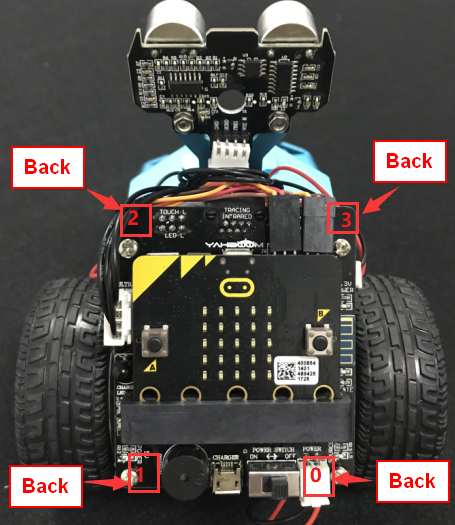
**1-2.Light up multiple colorful lights on body of robot**

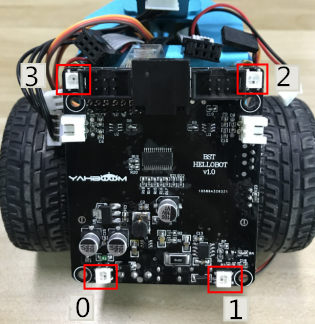
**1.Preparation**

1.You should learn about the position of the colorful lights in the body of hellobot；

2.You should learn about the micro:bit pins connected to the colorful lights in the schematic.

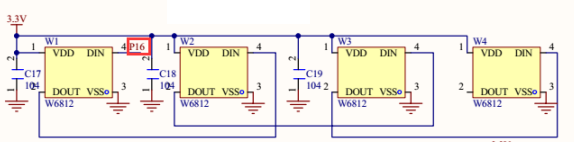


1-2-1 colorful lights on body of hellobot（back）

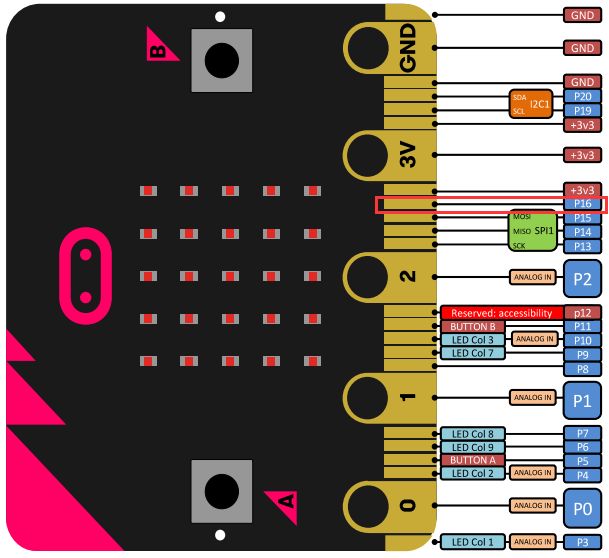


1-2-2 colorful lights on body of hellobot

We can make different colors of light and brightness by programming.



1-2-3 schematic



1-2-4 Pins of Micro:bit

From the schematic diagram in P1-1-3, you can see that the colorful lights is connected to the P16 of the Micro:bit.

Note:In the bottom layer of the HelloBot package has been set parameter for the user, you can directly drag the colorful lights building blocks.

1. **Learning goals**

In this lesson, we will learn to light up four colorful lamps in turn, the colorful lamps will emit light of different colors.

**3.Programming**

3.1 Programming online

**1) You should use the USB cable to connect the micro:bit to the computer, at this point, the computer will have a micro:bit U disk. You need to open it, click micro:bit website, then entered the micro:bit website** or you can enter the URL directly in your browser: http://microbit.org/

2) After entering the programming interface, you need to click Add package and copy the HelloBot package URL: https://github.com/lzty634158/HelloBot to the input field, click to confirm the add package. Then you can use the blocks of the HelloBot package.

