

## Course2---Display built-in image

### Learning goals:

This lesson learns to display image on a micro:bit dot matrix by Python programming. For example: heart.

### Code:

```
from microbit import *
display.show(Image.HEART)
```

Below is a list of built-in images:

- Image.HEART
- Image.HEART\_SMALL
- Image.HAPPY
- Image.SMILE
- Image.SAD
- Image.CONFUSED
- Image.ANGRY
- Image.ASLEEP
- Image.SURPRISED
- Image.SILLY
- Image.FABULOUS
- Image.MEH
- Image.YES
- Image.NO
- Image.CLOCK12, Image.CLOCK11, Image.CLOCK10, Image.CLOCK9,  
Image.CLOCK8, Image.CLOCK7, Image.CLOCK6, Image.CLOCK5,  
Image.CLOCK4, Image.CLOCK3, Image.CLOCK2, Image.CLOCK1
- Image.ARROW\_N, Image.ARROW\_NE, Image.ARROW\_E,  
Image.ARROW\_SE, Image.ARROW\_S, Image.ARROW\_SW,  
Image.ARROW\_W, Image.ARROW\_NW
- Image.TRIANGLE
- Image.TRIANGLE\_LEFT
- Image.CHESSBOARD
- Image.DIAMOND
- Image.DIAMOND\_SMALL
- Image.SQUARE
- Image.SQUARE\_SMALL
- Image.RABBIT
- Image.COW
- Image.MUSIC\_CROTCHET
- Image.MUSIC\_QUAVER
- Image.MUSIC\_QUAVERS
- Image.PITCHFORK
- Image.XMAS

- Image.PACMAN
  - Image.TARGET
  - Image.TSHIRT
  - Image.ROLLERSKATE
  - Image.DUCK
  - Image.HOUSE
  - Image.TORTOISE
  - Image.BUTTERFLY
  - Image.STICKFIGURE
  - Image.GHOST
  - Image.SWORD
  - Image.GIRAFFE
  - Image.SKULL
  - Image.UMBRELLA
  - Image.SNAKE
- Image.ALL\_CLOCKS  
Image.ALL\_ARROWS

### Programming and downloading:

1. You should open the Mu software, and enter the code in the edit window, , as shown in Figure 2-1.

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

The screenshot shows the Mu IDE interface. At the top is a toolbar with six icons: New (plus sign), Load (up arrow), Save (down arrow), Flash (micro:bit icon), Files (file folder icon), and Repl (keyboard icon). Below the toolbar is a title bar for an untitled script. The main area contains the following Python code:

```

1 from microbit import *
2 display.show(Image.HEART)
3

