

## Dance Battle

### 1.Learning goals

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

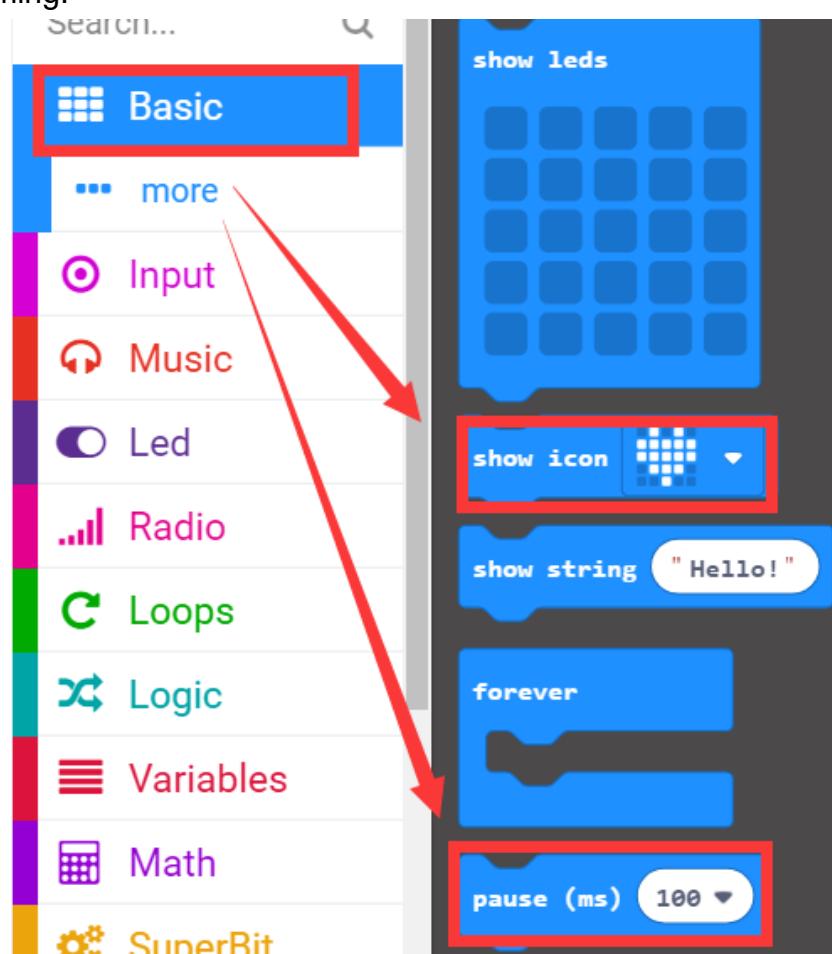
### 2.Programming method

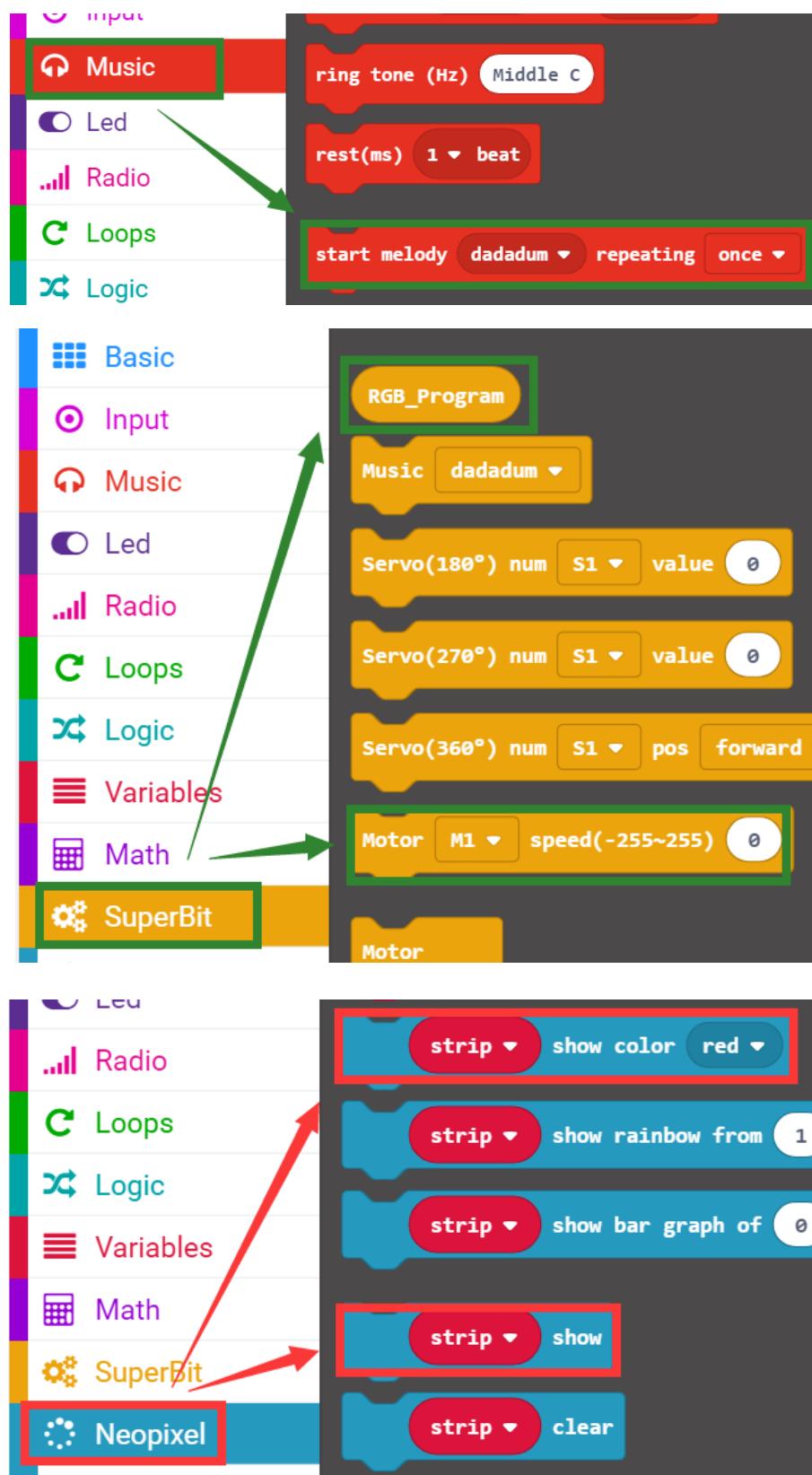
**Mode 1 online programming:** First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: <http://microbit.org/> to enter the programming interface. Add the Yahboom package <https://github.com/lzty634158/SuperBit>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

