

Delete Fingerprint

1. Learning target

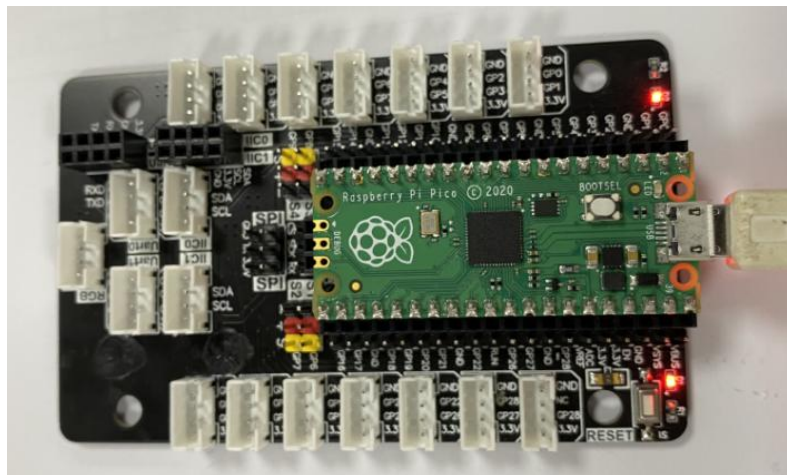
In this course, we will learn how to use Pico and fingerprint recognition module to achieve fingerprint delete function.

2. Preparation

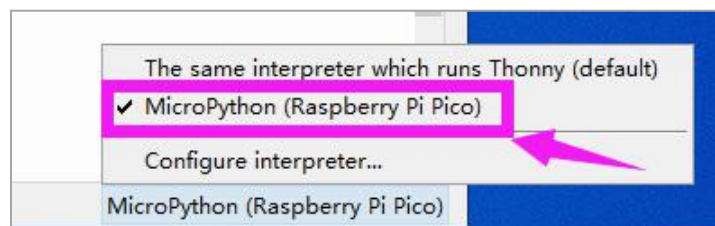
The fingerprint recognition module uses UART communication, and the program uses a virtual serial port. Connect the TX and RX of the module to the D2 and D3 pins of the arduino UNO board. V+/Vi and GND are connected to 3.3V and GND of Pico respectively.

3. Import library file

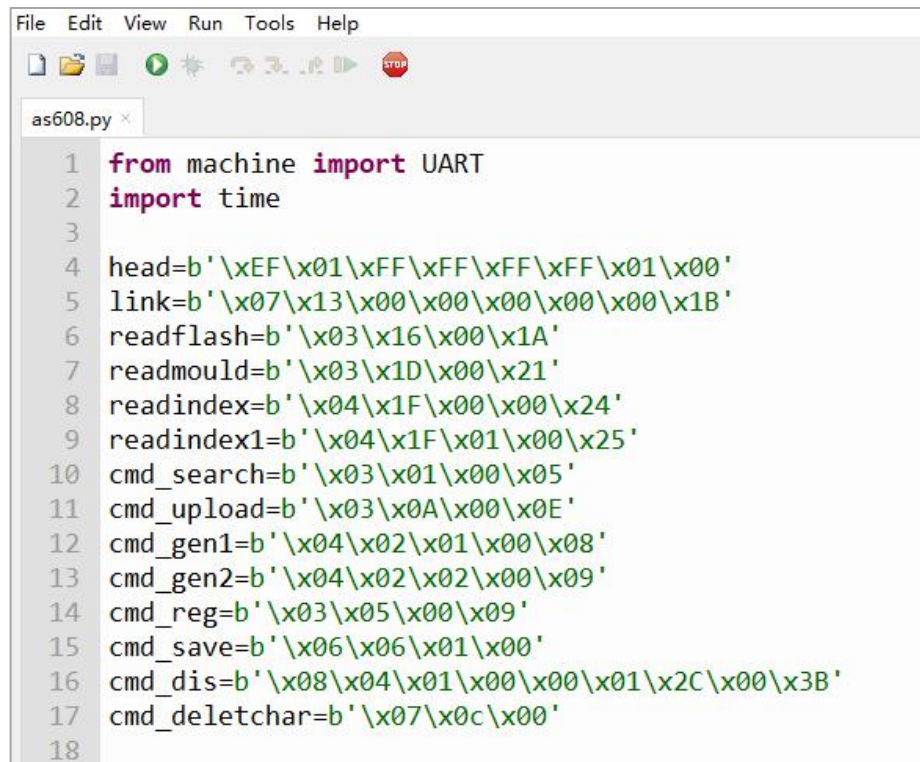
3.1 Connect Pico to your computer, as shown below.