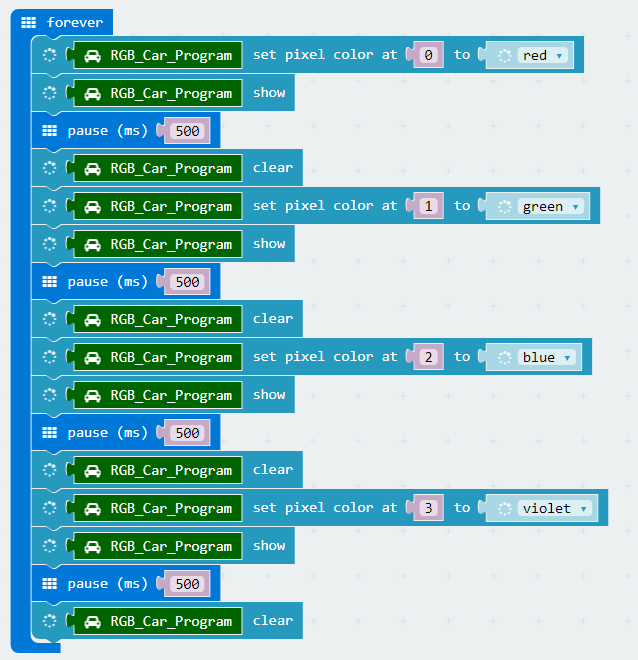
3.2 Programming offline

1) You can double-click to use it. As shown in the following figure.



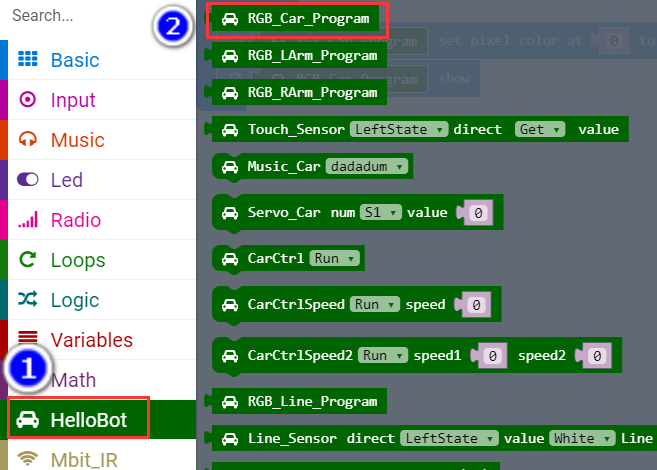
2) After entering the programming interface, you need to click Add package and copy the HelloBot package URL: https://github.com/lzty634158/HelloBot to the input field, click to confirm the add package. Then you can use the blocks of the HelloBot package.

**Note: The package only needs to be added once. If you have added packages in the previous lessons, this course does not need to be added repeatedly.**

