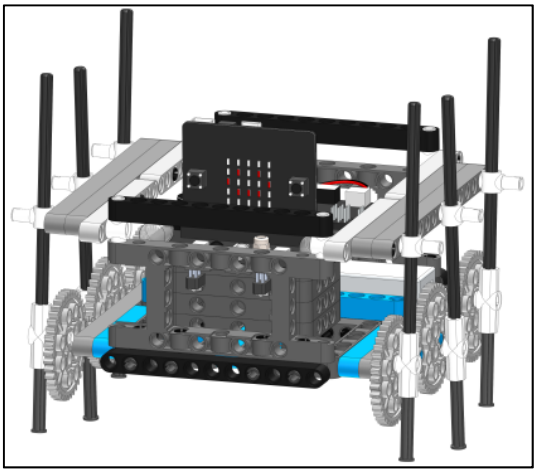
Python course Hexapod robot---“ advance”



1.Learning goals

After downloading the program, turn on the power switch of the Hexapod robot, the Hexapod robot will run forward and a smile will appear on the micro:bit dot matrix.

2. Preparation before class

We needs to be ready:
Hexapod robot*1
USB data cable*1

3. Hexapod robot walking principle

The hexapod robot walks by controlling the motors. Each motor changes the three feet in the same row through the gears. The three feet have been matched by the building block structure. When the motor rotates forward, let the robot walk forward and the motor rotate backward At this time, the robot walked backward.

4. Programming

1) Import buildingbit library：**import buildingbit**

We also need to use display library: **from microbit import display**

2) **display.show(Image.HAPPY)** Display smile.

3) **buildingbit.car_run(255, 255, 0)** make robot advance.

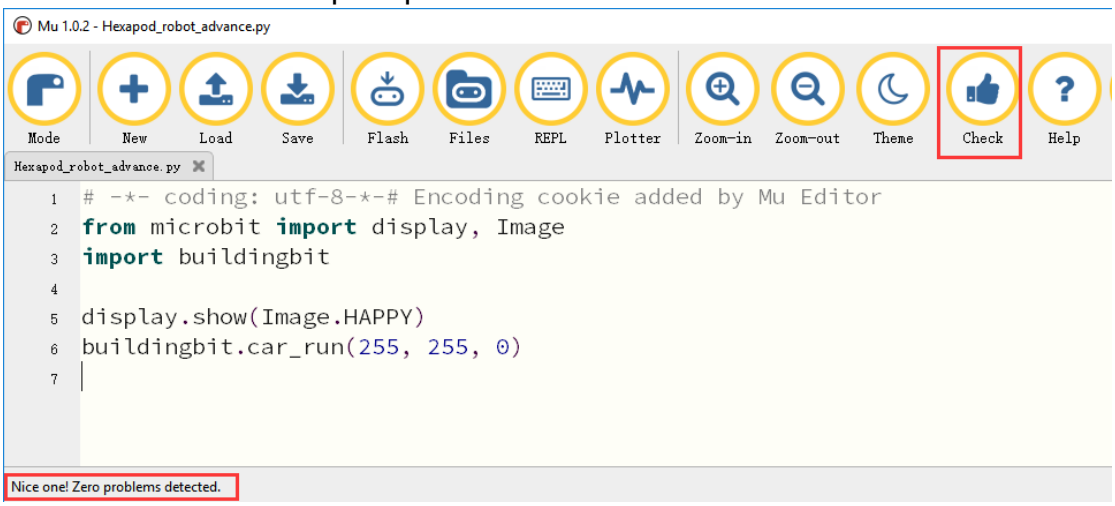
Code as shown below:

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

display.show(Image.HAPPY)
buildingbit.car_run(255, 255, 0)

```

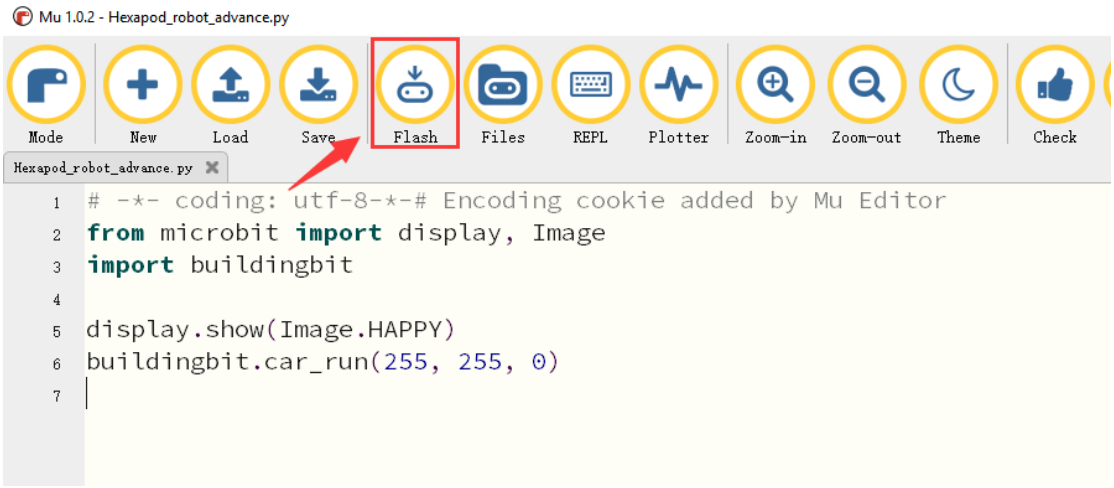
5. Download program

5.1 After programming is complete, please connect the computer and the micro:bit board with a Micro USB data cable.

5.2 You need to 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. If there is no cursor or underline, it means that the code is correct, and the bottom left will prompt that the check is OK.



5.3 Click the 【Flash】 button to download the program to the micro: bit board of the building block Hexapod robot.



If the program is wrong or the experimental phenomenon is wrong after downloading, please confirm whether you have downloaded the Buildingbit library hex 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】