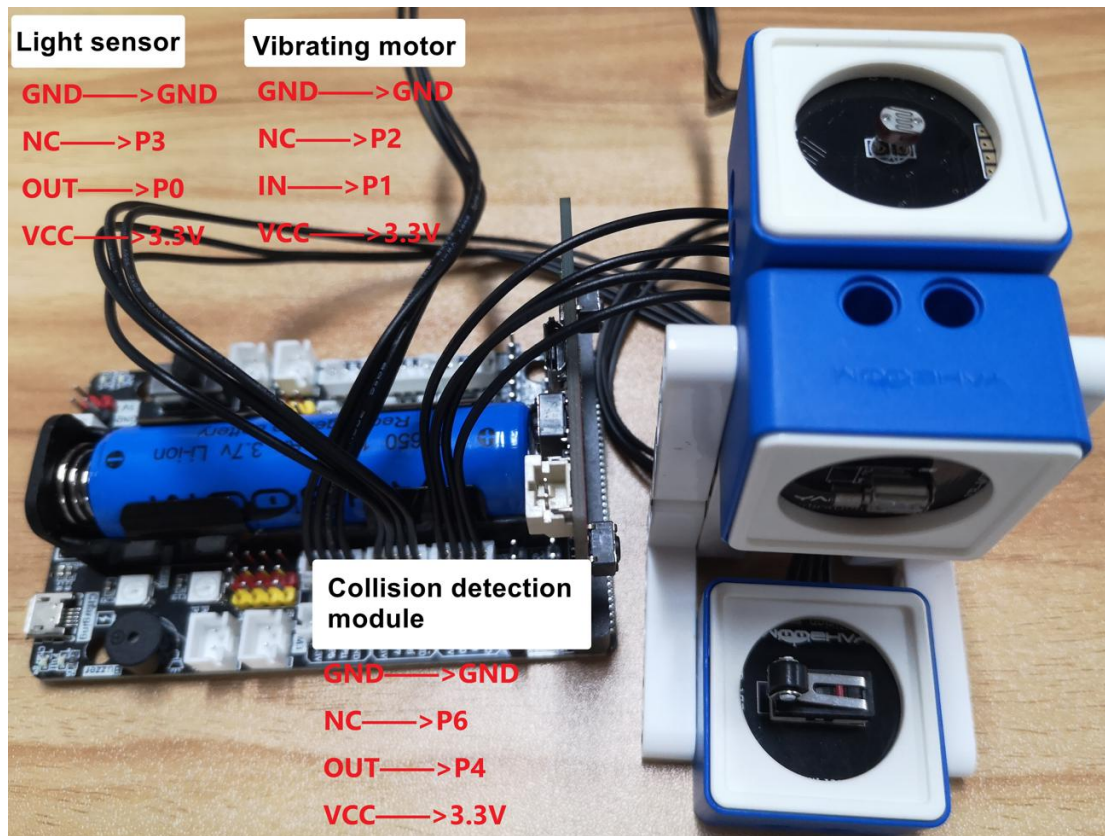# Vibrating alarm clock

1. Learning target

In this course, we will learn how to use Micro:bit, super:bit expansion board, vibrating sensor, collision detection sensor and light sensor module to make vibrating alarm clock function.