3.2 Open the Thonny software, click the lower right corner to connect the Pico board.

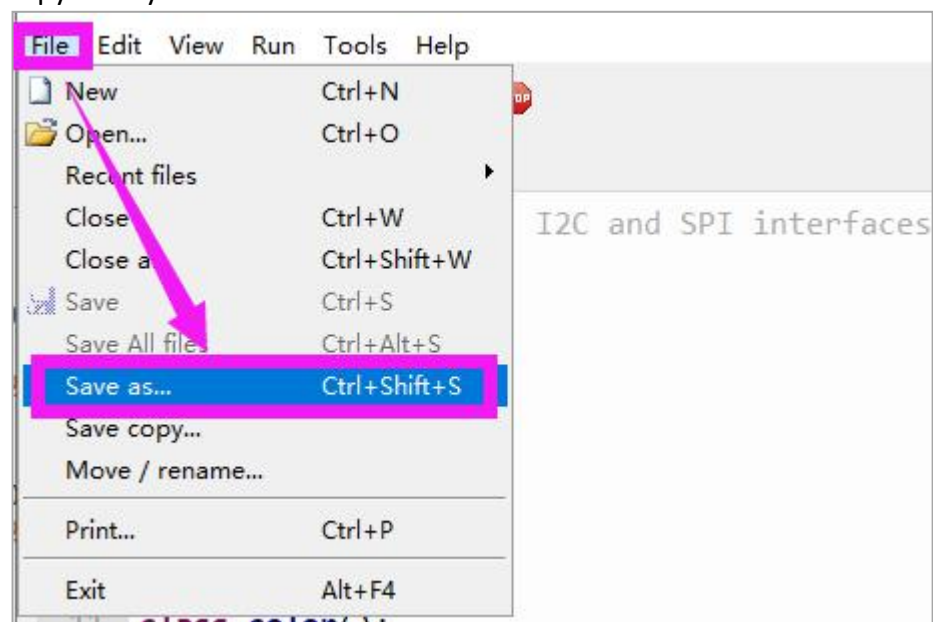


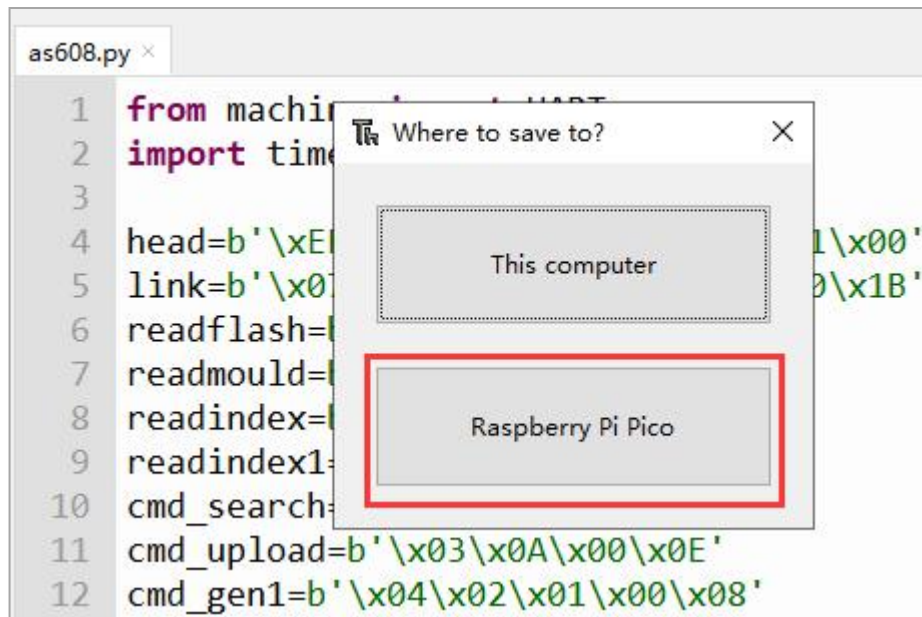
3.3 Open the as608.py in library folder by Thonny software.



