

## **Photosensitive robot**

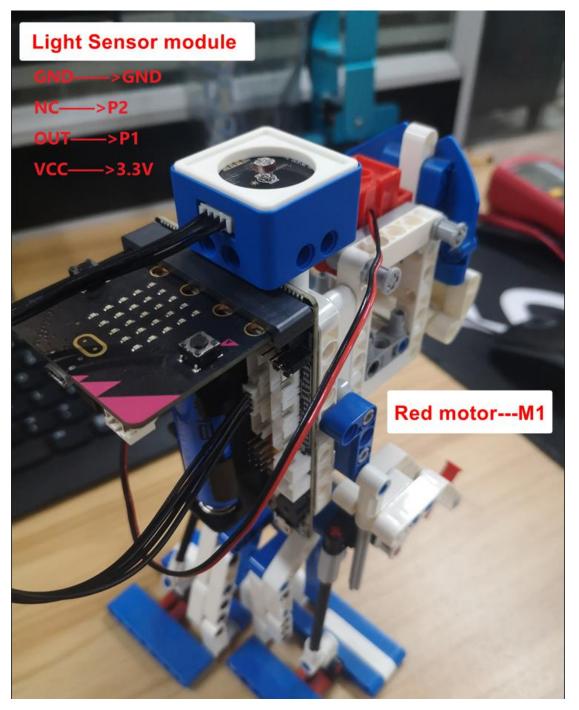
Note: Since the photosensitive module is affected by the ambient light, the values obtained will also be different. Please modify the threshold value of the sensor according to your actual situation.

## 1. Learning target

In this course, we will learn how to use Micro:bit, super:bit expansion board, light sensor module and motor to make a Photosensitive robot.

# 2. Preparation

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





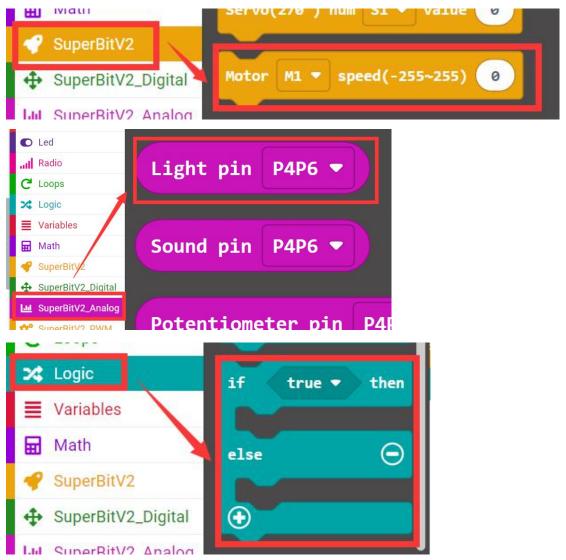
# 3. Programming method

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: <a href="http://microbit.org/">http://microbit.org/</a> to enter the programming interface. Add the Yahboom package <a href="https://github.com/YahboomTechnology/SuperBitLibV2">https://github.com/YahboomTechnology/SuperBitLibV2</a> 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: <a href="https://github.com/YahboomTechnology/SuperBitLibV2">https://github.com/YahboomTechnology/SuperBitLibV2</a>, you can start programming.

### 4.Looking for blocks

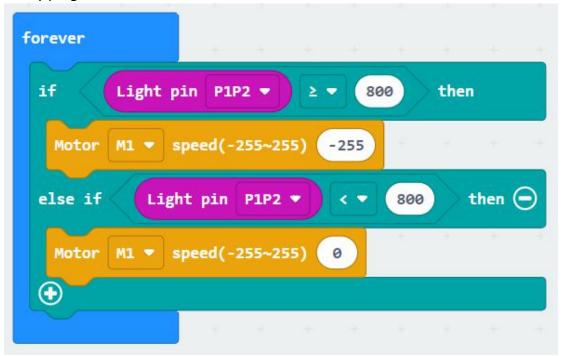
The following is the location of the building blocks required for this programming.



#### 5.Combine block



The summary program is shown below.



# 5. Phenomenon

After the program is downloaded successfully. If the light sensitive module detects strong light, the motor will drive the robot to walk. If the light sensitive module is blocked by hands, the robot will stop walking.