

5.3 Control speed

Control speed-1.hex

http://www.yahboom.net/xiazai/Tiny_bit/5.Running%20with%20Tiny%20bit/Control%20speed-1.hex

Control speed-2.hex

http://www.yahboom.net/xiazai/Tiny_bit/5.Running%20with%20Tiny%20bit/Control%20speed-2.hex

1.Preparation

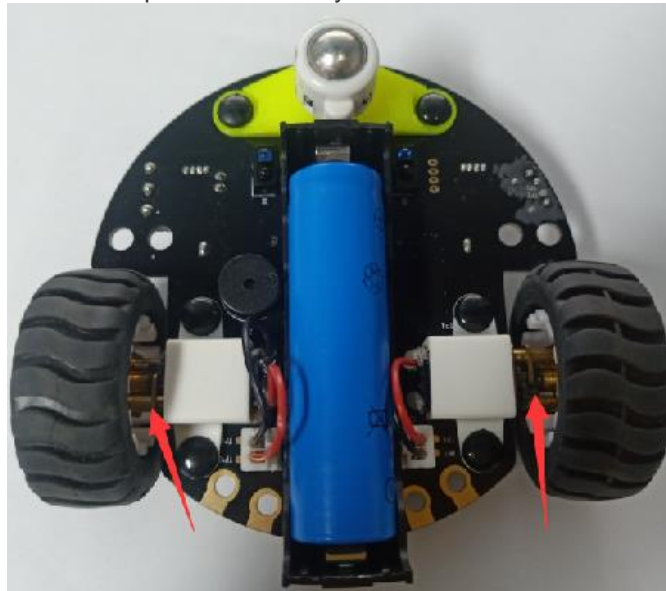
1-1.The position of the motor on the robot car

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/lzty634158/Tiny-bit> 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/lzty634158/Tiny-bit>, you can program.

As shown in the figure below, the red arrow points to the Tiny-bit motor.



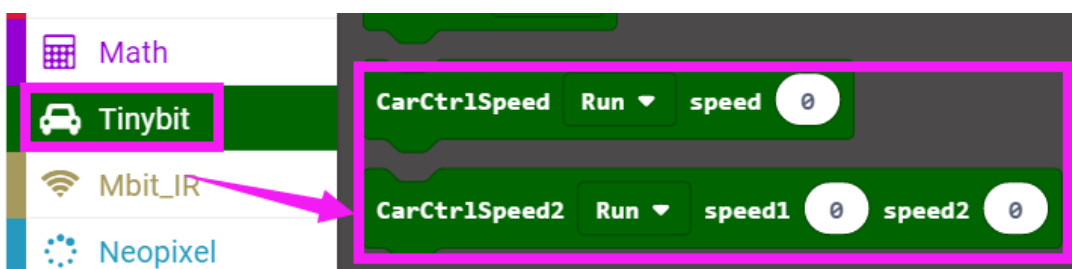
2.Learning goal

2-1.Learn how to use control motor graphically program building blocks

2-2.In this lesson, we will learn how to control speed of motor

3.Search for block

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



4.Combine block

The summary program is shown below.

Method 1 :

```
forever
  CarCtrlSpeed Run speed 0
  pause (ms) 1000
  CarCtrlSpeed Run speed 50
  pause (ms) 1000
  CarCtrlSpeed Run speed 100
  pause (ms) 1000
  CarCtrlSpeed Run speed 150
  pause (ms) 1000
  CarCtrlSpeed Run speed 200
  pause (ms) 1000
  CarCtrlSpeed Run speed 255
  pause (ms) 1000
```

Method 2 :

```
forever
  CarCtrlSpeed2 Run speed1 0 speed2 0
  pause (ms) 1000
  CarCtrlSpeed2 Run speed1 50 speed2 50
  pause (ms) 1000
  CarCtrlSpeed2 Run speed1 100 speed2 100
  pause (ms) 1000
  CarCtrlSpeed2 Run speed1 150 speed2 150
  pause (ms) 1000
  CarCtrlSpeed2 Run speed1 200 speed2 200
  pause (ms) 1000
  CarCtrlSpeed2 Run speed1 255 speed2 255
  pause (ms) 1000
```

5. Experimental phenomena

After program is downloaded, we can see that robot car will advance with different speed.