Button control robot

Learning goals

In this lesson, we mainly learn how to control robot by button.

Code

```
from microbit import *

import microbit
import superbit

display.show(Image.HAPPY)
superbit.motor_control(superbit.M1, 0, 0)

while True:
    if microbit.button_a.is_pressed():
        superbit.motor_control(superbit.M1, 255, 0)
    if microbit.button_b.is_pressed():
        superbit.motor_control(superbit.M1, -255, 0)

```

Import microbit and superbit library.

display.show(Image.HAPPY) : Micro:bit dot matrix will display a smile pattern.

superbit.motor_control(superbit.M1, 0, 0) : Initialize the speed of the motor to 0, which means that the motor stops rotating.

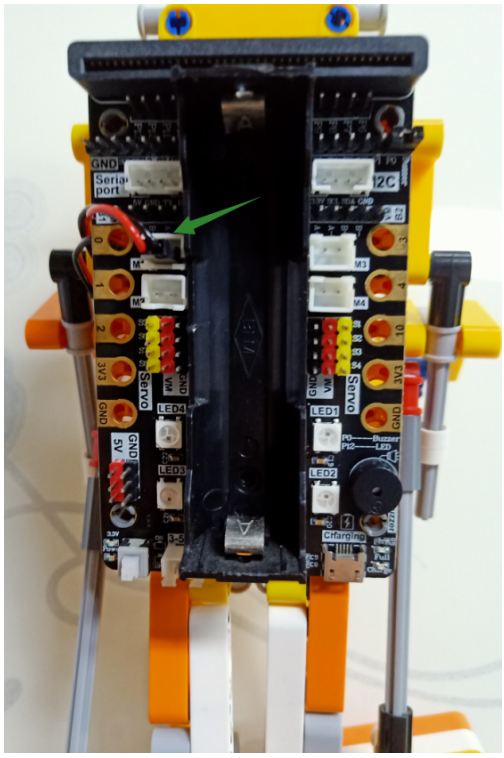
Determines whether button A and B is pressed in an loop, if button A is pressed, motor with 255 speed, if button B is pressed, motor with -255 speed.

About wiring

As shown below,

Building block motor connect to M1 interface of super:bit.

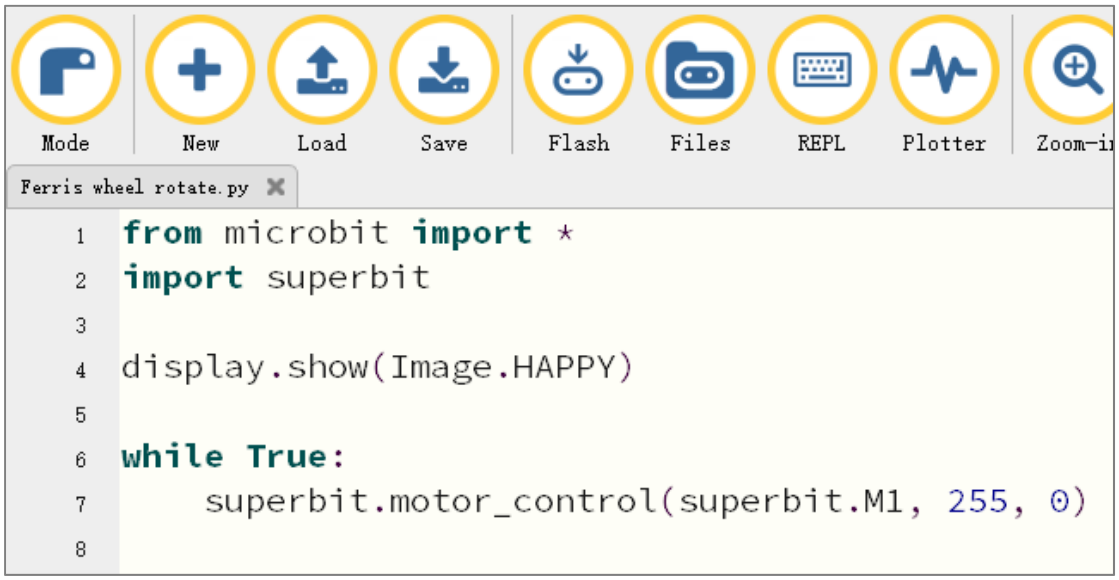
The black wiring of the motor is near the battery side.



Programming and downloading

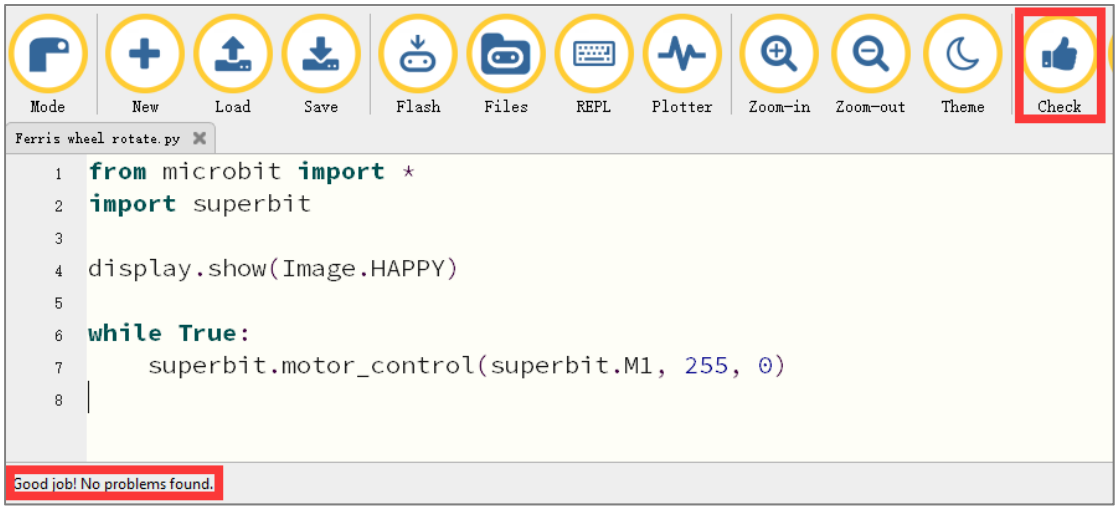
1.You should open the Mu software, and enter the code in the edit window, , as shown below.