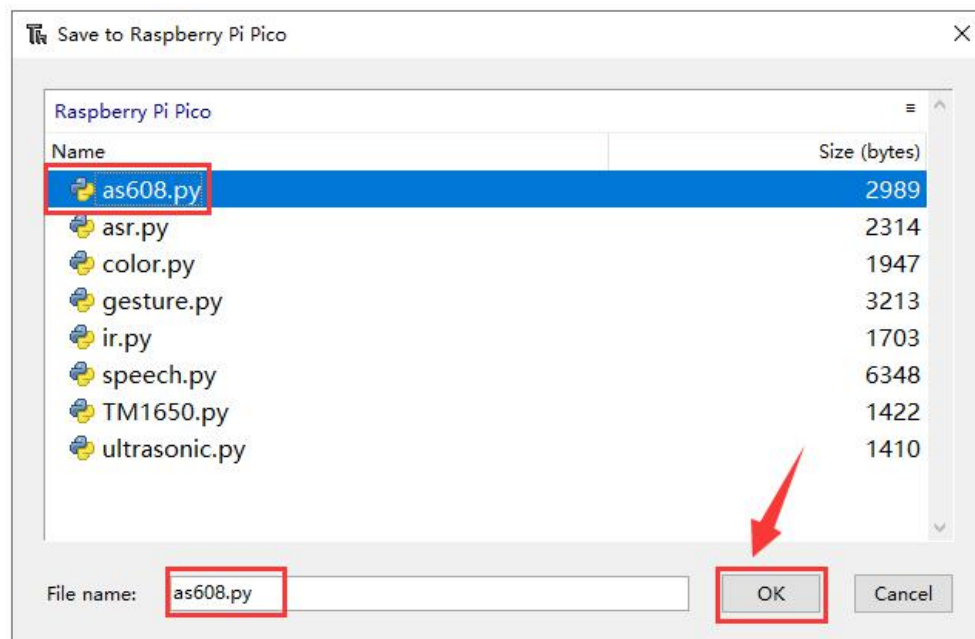
```
1 from machine import UART
2 import time
3
4 head=b'\xEF\x01\xFF\xFF\xFF\xFF\x01\x00'
5 link=b'\x07\x13\x00\x00\x00\x00\x00\x1B'
6 readflash=b'\x03\x16\x00\x1A'
7 readmould=b'\x03\x1D\x00\x21'
8 readindex=b'\x04\x1F\x00\x00\x24'
9 readindex1=b'\x04\x1F\x01\x00\x25'
10 cmd_search=b'\x03\x01\x00\x05'
11 cmd_upload=b'\x03\x0A\x00\x0E'
12 cmd_gen1=b'\x04\x02\x01\x00\x08'
13 cmd_gen2=b'\x04\x02\x02\x00\x09'
14 cmd_reg=b'\x03\x05\x00\x09'
15 cmd_save=b'\x06\x06\x01\x00'
16 cmd_dis=b'\x08\x04\x01\x00\x00\x01\x2C\x00\x3B'
17 cmd_deletchar=b'\x07\x0c\x00'
18
```

