

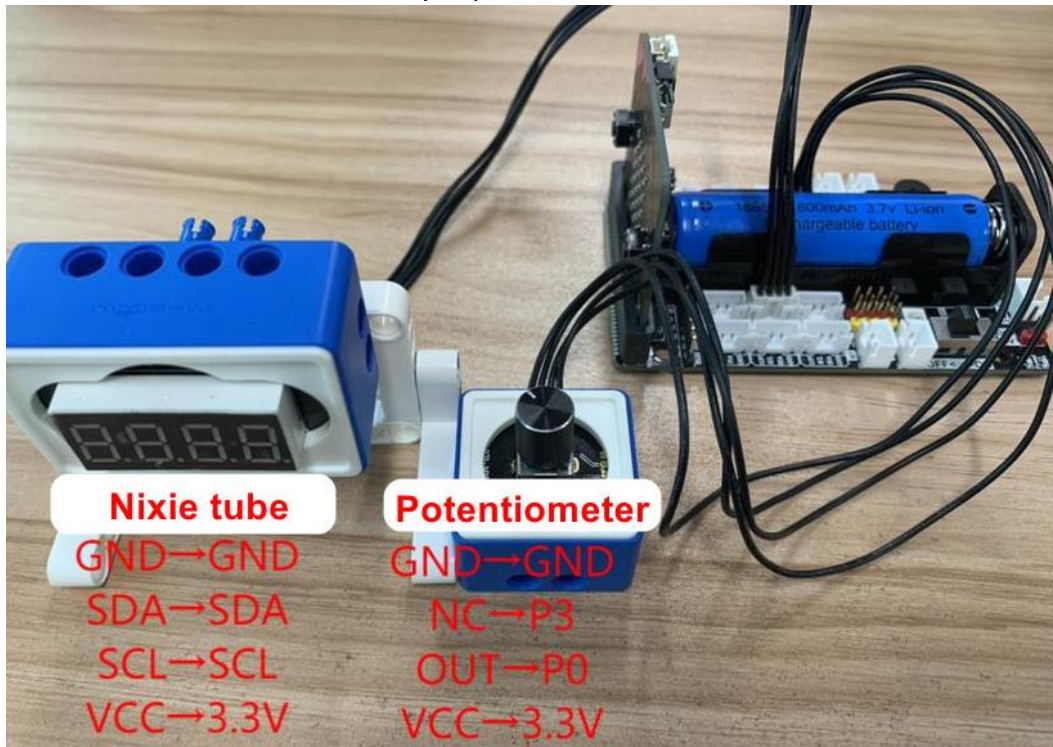
## Adjust potentiometer

### 1. Learning target

In this course, we will learn how to use Micro:bit board, potentiometer module and nixie tube module to realize nixie tube display potentiometer value.

### 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:

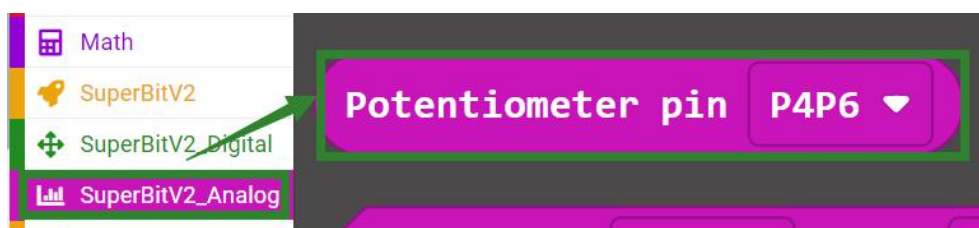
<http://microbit.org/> to enter the programming interface. Add the Yahboom package