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

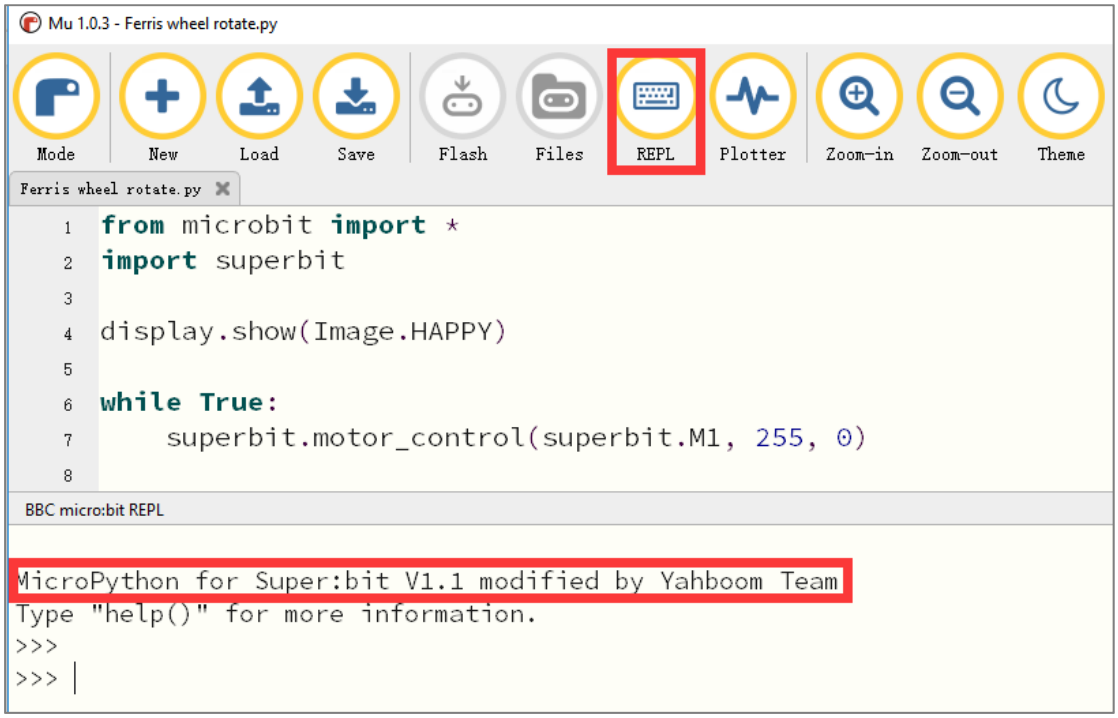


2.You can click the **"Check"** button to check if our code has an error. If a line appears with a cursor or an underscore, the program indicating this line is

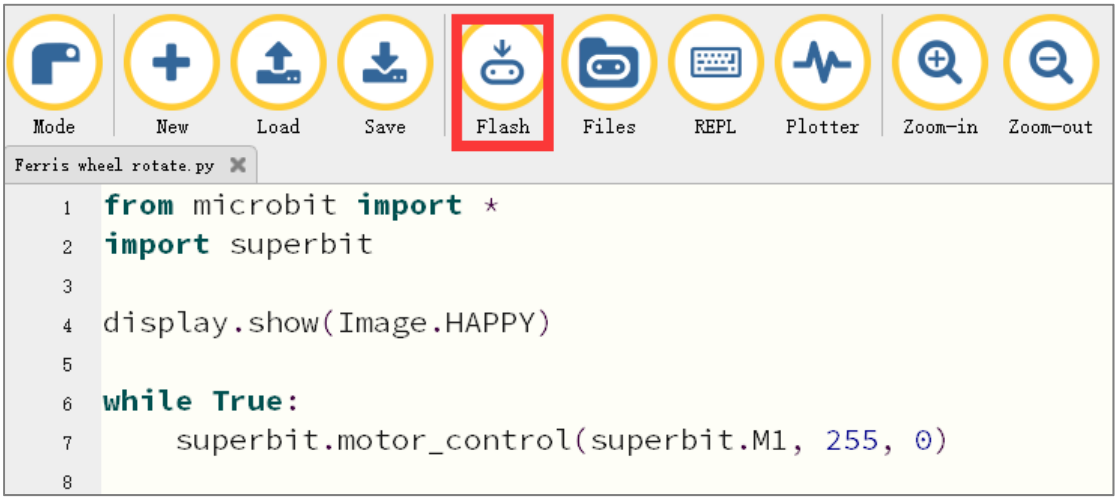
wrong.



3.Click the 'REPL' button to check whether the super:bit library has been downloaded. If not, please refer to the [1.preparation before class] ---> [2.How to import Yahboom superbit library] import super:bit library tutorial.



4.After writing the code, please click the ‘Flash’ button to download the program to the micro:bit board.



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

For the specific method of adding library files, please refer to【Preparation before class】---【How to import Yahboom superbit library】

Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display the smile pattern and the robot will stop, when we press the A button, the robot will advance, when we press the B button, the robot will back.