3.4 Swing

1. Learning goals

In this lesson, we will learn to use the micro:bit and Super:bit to control the building blocks to balance the car movement, including spin left and spin right functions.

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.

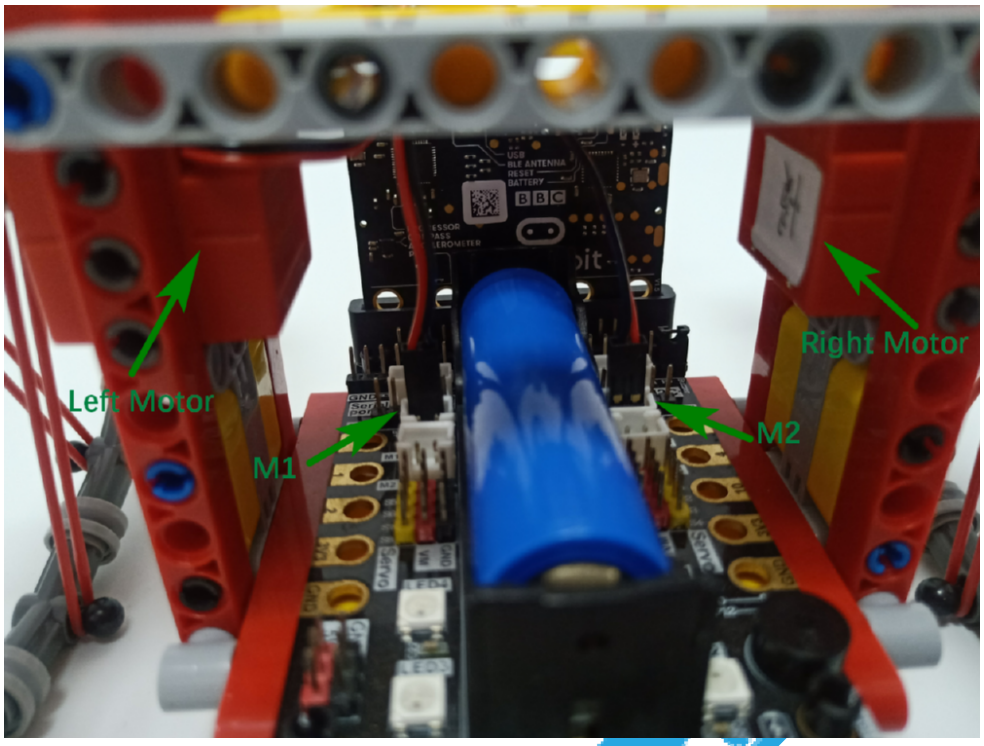
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, add Yahboom package: https://github.com/lzty634158/SuperBit, you can program.

3.Assembly steps

Please refer to the **[Tumblebit Assembly Steps]**

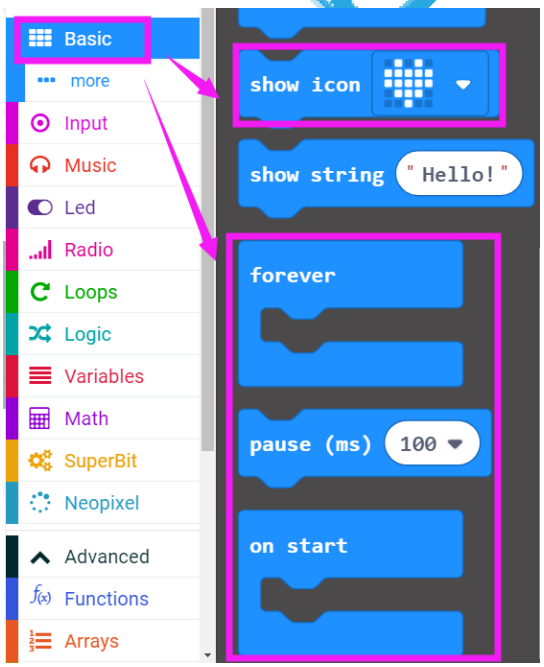
4.About wiring

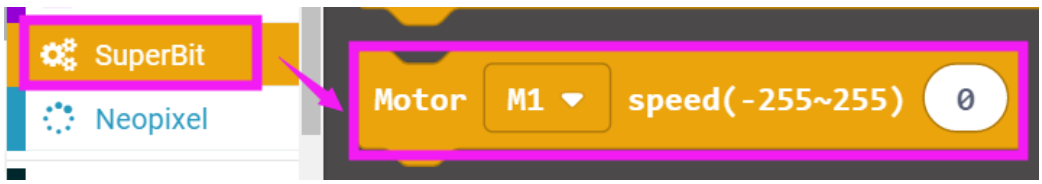
The motor wiring on the left side of the building block balance car is connected to the Super:bit M1 interface, and the black wire is on the battery side.
The motor wiring on the right side of the building block balance car is connected to the Super:bit M3 interface, and the black wire is on the battery side.
As shown below:



5.Looking for blocks

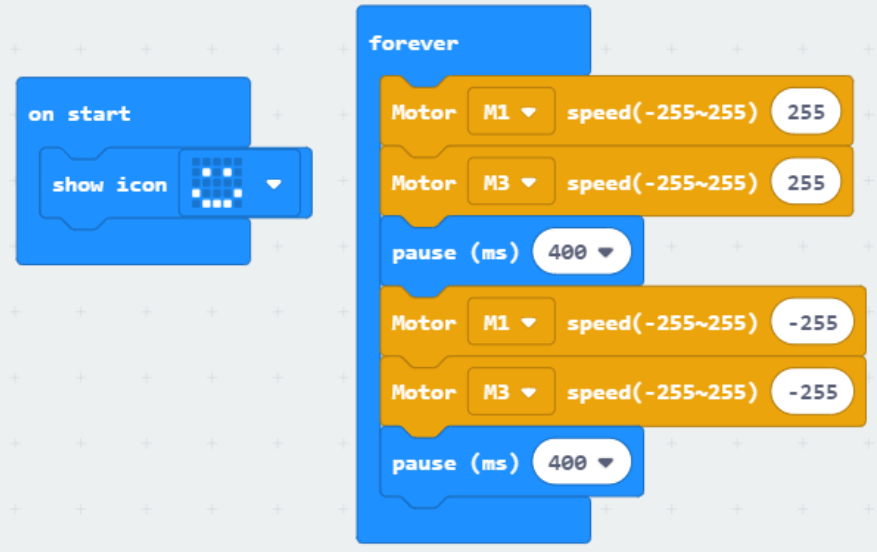
The following is the location of the building blocks required for this programming.





6.Combine building block

The summary program is shown below:



7. Experimental phenomenon

After the program is successfully downloaded, the micro:bit dot matrix will display a smile. The middle part of the building block balance car will sway back and forth, and it will cycle. If you need to restart, please press the reset button on the micro:bit board.