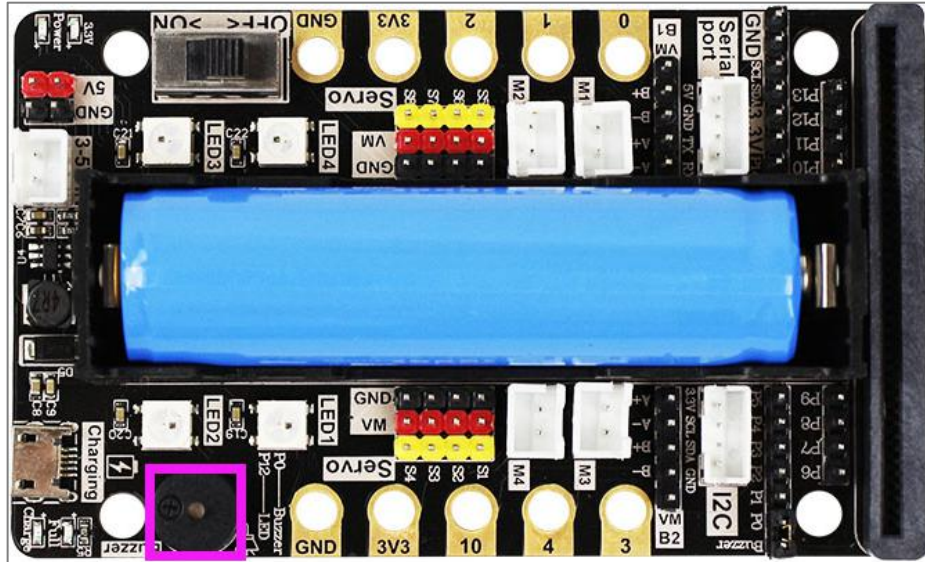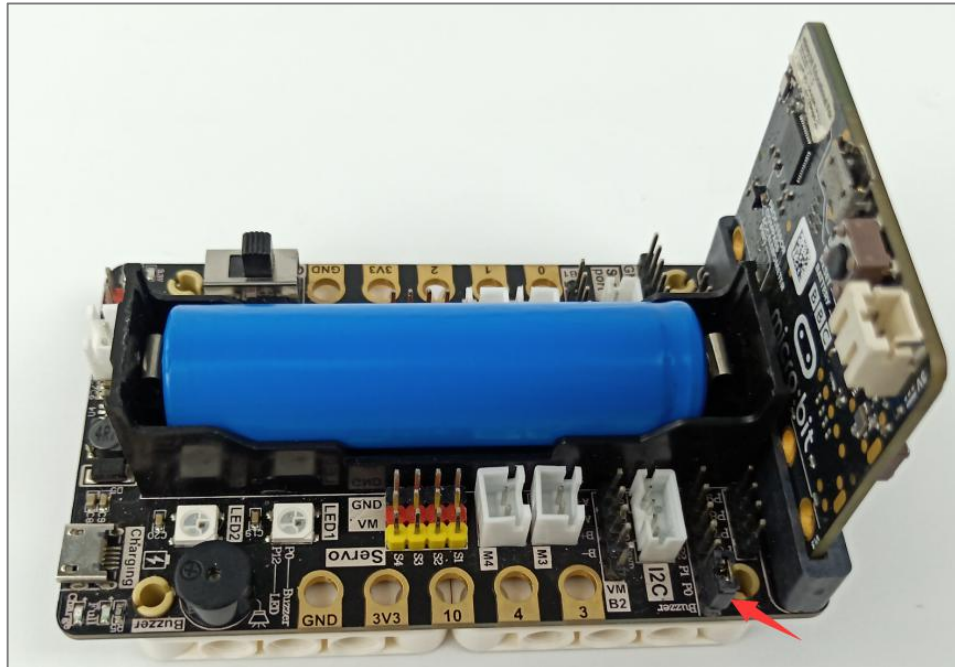# Buzzer play music

1.Learning goals

In this course, we mainly learn how to drive the buzzer on the superbit expansion board through Python programming.

The buzzer is located on the expansion board as shown in the figure below.

Tip:

Before this experiment, we need to connect the jumper cap to the P0 and Buzzer pins on the Super: bit expansion board, as shown below.

