Coures8 --- Drive Motor

Learning goal：

This lesson learns how to drive motor by Python programming.

Code:

```
# -*- coding: utf-8-*-# Encoding cookie added by Mu Editor
from microbit import display, Image
import tinybit

display.show(Image.HAPPY)
tinybit.setMotorPWM(255, 255, 1000)
tinybit.setMotorPWM(0, 0, 1000)
tinybit.setMotorPWM(-255, -255, 1000)
tinybit.setMotorPWM(0, 0, 1000)

```

1) Import the libraries needed for this routine: display is used to display the dot matrix, Image is used to display the built-in pattern, sleep delay time, and tinybit is used to drive the car.

2) **display.show (Image.HAPPY)** Make the micro:bit display a smiling face.

3) **tinybit.setMotorPWM (255, 255, 1000)** Make both left and right motors forward.

The first parameter: the left motor speed, range is -255 ~ 255. A negative number indicates the motor reserve. A positive number indicates the motor forward, 0 means the motor stops.

The second parameter: the right motor speed, ranges is -255 ~255. A negative number indicates that the motor is reserve. A positive number indicates that the motor forward, 0 indicates that the motor is stop.

The third parameter: Delay time, the unit is milliseconds ms.

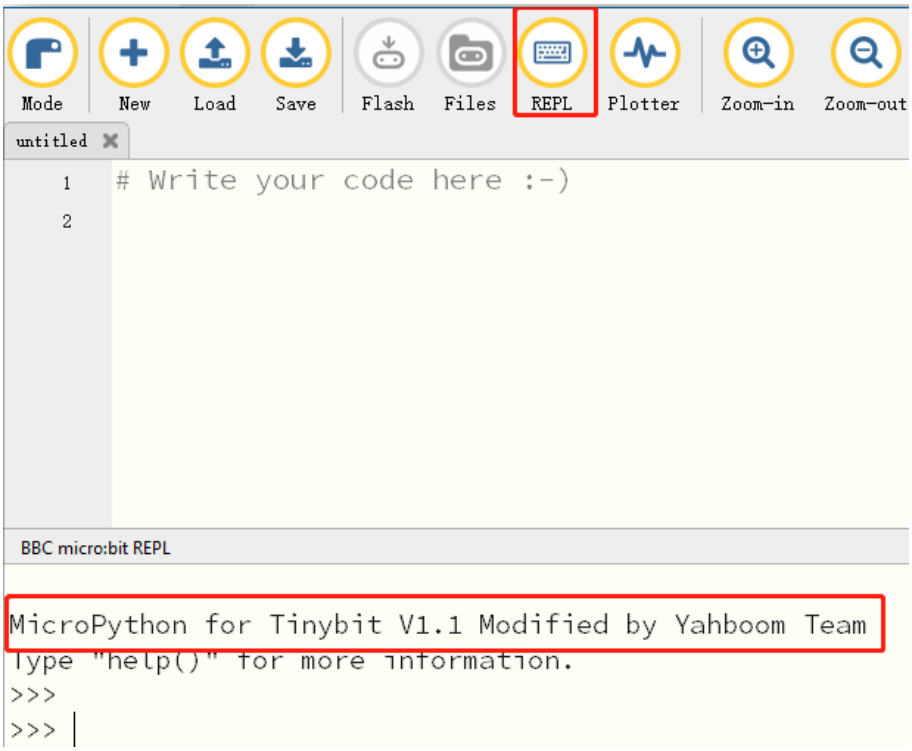
Programming and downloading：

1.You should open the Mu software, and enter the code in the edit window, , as shown below.

Note! All English and symbols should be entered in English, and the last line must be a space.

2.You can click the **“Check”** button to check if our code has an error. If a line appears with a cursor or an underscore, the program indicating this line is wrong.

3.Click **"REPL"** button,check whether the tinybit library has been downloaded. If not, please refer to the [preparation before class]---> [Python programming]



4.Click the **"Flash"** button to download the program to micro:bit board.

If the program is wrong or the experimental phenomenon is wrong after downloading, please confirm whether you have downloaded the Buildingbit libraryhex file we provided to the micro: bit board.

For the specific method of adding library files, please refer to 【1.Preparation before class】---【Python programming】

Experimental phenomena

After download is complete, open the power switch. A smile face appears on the micro:bit dot matrix. Motor will forward 1s --> reserve 1s --> stop.