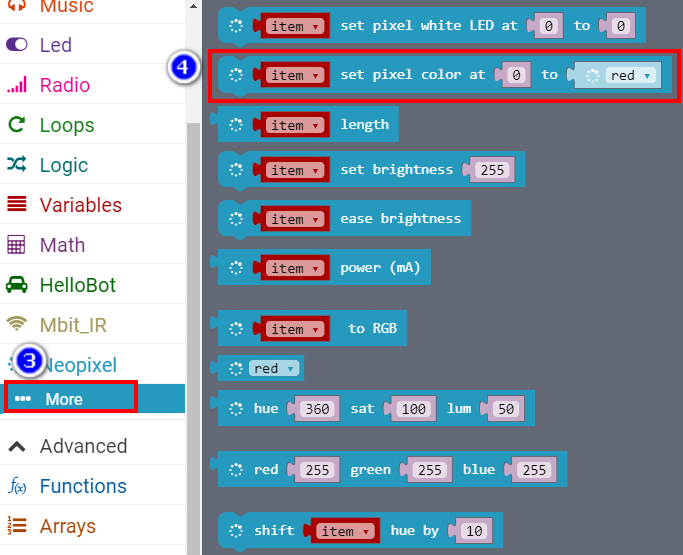


1-2-5 total program

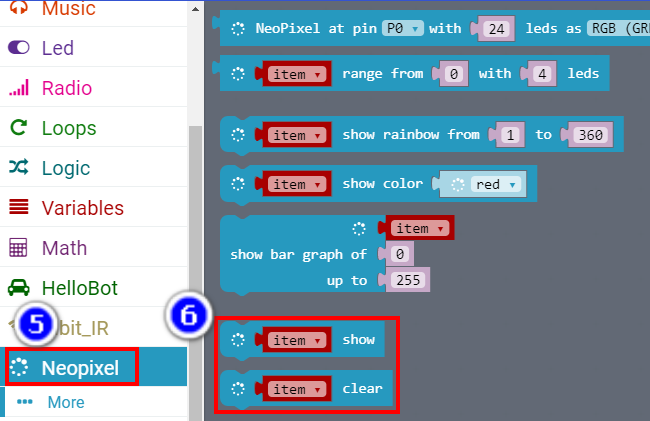
The locations of blocks in the total program are shown in the following figure.



