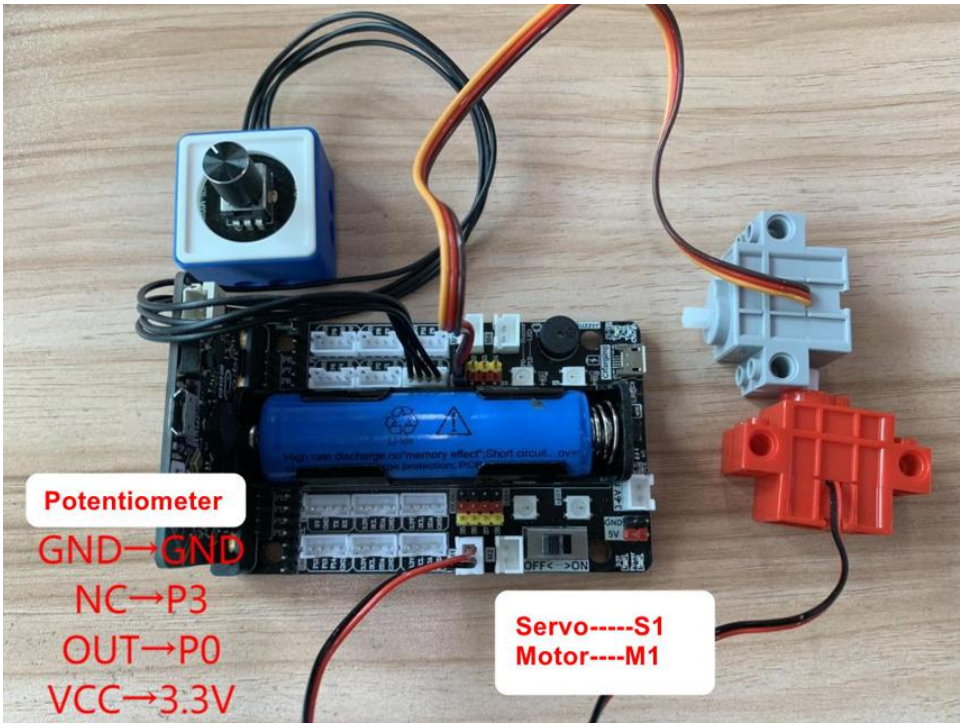
Adjustable fan

1. Learning target

In this course, we will learn how to use Micro:bit board, potentiometer module, motor and servo to make a adjustable fan.

2. Preparation

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



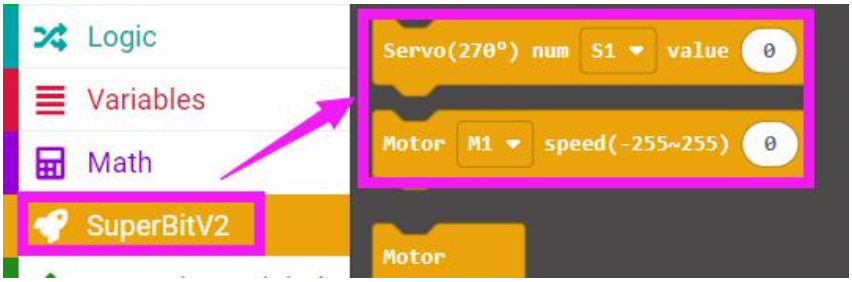
3.Programming method

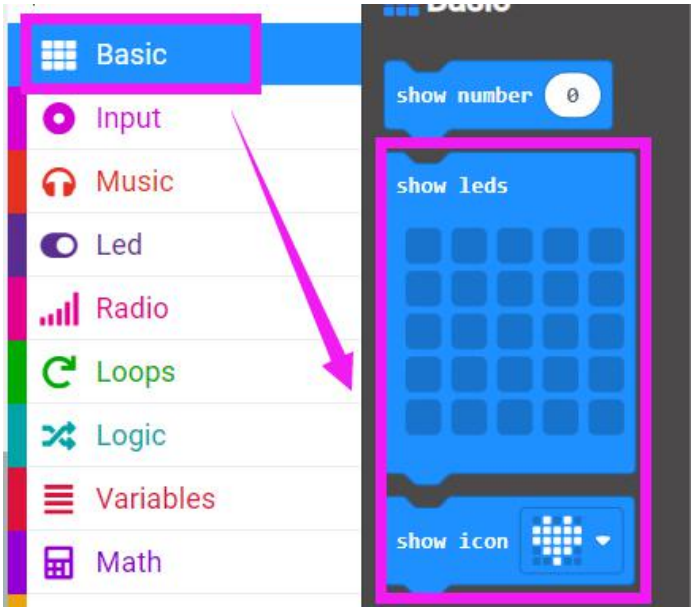
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: http://microbit.org/ to enter the programming interface. Add the Yahboom package https://github.com/YahboomTechnology/SuperBitLibV2 to program.