2. Preparation

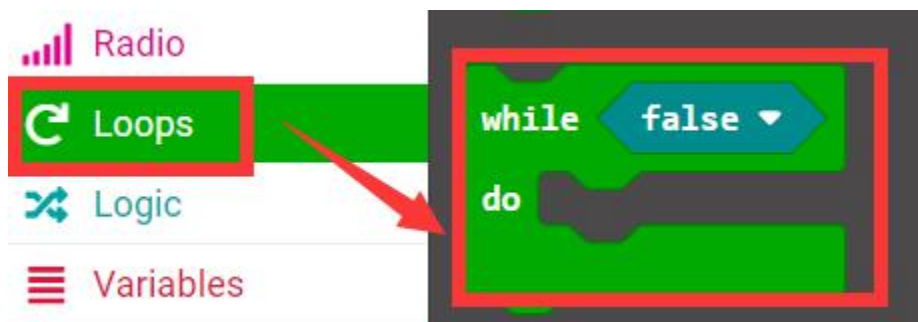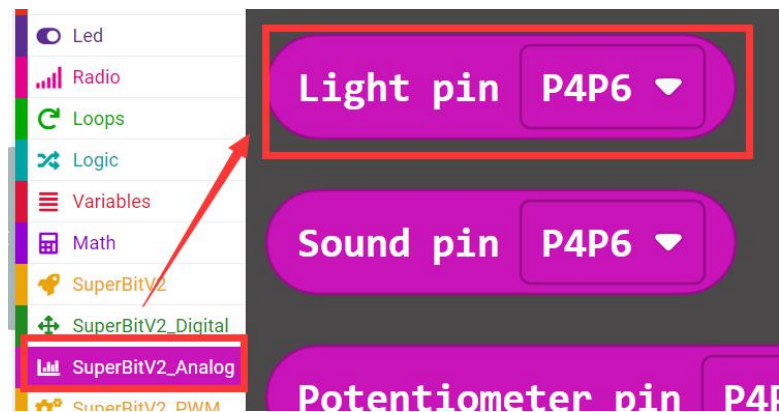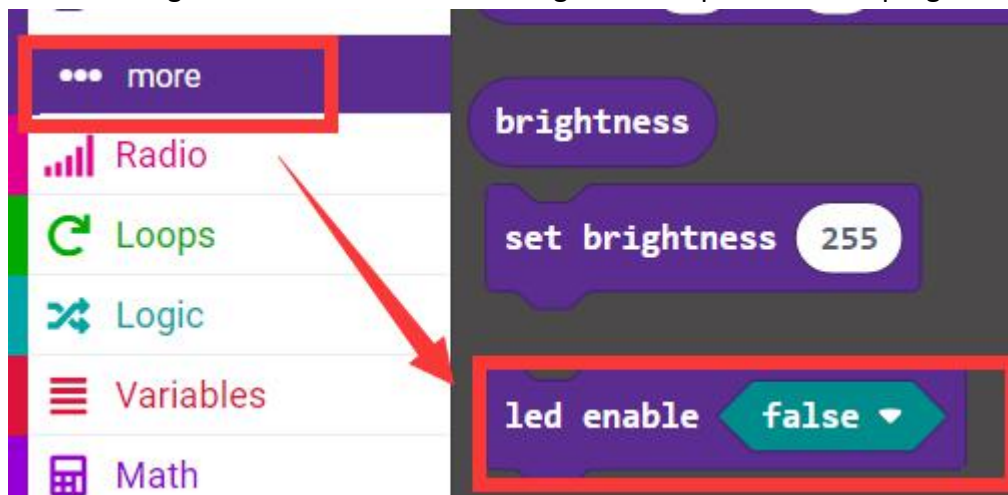Connect the module to Micro:bit board by expansion board, as shown below.
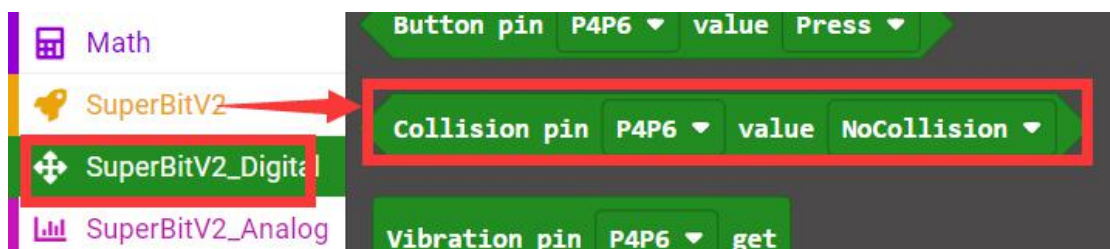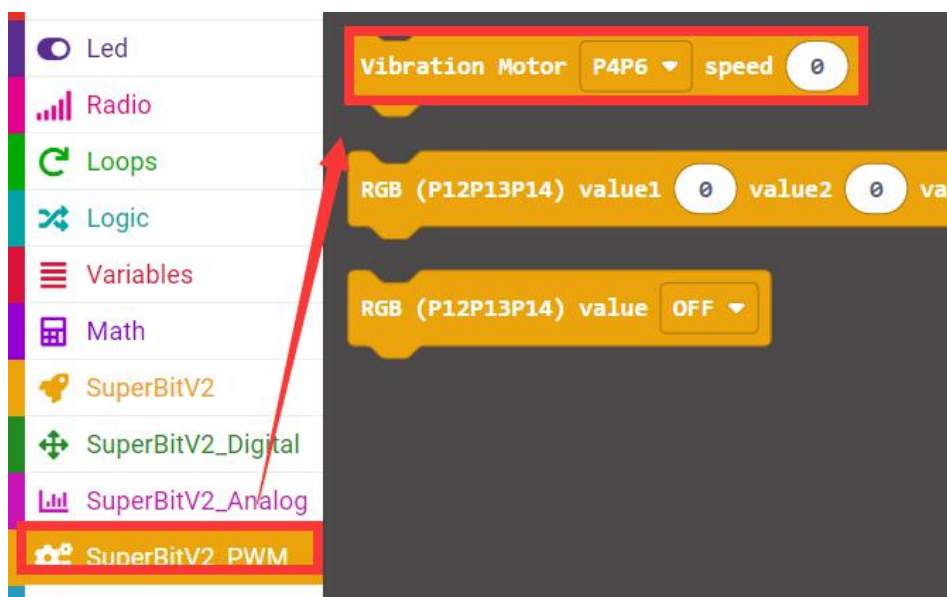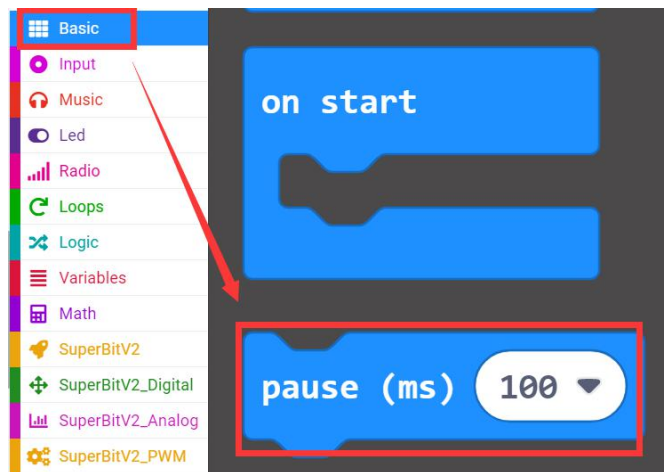