1-2-6



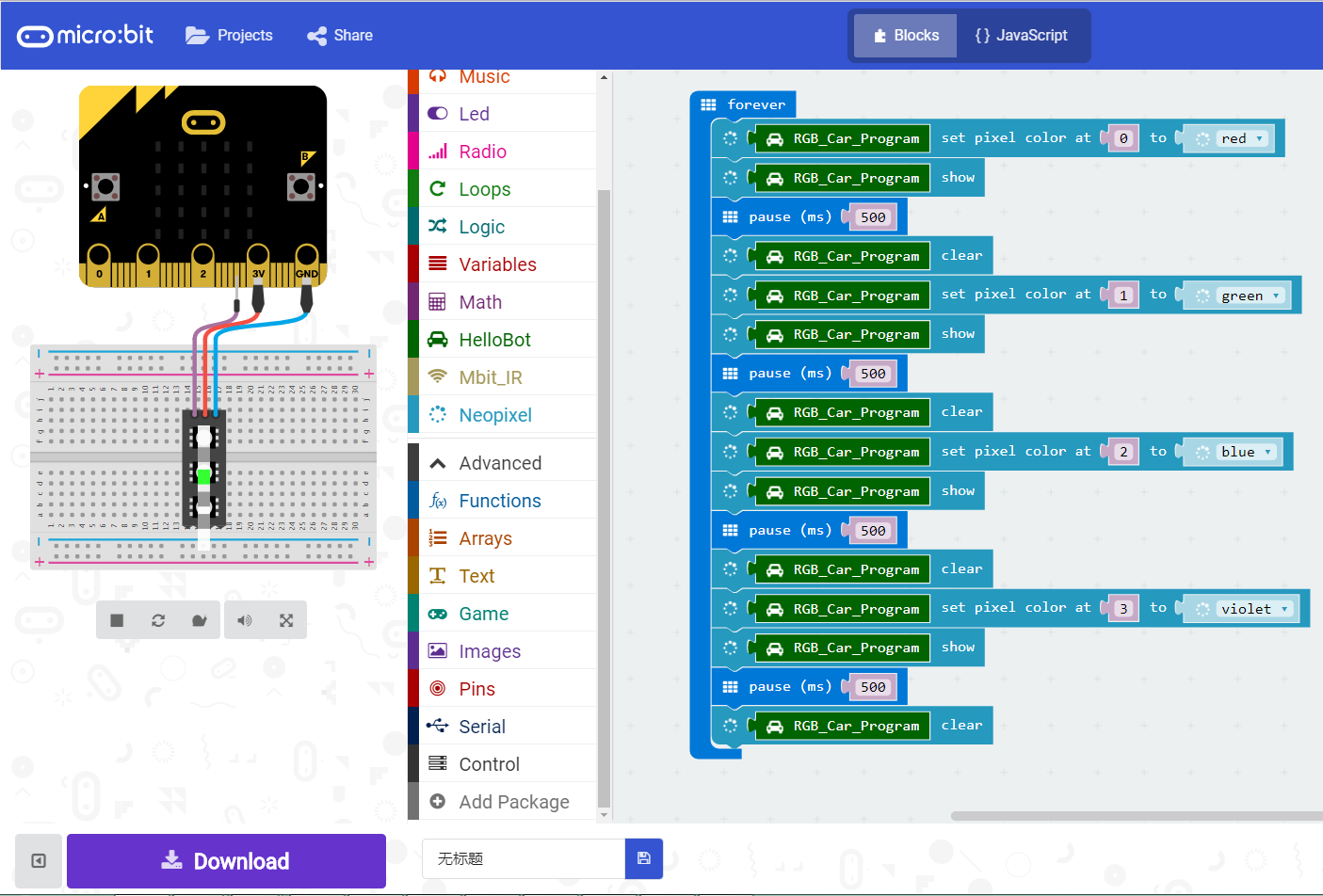
1-2-7



1-2-8

**4.Download programming**

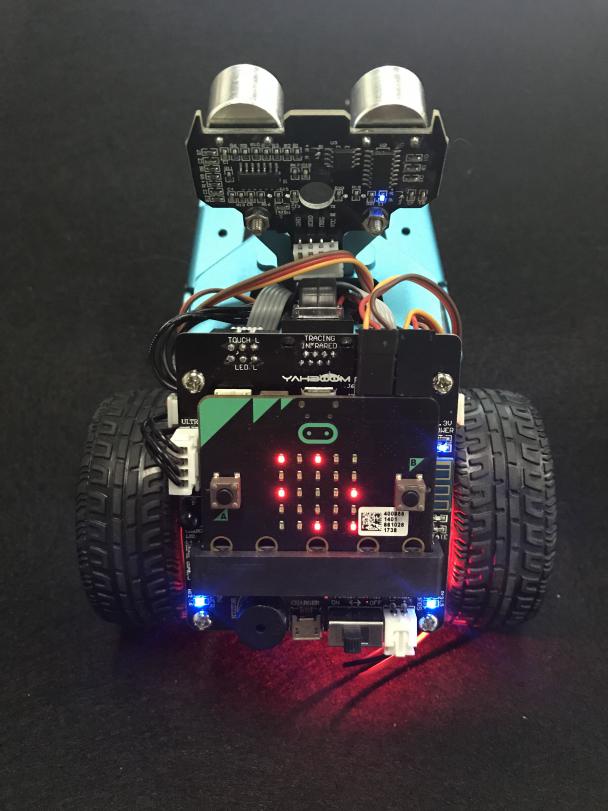
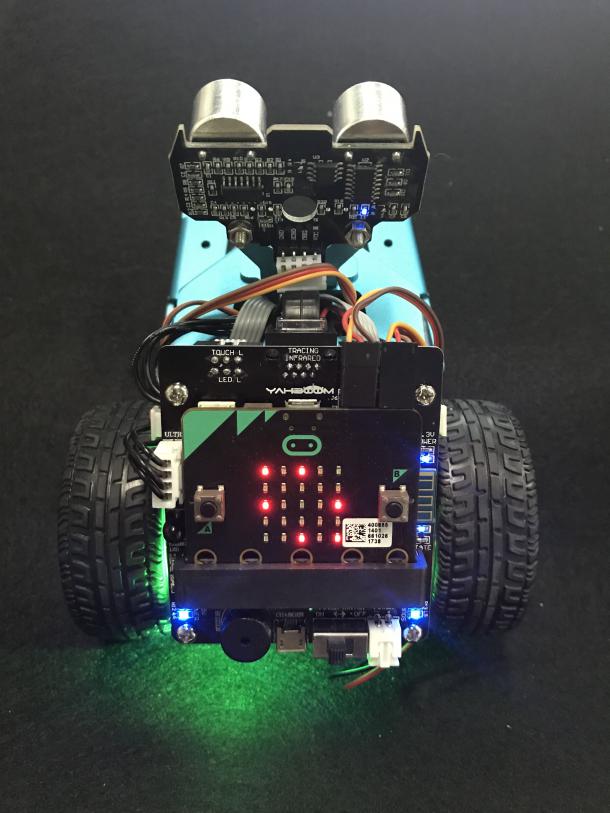
You need to make sure that the micro:bit development board is connected to the computer. Then you should click on the download in the lower left corner as shown in P 1-2-9 to download the program to micro:bit.



