Control_motor

1.Learning goals

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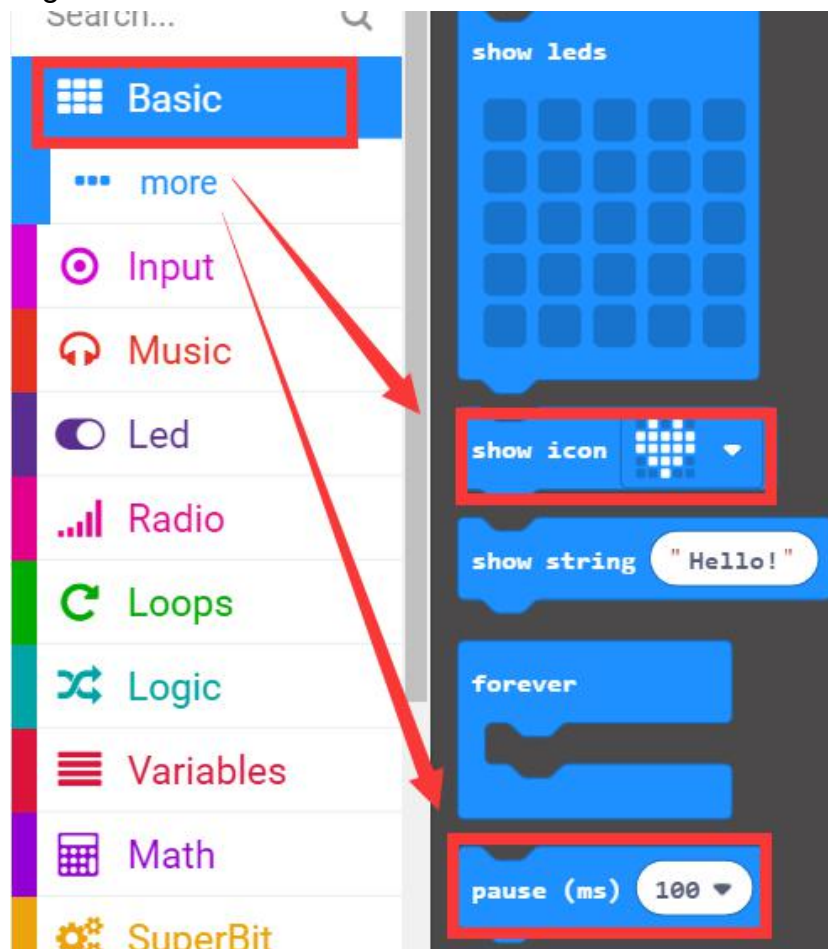
2.Programming method

