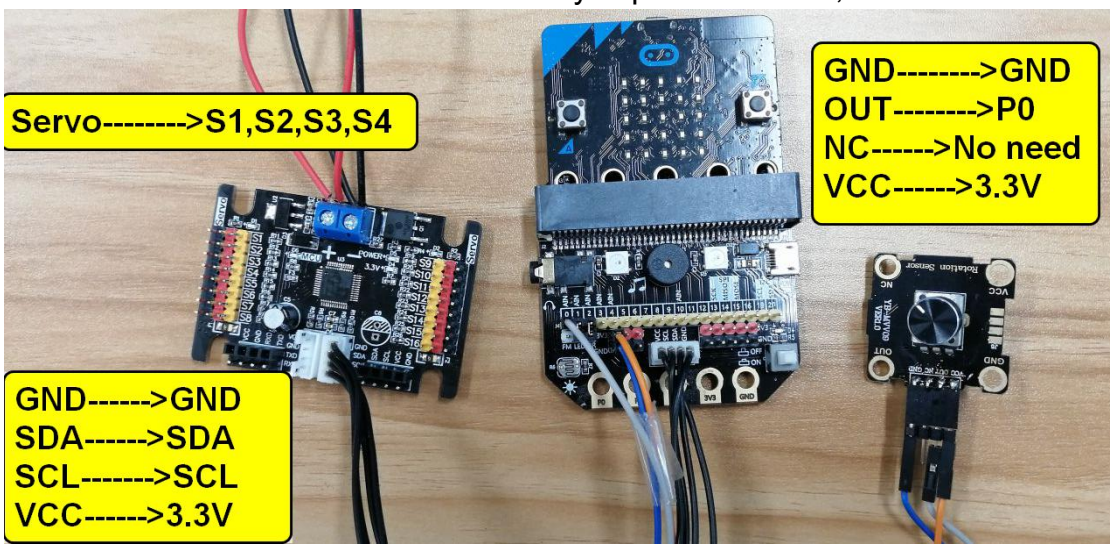
Potentiometer control servo

1. Learning target

In this course, we will earn how to use Micro:bit, 16-channels servo debugging board and potentiometer module to control servo.