3.4 Save as this .py library file into Pico.





3.5 Enter the same file name as the library file. Then, click “OK”.

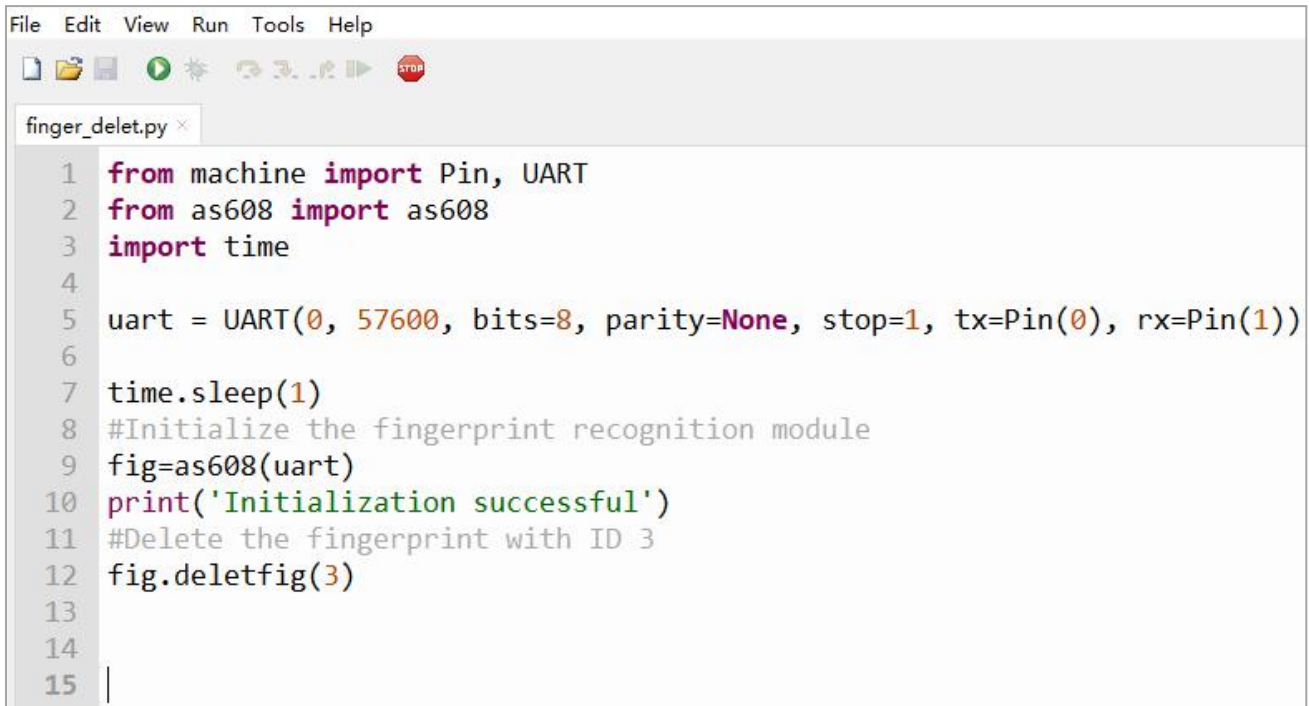


4. About code

Please view **finger_delet.py** we provided.

5. Compiling and running code

5.1 We can open the Gesture.py file by Thonny software.



```

1  from machine import Pin, UART
2  from as608 import as608
3  import time
4
5  uart = UART(0, 57600, bits=8, parity=None, stop=1, tx=Pin(0), rx=Pin(1))
6
7  time.sleep(1)
8  #Initialize the fingerprint recognition module
9  fig=as608(uart)
10 print('Initialization successful')
11 #Delete the fingerprint with ID 3
12 fig.deletfig(3)
13
14
15 |

```

5.2 In Thonny menu bar, we need to click run button to run this program.

"%Run -c \$EDITOR_CONTENT" will be displayed. As shown below.



```

MicroPython v1.13-290-g556ae7914 on 2021-01-21; Raspberry Pi Pico with RP2040
Type "help()" for more information.
>>> %Run -c $EDITOR_CONTENT
>>>

```

6. Phenomenon

After the program is run successfully. System will start to initialize the fingerprint recognition module.

If the initialize is successfully, it will display "initialization successful". Otherwise, please check the baud rate or wiring of the module.

Then, it will delete fingerprints, when the print out "Delete command is executed", which means that fingerprint-3 is deleted successfully.