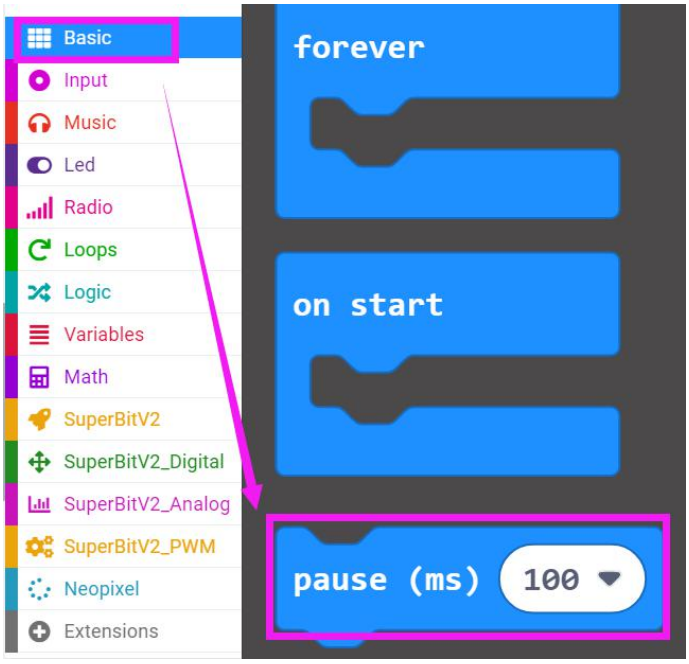
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, add Yahboom package: https://github.com/YahboomTechnology/SuperBitLibV2 , you can start programming.

4.Looking for blocks

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

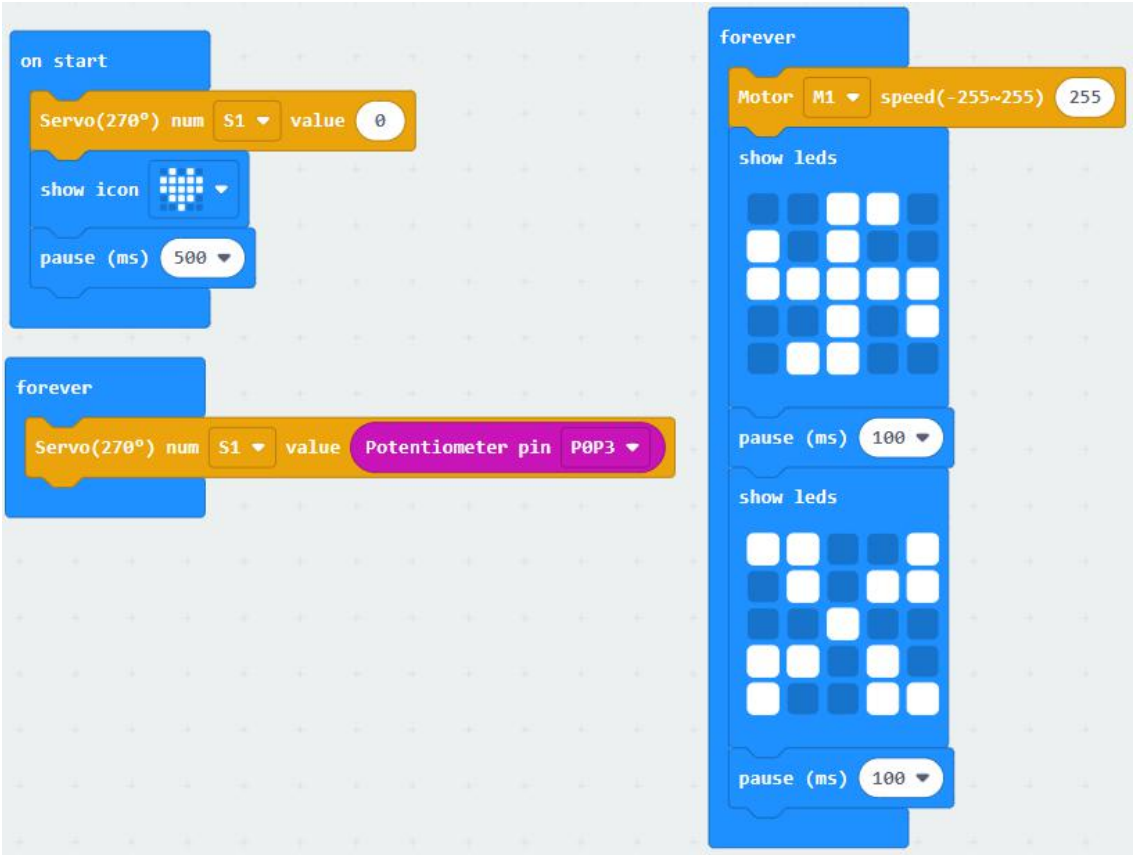






5.Combine block

The summary program is shown below.



5. Phenomenon

After the program is downloaded successfully. Turn on the power switch, and the micro: bit dot matrix will display the love pattern. The adjustable fan starts to rotate at the maximum speed of 255. Turn the potentiometer to change the angle of the adjustable fan. At the same time, we can see that the micro: bit lattice will display the pattern of dynamic windmill rotation.