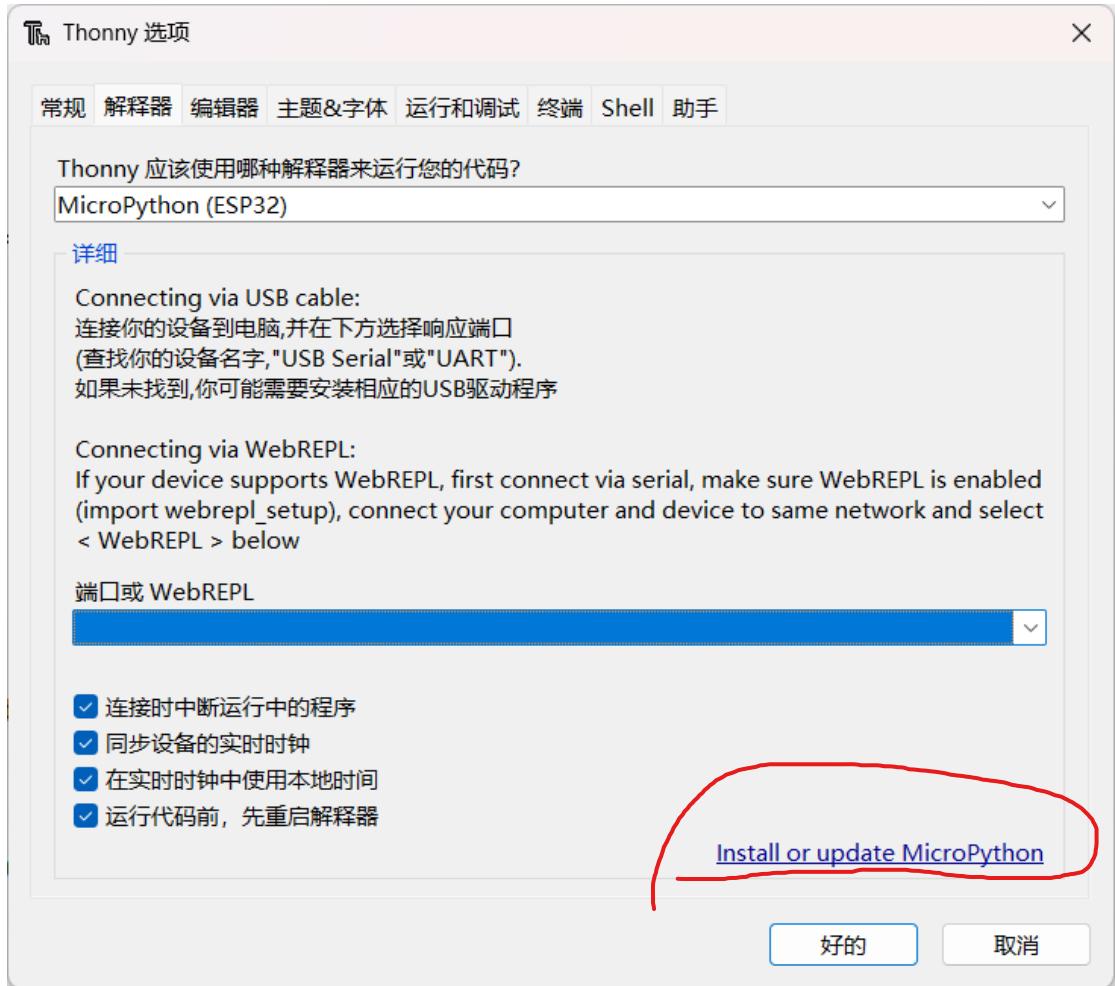


安装完成后，可以打开 Thonny，如下图所示：

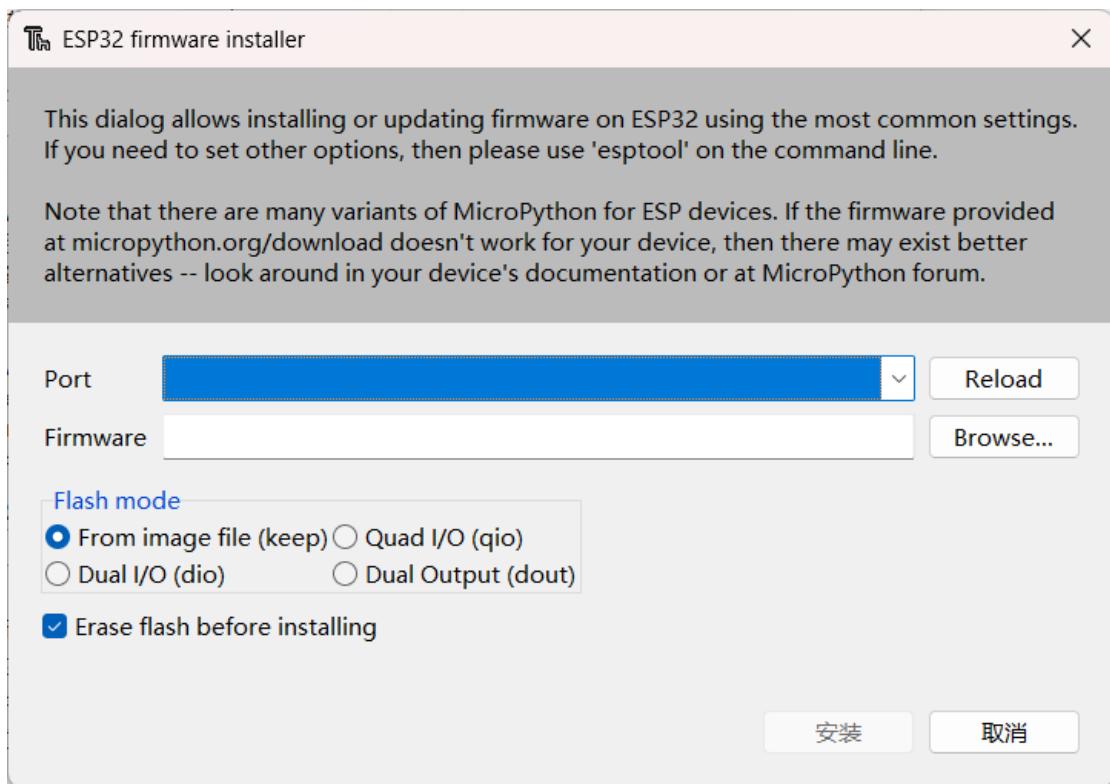
The screenshot shows the Thonny IDE interface. On the left is a file tree with files like main.py, focus.js.txt, and setup.txt. The main area displays Python code for an ESP32 project. The code initializes an I2C connection, scans for devices, and attempts to initialize an OLED display at address 0x3C. It also handles button presses and displays the current state. The terminal window at the bottom shows the command line and some error messages related to port permissions.

```
main.py
1 import network
2 import socket
3 import json
4 import time
5 from machine import Pin, Timer
6 import ssd1315
7 from machine import I2C
8 import hashlib
9 import ubinascii
10
11 # OLED显示设置 (ESP32-S3, GPIO18=SCL, GPIO17=SDA)
12 OLED_INITIALIZED = False
13 try:
14     # 初始化I2C总线
15     i2c = I2C(0, scl=Pin(18), sda=Pin(17), freq=400000)
16     print("I2C总线初始化成功")
17
18     # 扫描I2C设备
19     devices = i2c.scan()
20     print(f"扫描到 {len(devices)} 个I2C设备")
21     for addr in devices:
