Dancing and singing

1.Learning goals

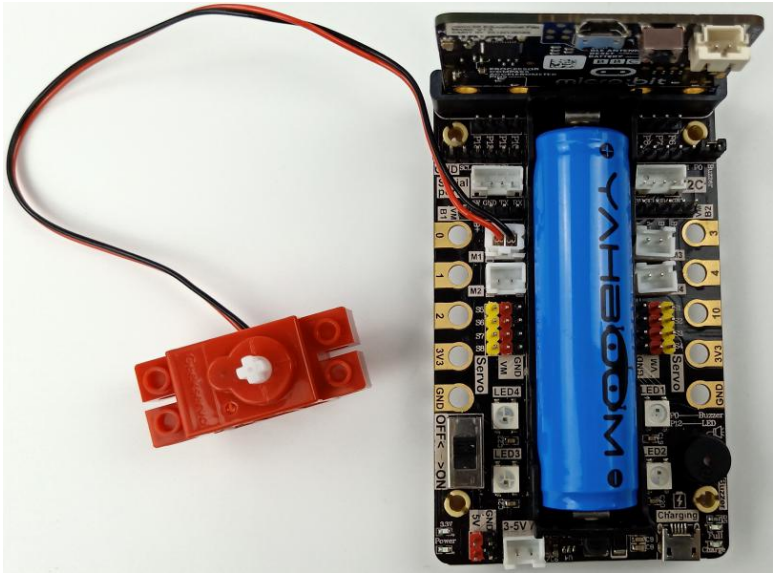
In this course, we mainly learn how to use the MakeCode graphical programming to realize the Biped robot“dancing” and “singing”, that is, the motor and buzzer work simultaneously.

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]-[Biped robot].

3.Wiring of motor and servo

The motor wiring is inserted into the M1 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/lzty634158/SuperBit** to program.

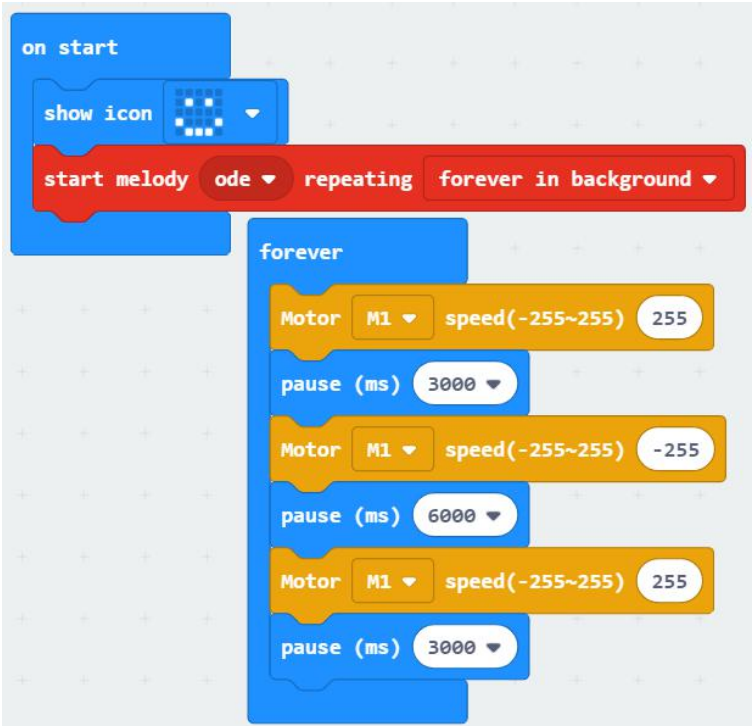
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, add Yahboom package: **https://github.com/lzty634158/SuperBit**, you can program.

5.Looking for blocks

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

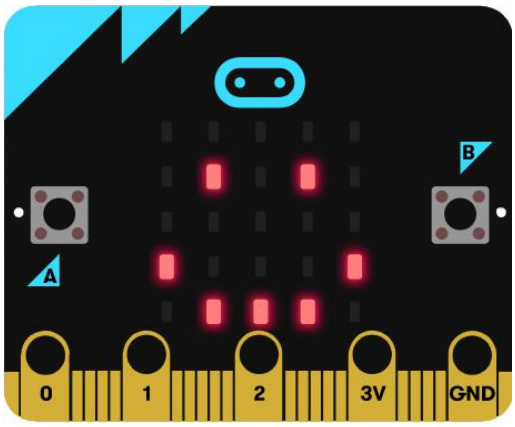
6.Combine block

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 robot will keep advance. Open the power switch, the spider robot will play the music "Ode", and spider will move forward-> backward switch different motion states.



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