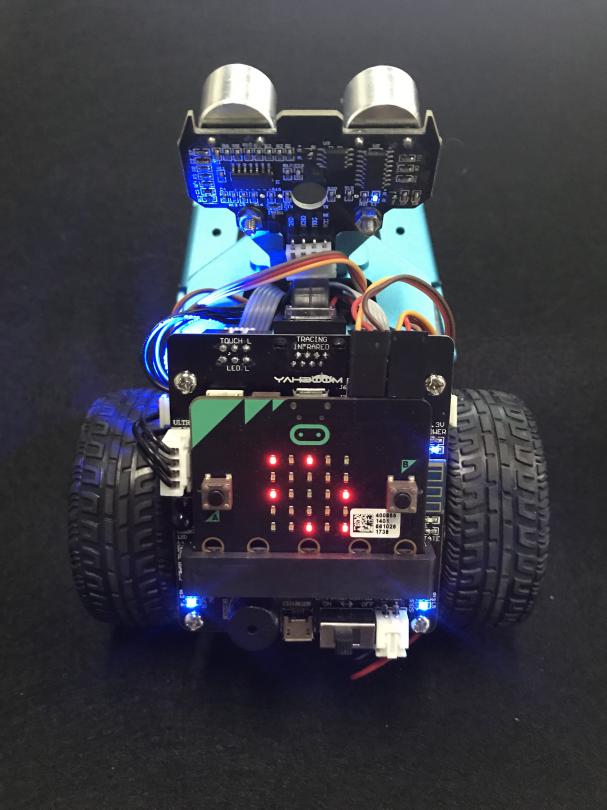
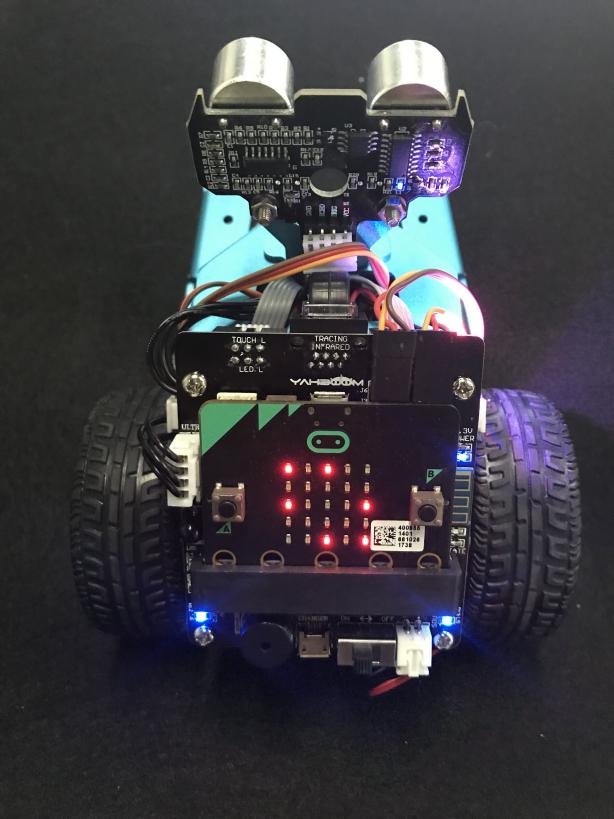
1-2-9

1. **Phenomenon**

After the code is uploaded. You can see that four colorful lamps are lit up in turn.

1-2-10 1-2-11

1-2-12 1-2-13