2.Code and analysis

The program for this course is shown below.

```
Buzzer play music.py  ✕
1  from microbit import *
2  import music
3
4  display.show(Image.MUSIC_QUAVER)
5  music.play(music.BIRTHDAY)
6
```

First, we need to import the library needed for this lesson from micro:bit, music library is dedicated to playing music;
<mark>display.show(Image.MUSIC_QUAVER):</mark> Display the note pattern on the micro:bit matrix;
<mark>music.play(music.BIRTHDAY):</mark> Play birthday song.
For more music, you can refer to the music part of the official micro:bit API function.
Website: https://microbit-micropython.readthedocs.io/en/latest/

3.Writing and download code

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, use the Tab key (tab key) to indent 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 cursor or underline appears on a line, it indicates a syntax error, please check and modify. If there is no error in the program, the bottom left of the interface will prompt that there is no problem in detection.
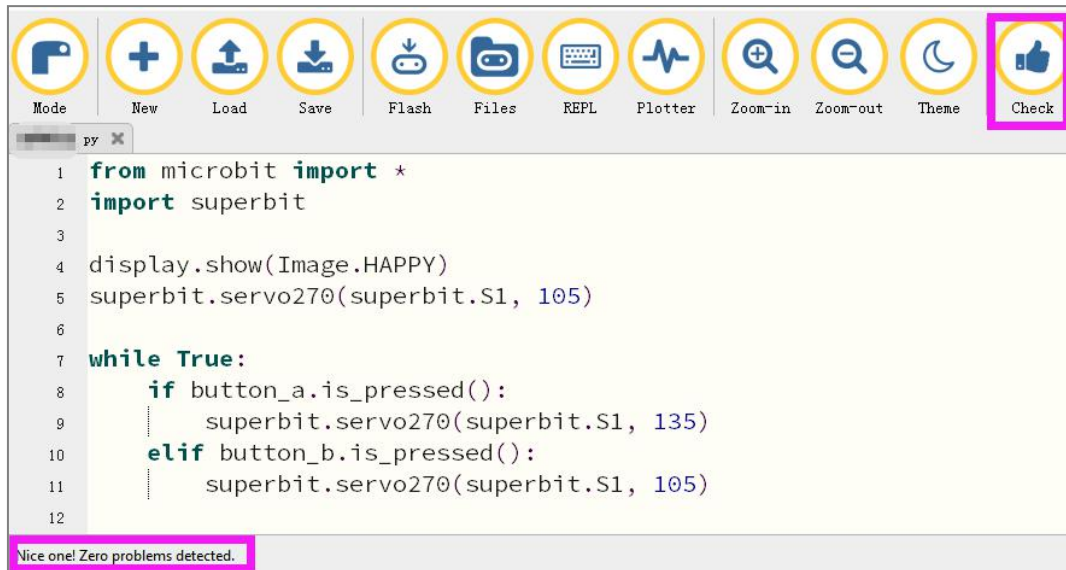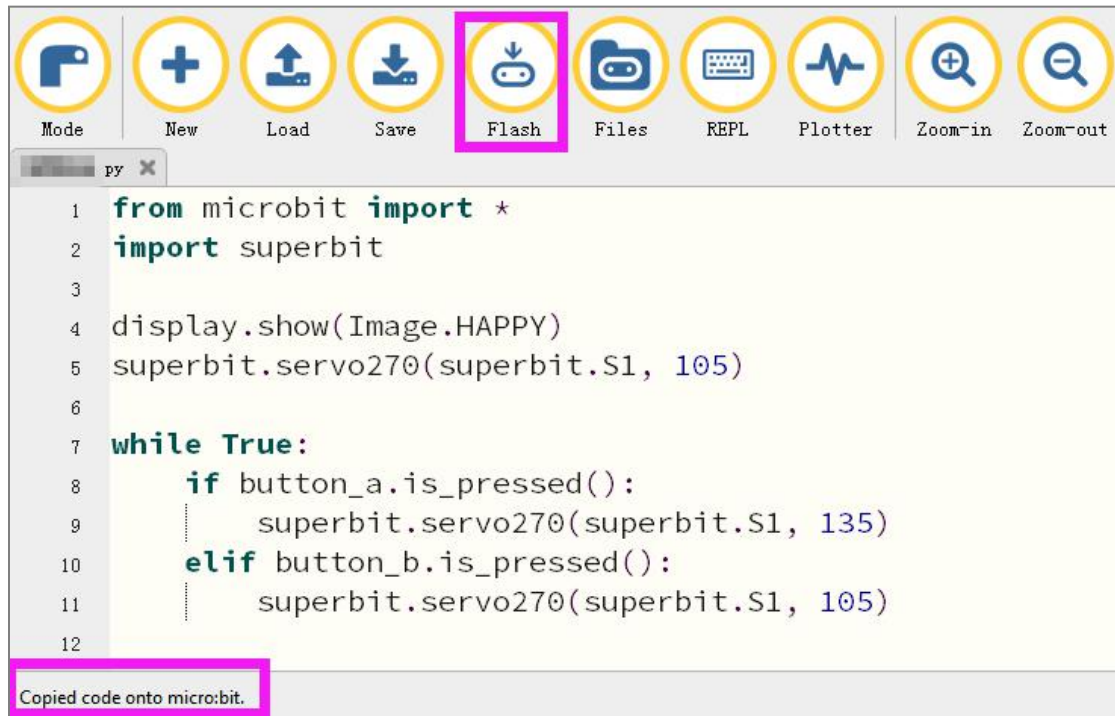
3. Click the 'REPL' button to check whether the Superbit library has been downloaded.