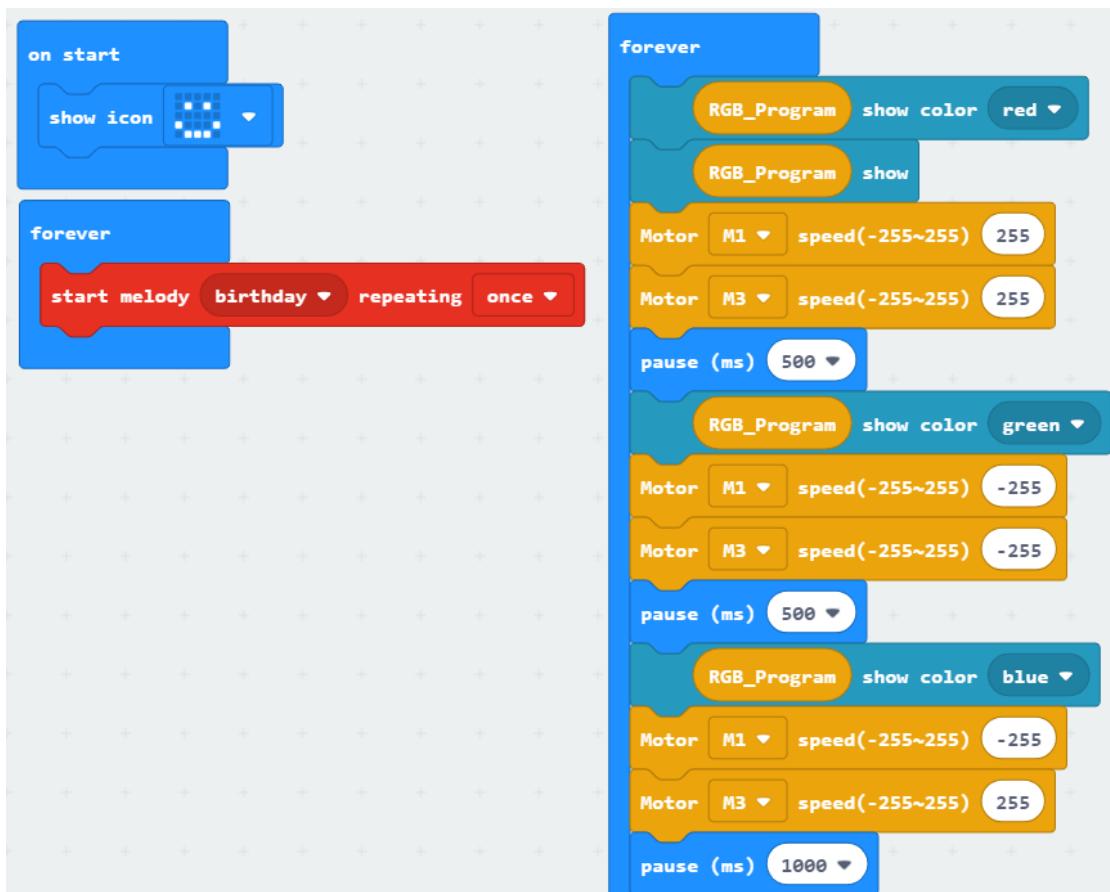
The following is the location of the building blocks required for this programming.





#### 4. Combine building block

The summary program is shown below:





## 5. Assembly steps

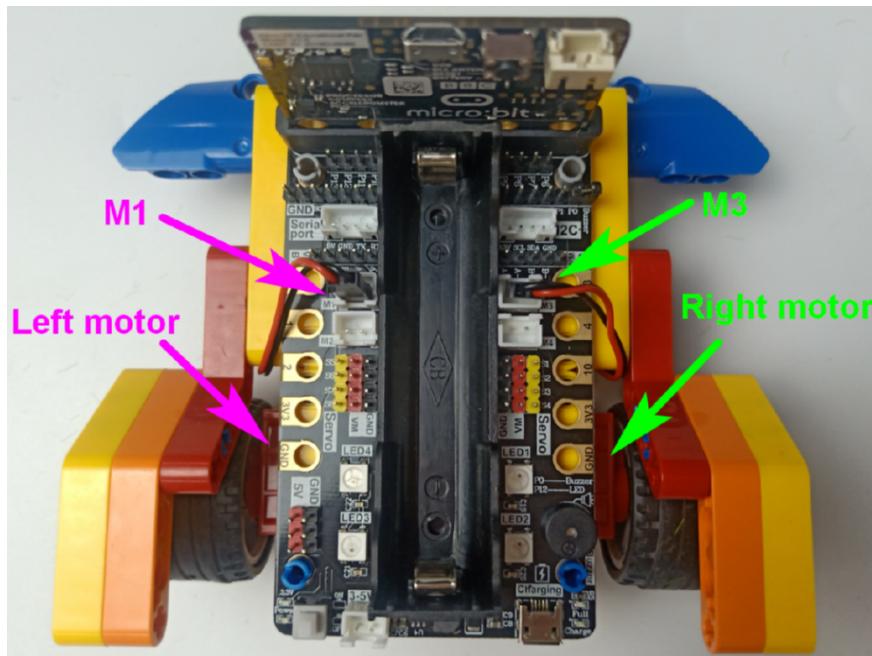
Please refer to the **Pretty car assembly steps** in the Assembly instructions folder for building blocks assembly steps.

## 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 play “Happy Birthday”. The car will advance 0.5s, back 0.5s, spin left 1s, spin right 1s, spin left 0.2s, spin right 0.2s, turn left 0.5s, turn right 0.5s.

At the same time, RGB lights will change color:red--green--blue--violet.

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