

As shown below,

Left motor connect to M1 interface of super:bit.

Right motor connect to M3 interface of super:bit.



5. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display the smile pattern and the car will advance with different speed, speed is 0 -> 125 -> 255 -> 125. The car will keep a loop in such a state.

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