If not, please refer to [Preparation before class] --> [2.4 Python Programming Guide] .
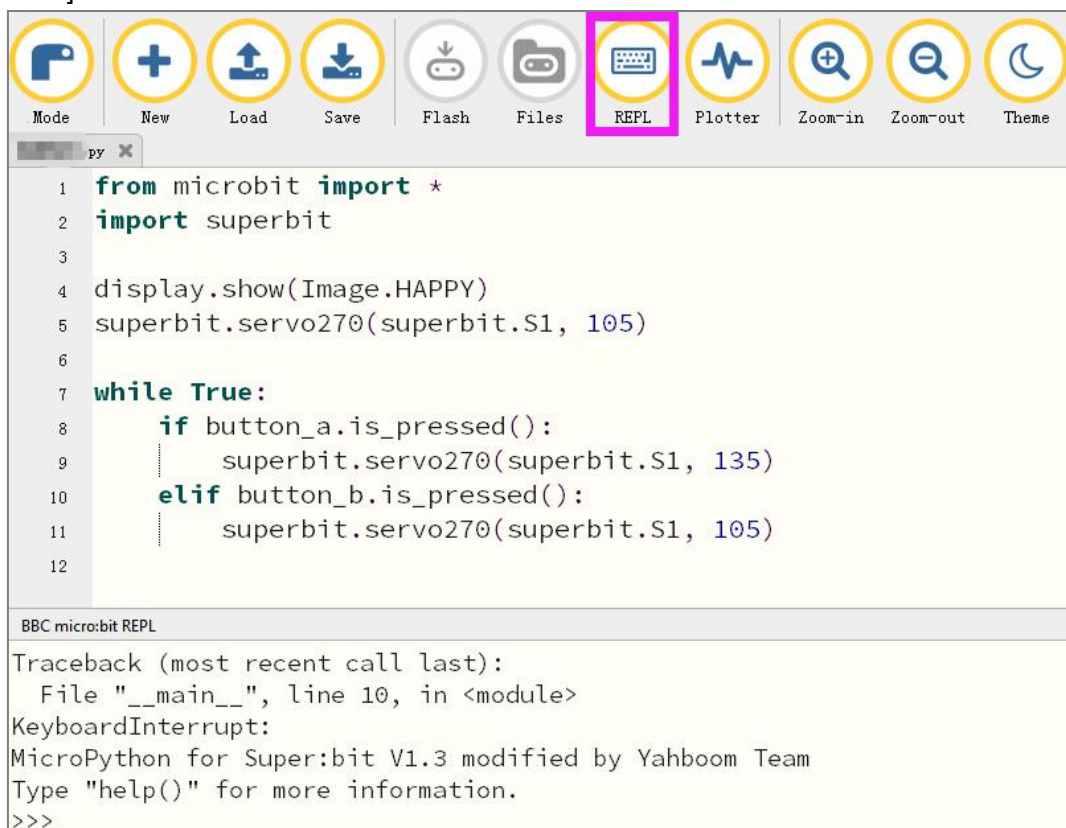
4. After the program is written, use a micro USB cable to connect the computer and the micro:bit board. Please click the 'Flash' button to download the program to the micro:bit motherboard (You need to click the 'REPL' button again to close the function of importing library files before you download the program).

```python
from microbit import *
import superbit

display.show(Image.HAPPY)
superbit.servo270(superbit.S1, 105)

while True:
    if button_a.is_pressed():
        superbit.servo270(superbit.S1, 135)
    elif button_b.is_pressed():
        superbit.servo270(superbit.S1, 105)
```

Copied code onto micro:bit.

5. If the download failed, please confirm whether the micro:bit is connected to the computer through the micro USB data cable, and confirm whether the Super:bit Python library has been imported.

4.Experimental phenomena

After the program is successfully downloaded, the micro:bit dot matrix will display a music pattern, and the buzzer will play a "Happy Birthday " once.