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
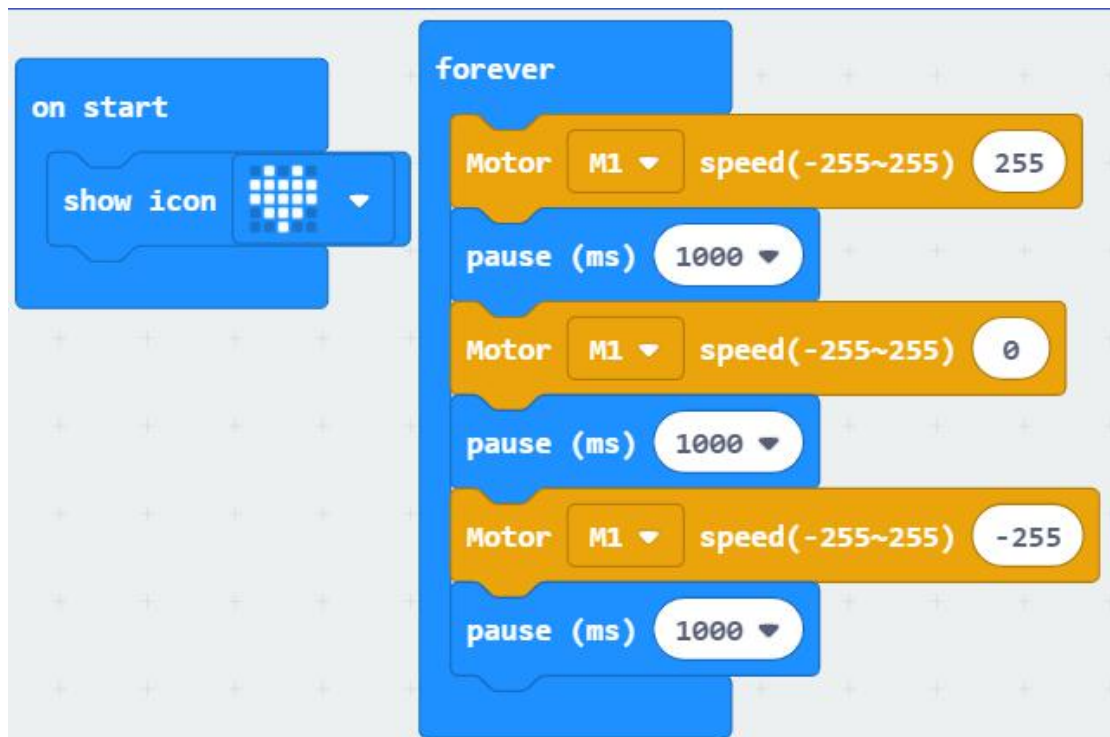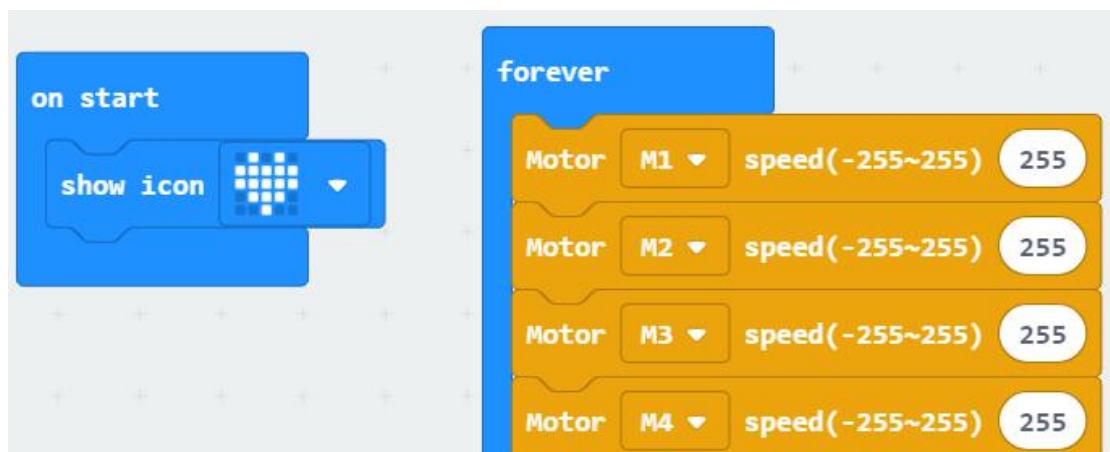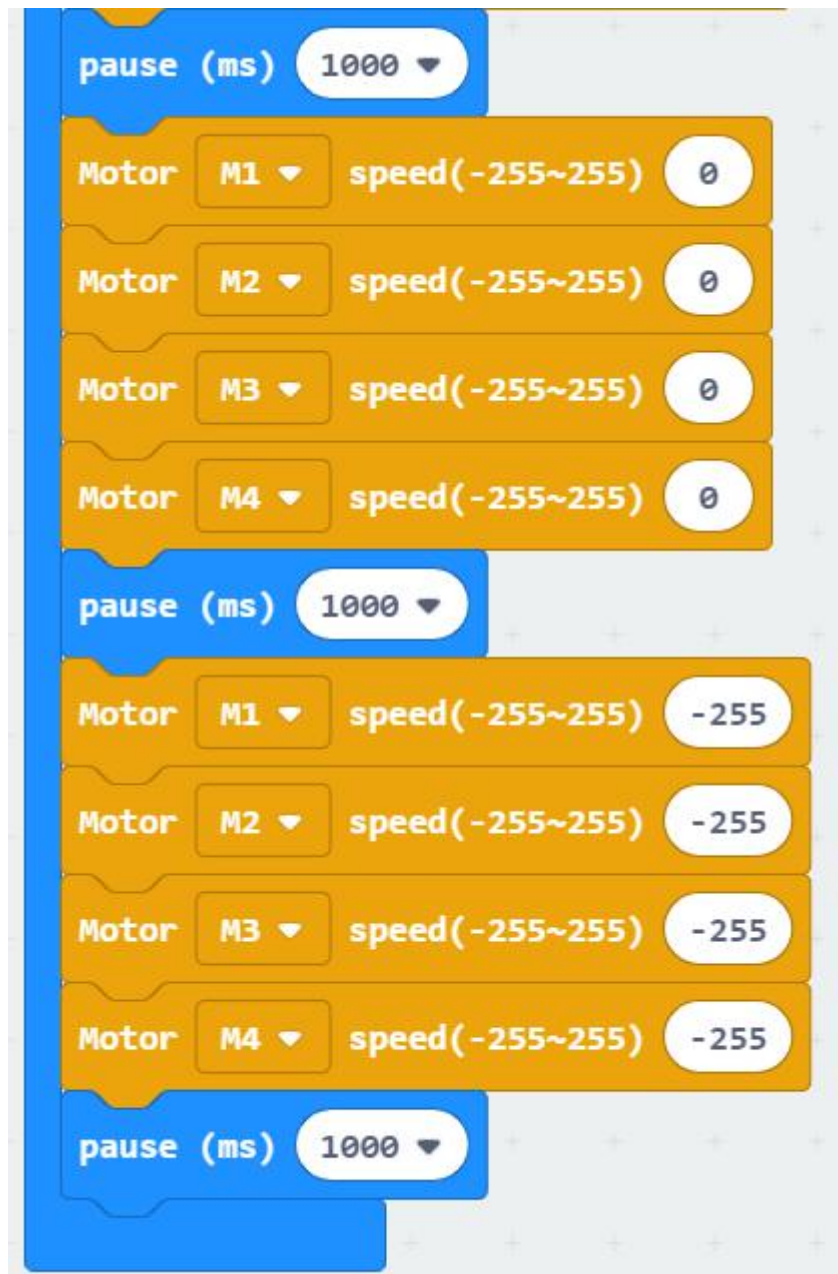
The summary program is shown below:

Control one motor

Control four motor:

```
pause (ms)  1000 ▼
  Motor  M1 ▼  speed(-255~255)  0
  Motor  M2 ▼  speed(-255~255)  0
  Motor  M3 ▼  speed(-255~255)  0
  Motor  M4 ▼  speed(-255~255)  0
pause (ms)  1000 ▼
  Motor  M1 ▼  speed(-255~255)  -255
  Motor  M2 ▼  speed(-255~255)  -255
  Motor  M3 ▼  speed(-255~255)  -255
  Motor  M4 ▼  speed(-255~255)  -255
pause (ms)  1000 ▼
```

5. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display the heart pattern and control the 180° servo rotation.

The motor forward speed is 255->stop->reverse speed is 255, the time interval is 1 second, and the loop is kept in such a state.

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