3.Programming method

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/YahboomTechnology/SuperBitLibV2 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/YahboomTechnology/SuperBitLibV2 , you can start programming.

4.Looking for blocks

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

brightness

set brightness 255

led enable false ▼

Light pin P4P6 ▼

Sound pin P4P6 ▼

Potentiometer pin P4P

if true ▼ then

else ⊖

⊕

while false ▼

do

5.Combine block

The summary program is shown below.
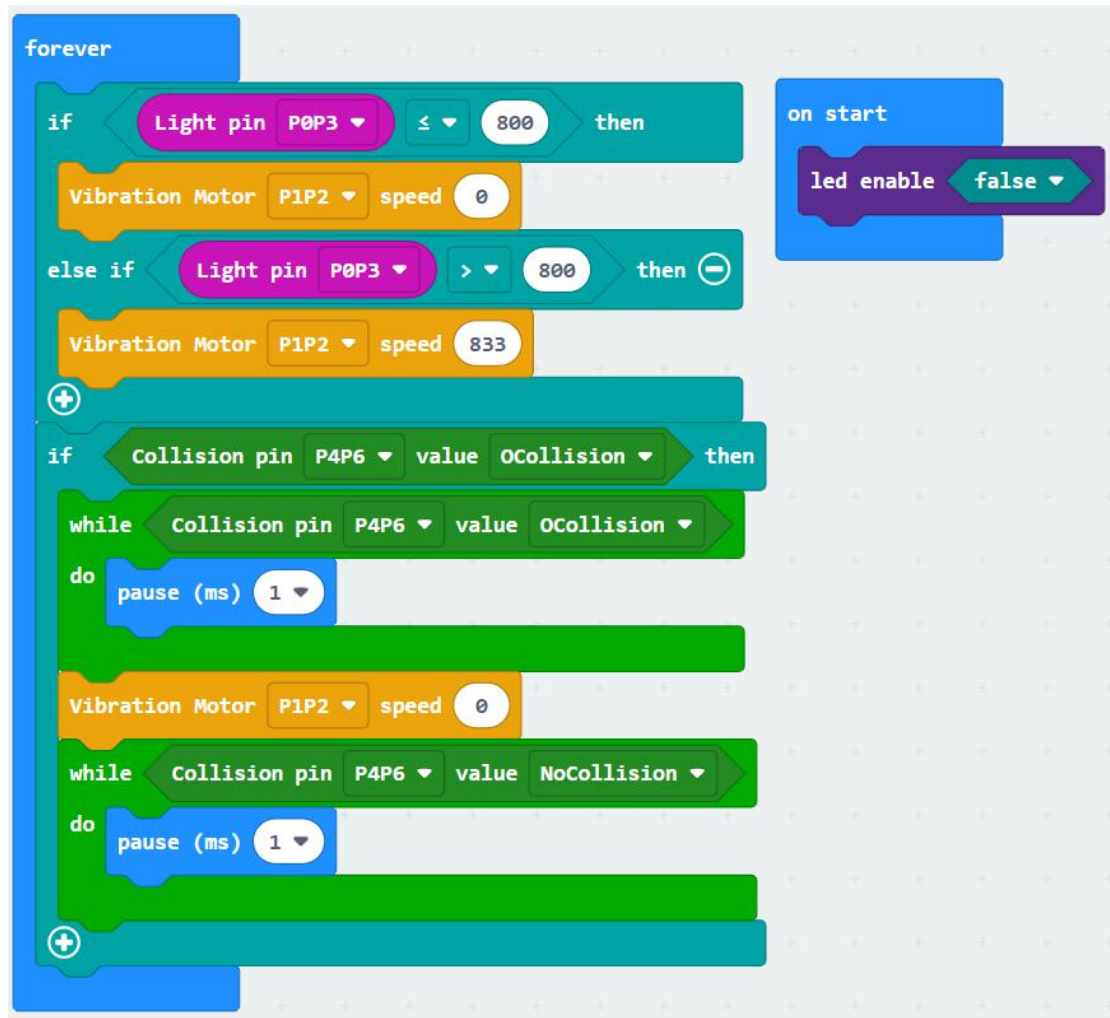
5. Phenomenon

After the program is downloaded successfully. When the light sensor detects strong light, the vibration motor starts to vibrate. When the collision module is pressed, the vibration motor stops vibrating. When no strong light is detected, the vibration motor stops vibrating.