

Course10-Play the custom music Painters

Learning goals:

In this lesson, you will learn how to play the music "The Painter."

Code:

```
from microbit import *
import music
display.show(Image.MUSIC_QUAVER)
tune = ["G4:2", "E4:2", "G4:2", "E4:2", "G4:2", "E4:2", "C4:4", "D4:2", "F4:2",
        "E4:2", "D4:2", "G4:4", "E1:4", "G4:2", "E4:2", "G4:2", "E4:2", "G4:2",
        "E4:2", "C4:4", "D4:2", "F4:2", "E4:2", "D4:2", "C4:4", "E1:4", "D4:2",
        "D4:2", "F4:2", "F4:2", "E4:2", "C4:2", "G4:4", "D4:2", "F4:2", "E4:2",
        "D4:2", "G4:4", "E1:4", "G4:2", "E4:2", "G4:2", "E4:2", "G4:2", "E4:2",
        "C4:4", "D4:2", "F4:2", "E4:2", "D4:2", "C4:4"]
music.play(tune)
```

Programming and downloading:

1. You should open the Mu software, and enter the code in the edit window, , as shown in Figure 10-1.

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

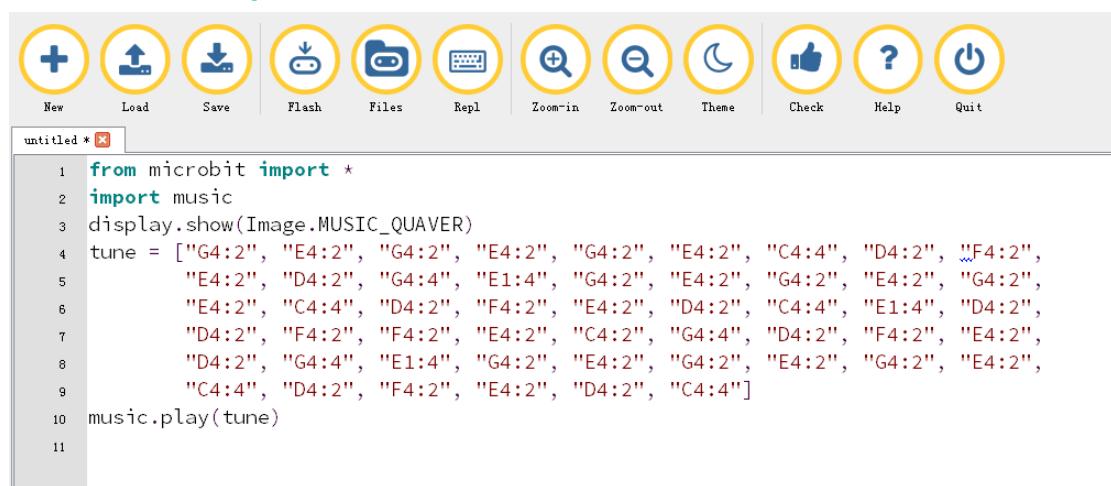


Figure 10-1

2. As shown in Figure 10-2, 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.

The screenshot shows a Scratch-like programming environment. At the top is a toolbar with the following icons from left to right: New, Load, Save, Flash, Files, Repl, Zoom-in, Zoom-out, Theme, Check (which is highlighted with a red box), Help, and Quit. Below the toolbar is a code editor window titled "untitled *". The code in the editor is:

```

1 from microbit import *
2 import music
3 display.show(Image.MUSIC_QUAVER)
4 tune = ["G4:2", "E4:2", "G4:2", "E4:2", "G4:2", "E4:2", "C4:4", "D4:2", "F4:2",
5         "E4:2", "D4:2", "G4:4", "E1:4", "G4:2", "E4:2", "G4:2", "E4:2", "G4:2",
6         "E4:2", "C4:4", "D4:2", "F4:2", "E4:2", "D4:2", "C4:4", "E1:4", "D4:2",
7         "D4:2", "F4:2", "F4:2", "E4:2", "C4:2", "G4:4", "D4:2", "F4:2", "E4:2",
8         "D4:2", "G4:4", "E1:4", "G4:2", "E4:2", "G4:2", "E4:2", "G4:2", "E4:2",
9         "C4:4", "D4:2", "F4:2", "E4:2", "D4:2", "C4:4"]
10 music.play(tune)
11

```

Figure 10-2

3. You need to connect the micro data cable to micro:bit and the computer, then click the Flash button to download the program to micro:bit as shown in Figure 10-3.