2. Preparation

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



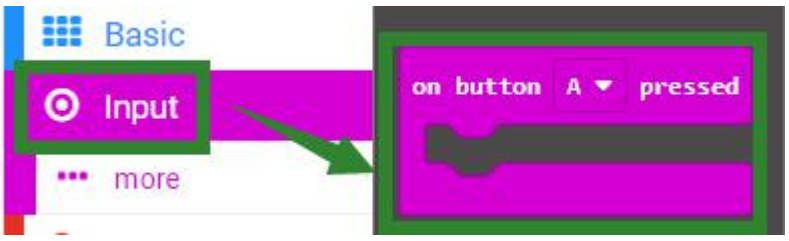
3.Programming method

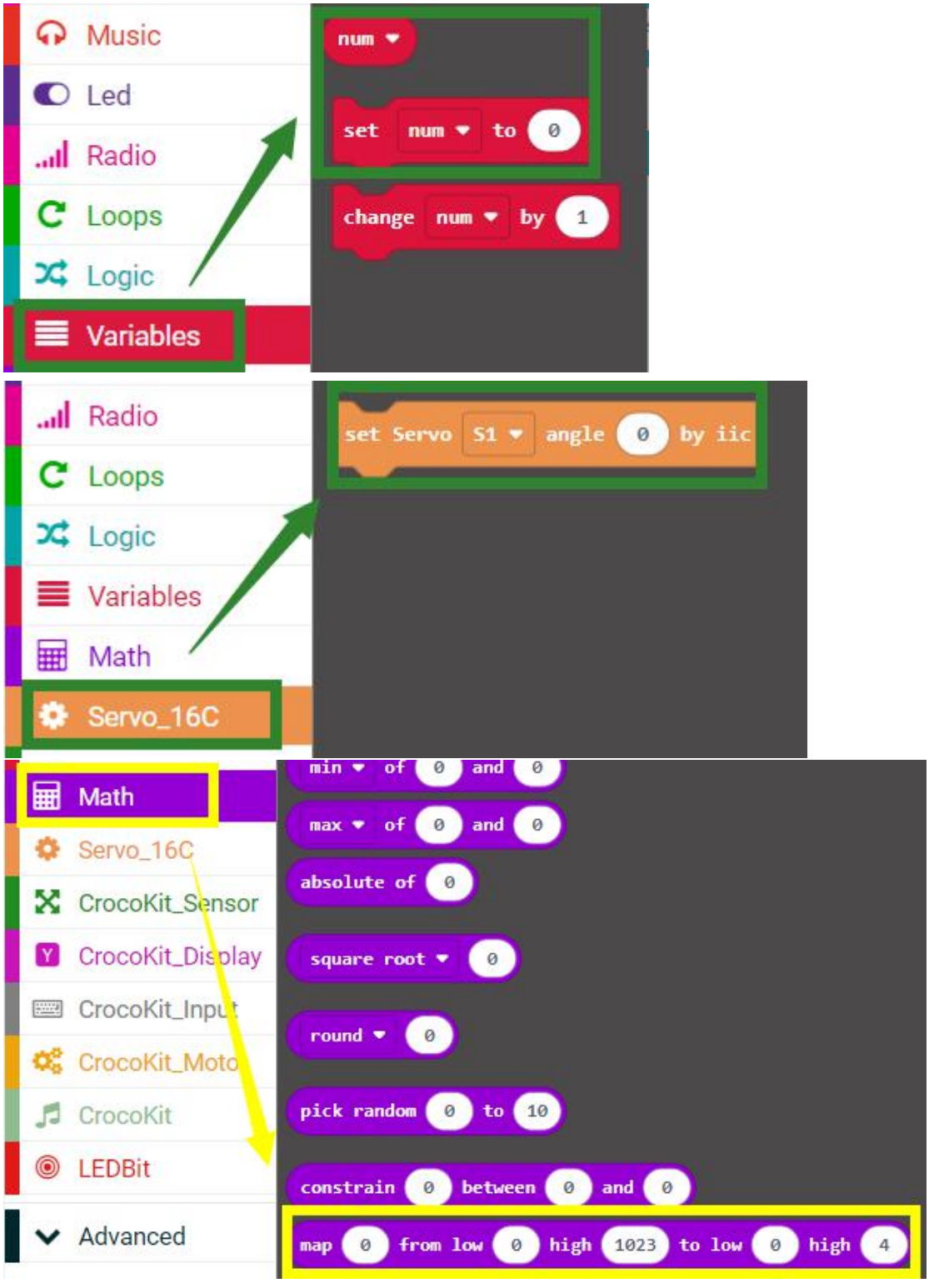
Mode 1 online programming: First, we need to connect the micro:bit to the computer by USB cable. The computer will pop up a USB flash drive and click on the URL in the USB flash drive: http://microbit.org/ to enter the programming interface. Add the Yahboom package https://github.com/YahboomTechnology/Servo_16C to programming.

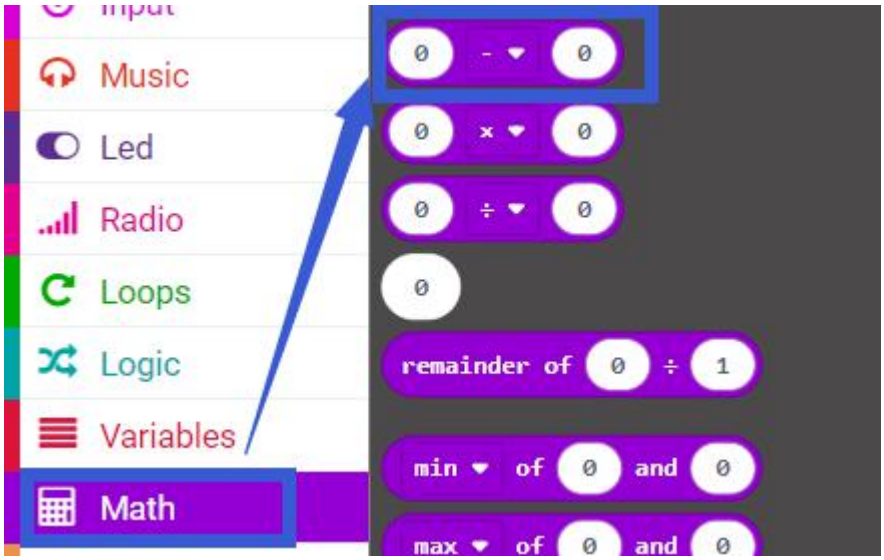
Mode 2 offline programming: We need to open the offline programming software. After the installation is complete, enter the programming interface, click【New Project】, add Yahboom package: https://github.com/YahboomTechnology/Servo_16C , you can start programming.