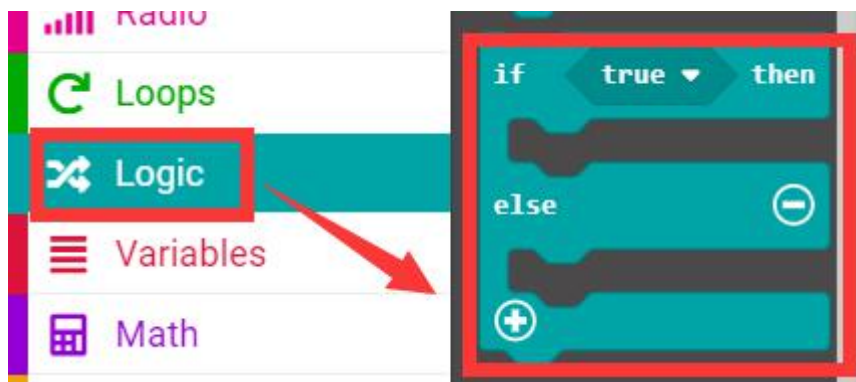
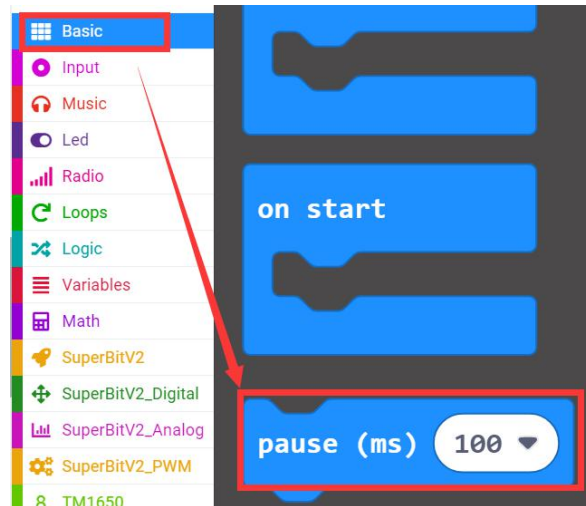
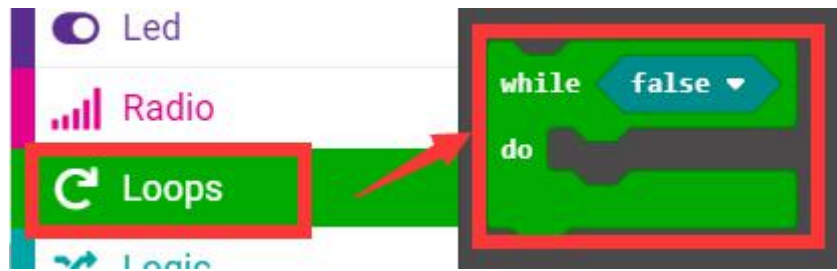
<https://github.com/YahboomTechnology/SuperBitLibV2> to program.

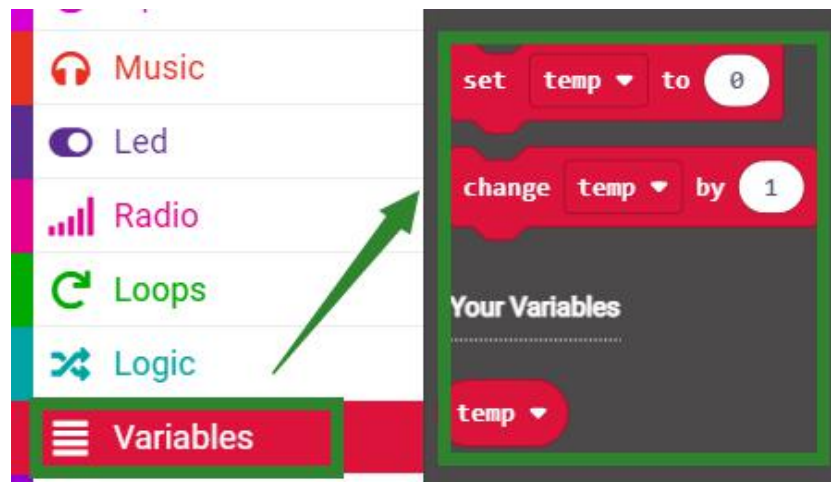
**Mode 2 offline programming:** We need to open the offline programming software. After the installation is complete, enter the programming interface, click **【New Project】**, add Yahboom package: <https://github.com/YahboomTechnology/SuperBitLibV2>, you can start programming.

