

Merry Christmas

1.Learning goals

In this lesson, we mainly learn how to control the color of RGB by micro:bit and Super:bit expansion board.

2.Programming method

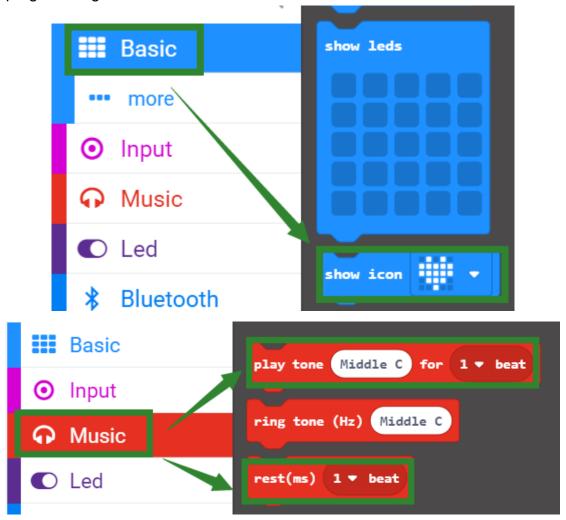
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: http://microbit.org/ to enter the programming interface. Add the Yahboom package https://github.com/lzty634158/SuperBit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

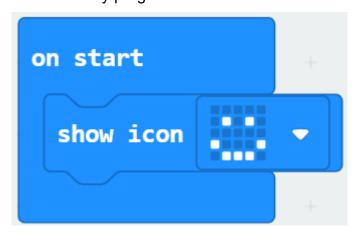
The following is the location of the building blocks required for this programming.

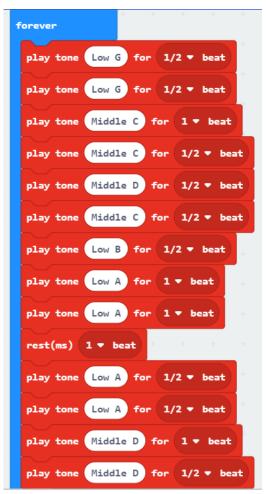




4.Combine building block

The summary program is shown below:





```
play tone Middle E for 1/2 ▼ beat

play tone Middle D for 1/2 ▼ beat

play tone Middle C for 1/2 ▼ beat

play tone Low B for 1 ▼ beat

play tone Low G for 1 ▼ beat

rest(ms) 1 ▼ beat

play tone Low G for 1/2 ▼ beat

play tone Low G for 1/2 ▼ beat

play tone Middle E for 1 ▼ beat

play tone Middle E for 1/2 ▼ beat

play tone Middle D for 1/2 ▼ beat

play tone Middle C for 1 ▼ beat
```



```
rest(ms) 1 ▼ beat

play tone Low G for 1/2 ▼ beat

play tone Low G for 1/2 ▼ beat

play tone Low A for 1/2 ▼ beat

play tone Middle D for 1/2 ▼ beat

play tone Low B for 1/2 ▼ beat

play tone Middle C for 1 ▼ beat
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5. Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display the smile pattern. The buzzer will play music "Merry Christmas".