

## 7.Do not touch me

### Learning goals:

In this lesson, we will learn the using of a single pin. When we clamp the GND with one end of the alligator clip and the pin0 pin with the another end of the alligator clip, the micro:bit dot matrix will display smile expression, Otherwise micro:bit dot matrix will display sad expression.

### Code:

```
from microbit import*
while True:
    if pin0.is_touched():
        display.show(Image.HAPPY)
    else:
        display.show(Image.SAD)
```

### Programming and downloading:

1.You should open the Mu software, and enter the code in the edit window, , as shown in Figure 7-1.

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

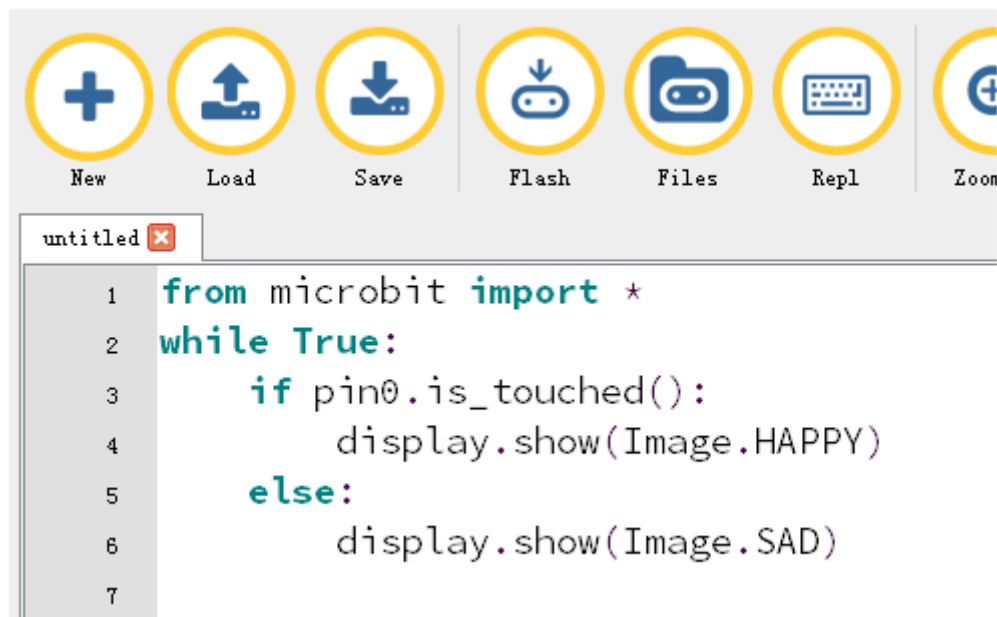


Figure 7-1

2. As shown in Figure 7-2, 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.

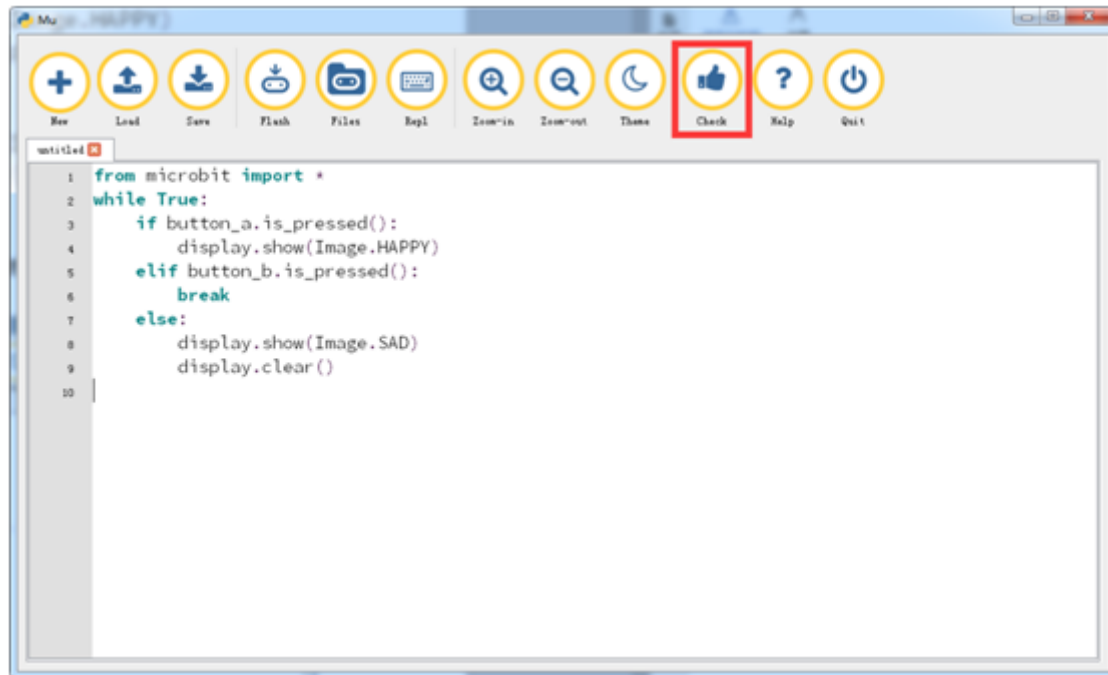


Figure 7-2

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 7-3.

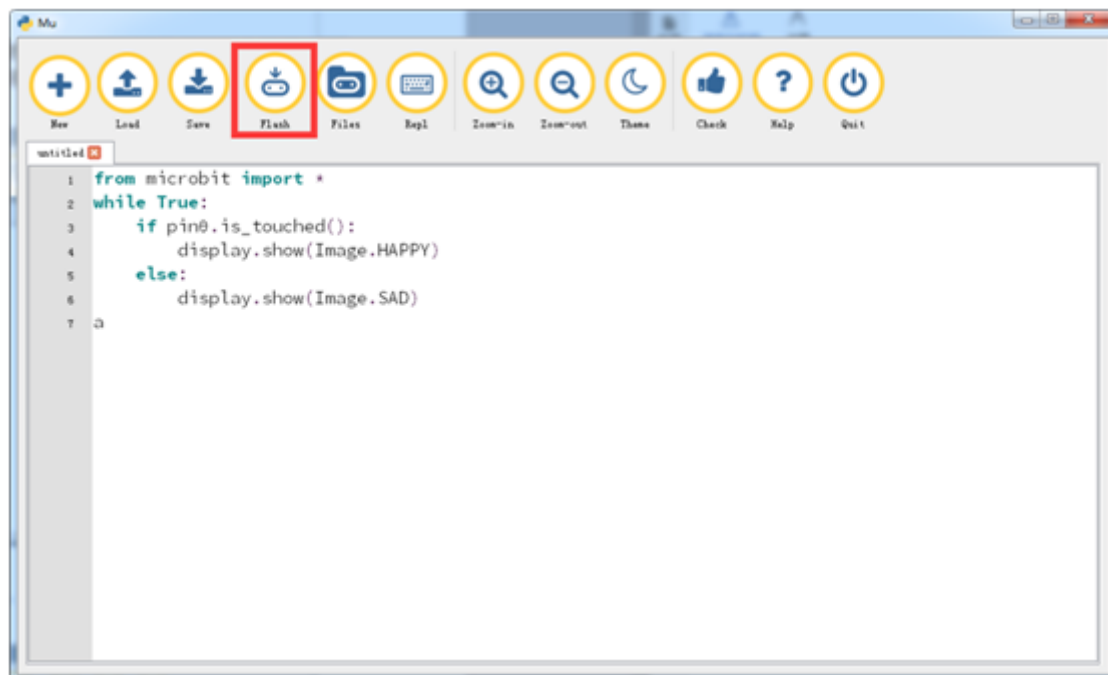


Figure 7-3

4. After the download is complete, you can see that the sad expression on the micro:bit dot matrix, as shown in Figure 7-4. When we clamp the GND with one end of the alligator clip and the pin0 pin with the another end of the alligator

clip, the micro:bit dot matrix will display smile expression, as shown in Figure 7-5.



Figure 7-4

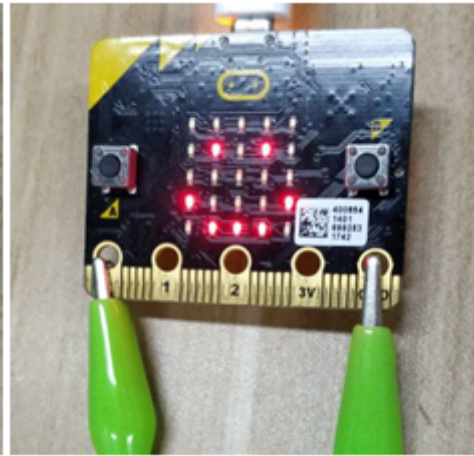


Figure 7-5