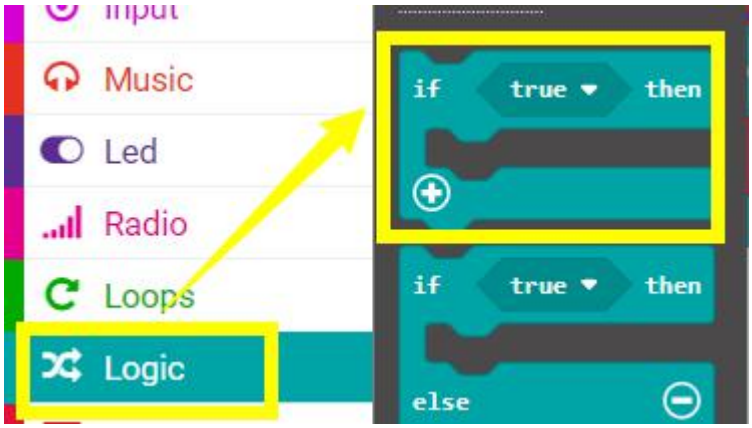
4.Looking for blocks

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

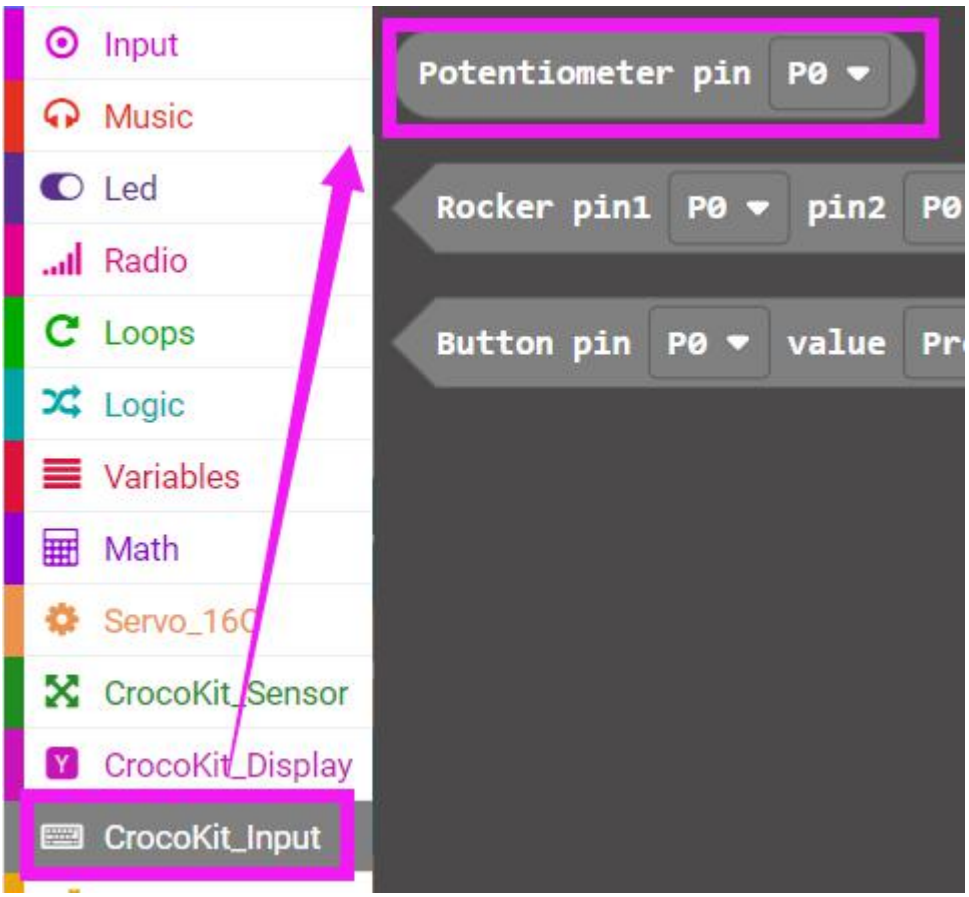



Music
Led
Radio
Loops
Logic
Variables
num
set num to 0
change num by 1
Radio
Loops
Logic
Variables
Math
Servo_16C
set Servo S1 angle 0 by iic
Math
Servo_16C
CrocoKit_Sensor
CrocoKit_Display
CrocoKit_Input
CrocoKit_Moto
CrocoKit
LEDBit
Advanced
min of 0 and 0
max of 0 and 0
absolute of 0
square root 0
round 0
pick random 0 to 10
constrain 0 between 0 and 0
map 0 from low 0 high 1023 to low 0 high 4