```

Figure 2-1

2. As shown in Figure 2-2, 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.

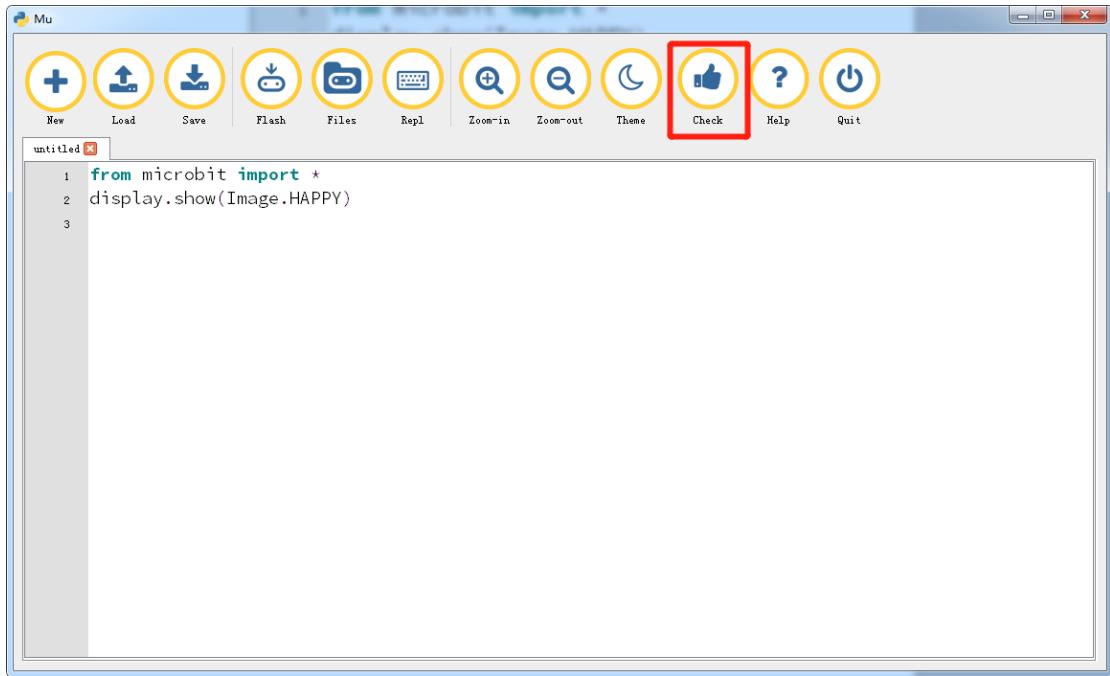


Figure 2-2

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 2-3.

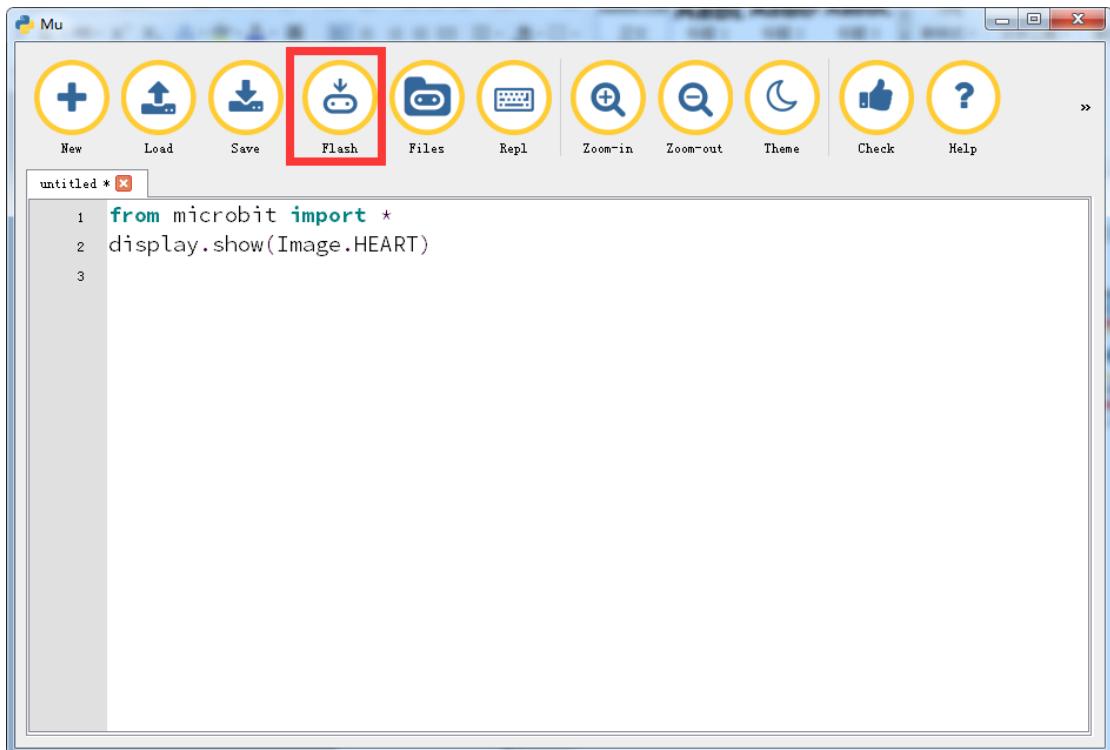


Figure 2-3

4. After the download is successful, you can see that a heart on the micro:bit dot matrix .as shown in Figure 2-4.

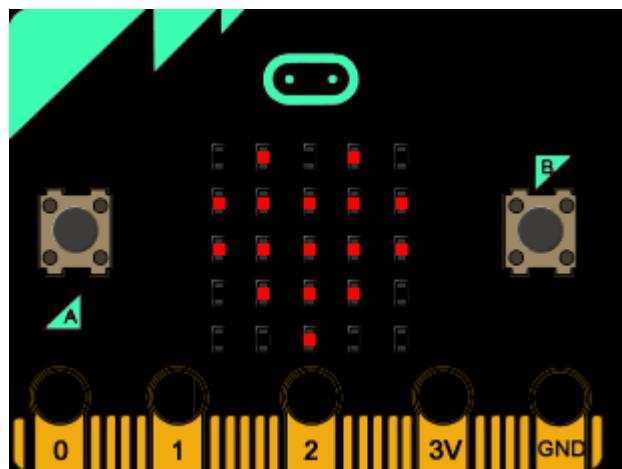


Figure 2-4.