22         print(f"设备地址: 0x{addr:02X}")
23
24     # 检测到的设备地址0x3C初始化OLED
25     OLED_ADDR = 0x3C
26     if OLED_ADDR in devices:
27         oled = ssd1315.SSD1315(128, 64, i2c, addr=OLED_ADDR)
28         print("OLED初始化成功")
29         OLED_INITIALIZED = True
30     else:
31         print("X 未找到OLED设备 (期望地址: 0x(OLED_ADDR:02X))")
32     except Exception as e:
33         print("X OLED初始化失败: {}").format(e)
34
35     # 状态变量
36     current_state = "idle" # idle, running, paused, completed, break_running, break_paused, break_completed
37     focus_duration = 0 # 总秒数 (专注键休息)
38     remaining_seconds = 0
39
40
41 Shell
Type "help()" for more information.
>>> Connection lost -- getoverlappedresult failed (PermissionError(13, '拒绝访问。', None, 5))
Use Stop/Restart to reconnect.
>>> Process ended with exit code 1.
MicroPython (ESP32) • COM7
```

工具->选项->解释器 interpreter

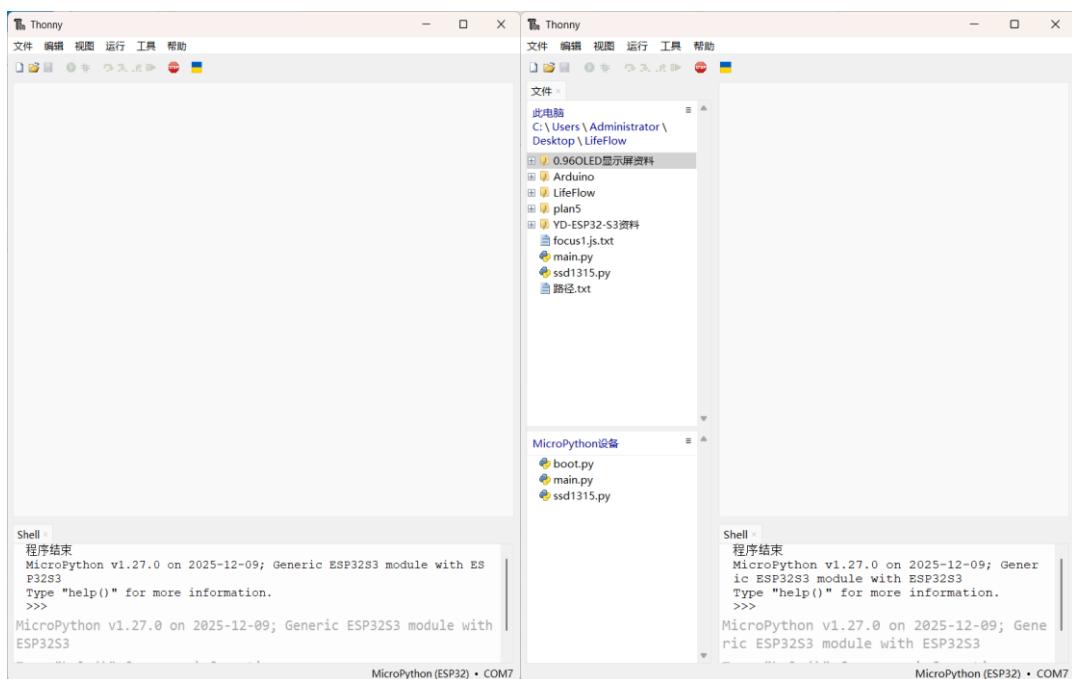


点击 Install or...; port 选择插入电脑后新出现的端口 COM 几



选择 port 和选中固件，点击安装

视图->勾选文件(前后)



右侧上方是自己打开的文件夹，下方是已连接的 esp32 根目录，可以从自己的文件夹选择文件如 main.py, 右键即可选择上传（先停止程序），main 是按下 reset 后自动执行的程序。