Music
Led
Radio
Loops
Logic
Variables
Math
0 - 0
0 x 0
0 ÷ 0
0
remainder of 0 ÷ 1
min of 0 and 0
max of 0 and 0

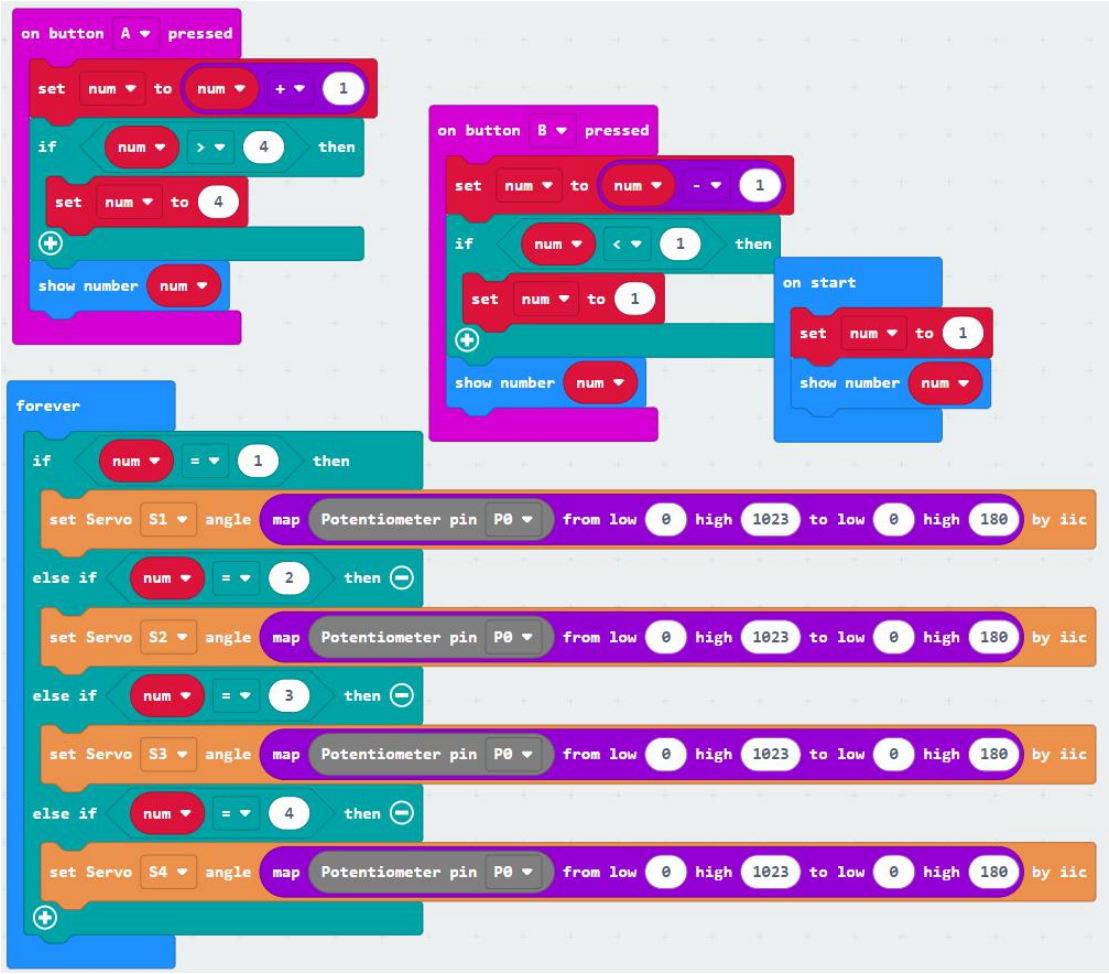

Music
Led
Radio
Loops
Logic
if true then
if true then
else


Basic
Input
show number 0



5.Combine block

The summary program is shown below.



6. Phenomenon

After the program is downloaded successfully. Twist the potentiometer, servo S1 will turn. Press the micro:bit button A, the dot matrix screen will display 2. Twist the potentiometer, servo S2 will turn. Press the micro:bit button B, the dot matrix will display 1. Twist the potentiometer, servo S2 will turn.