### 4. Looking for blocks

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

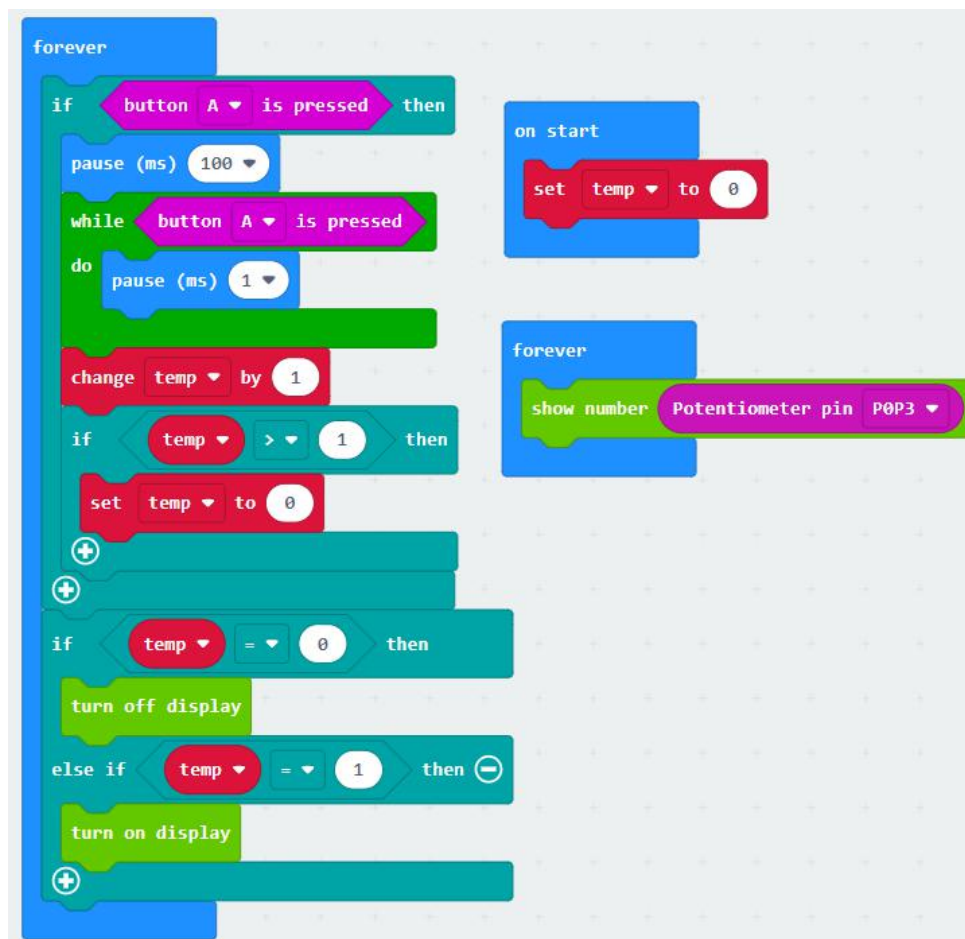






### 5.Combine block

The summary program is shown below.



At the beginning, the variable temp is 0. Turn off the nixie tube display. When it is detected that the key is pressed, wait for the key to release. When the key is released, the temp is increased by 1, and detect the temp value. If it is greater than 1, it is set to 0. When the temp is 0, press the key, the temp becomes 1, and turn on the nixie tube display.

### 5. Phenomenon

After the program is downloaded successfully. Press the microbit button A, the nixie tube lights up, twist the potentiometer, and the nixie tube displays the potentiometer value. Press button A again, and the nixie tube light will go out.