This screenshot is similar to Figure 10-2, showing the same Scratch-like interface. The difference is that the "Flash" button in the toolbar is highlighted with a red box, indicating it is selected or the next step in the process.

Figure 10-3

4. After downloading the program to micro:bit, the buzzer will play 《ODE》, as shown in Figure 10-4.

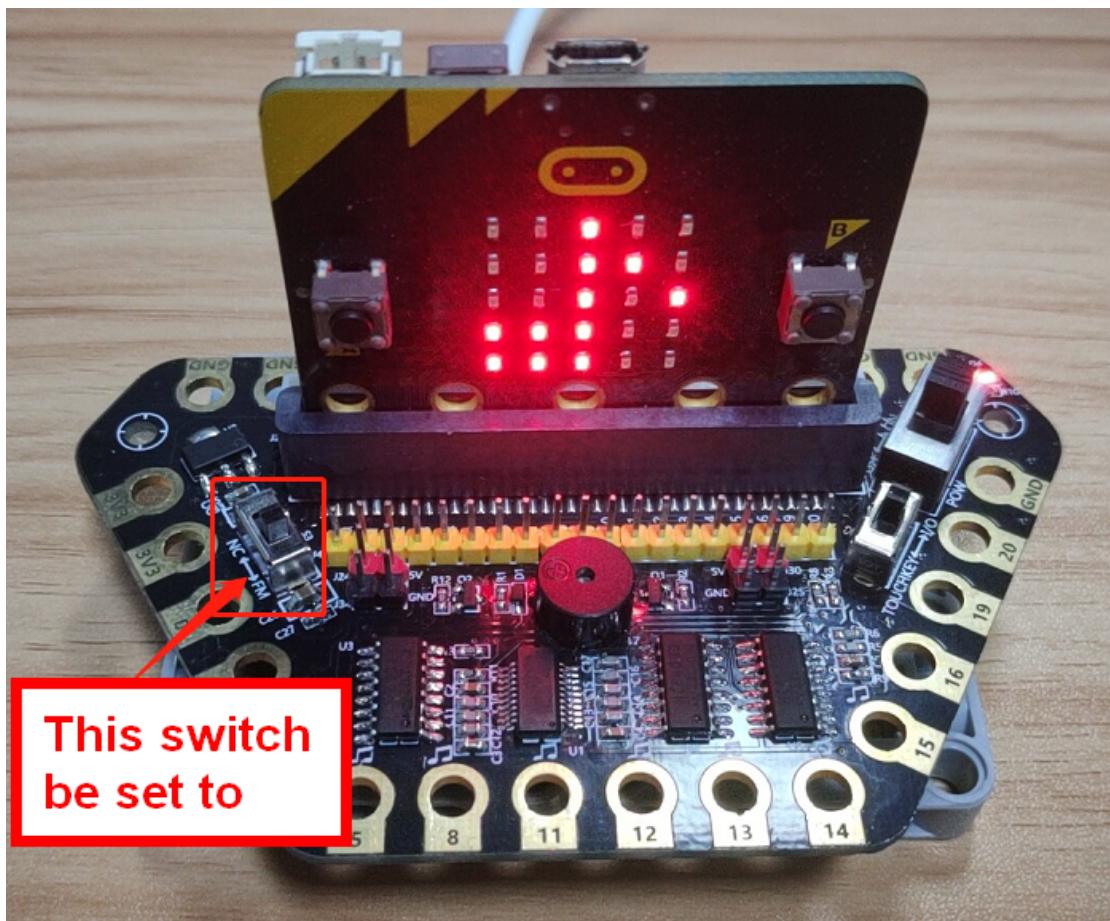


Figure10-4