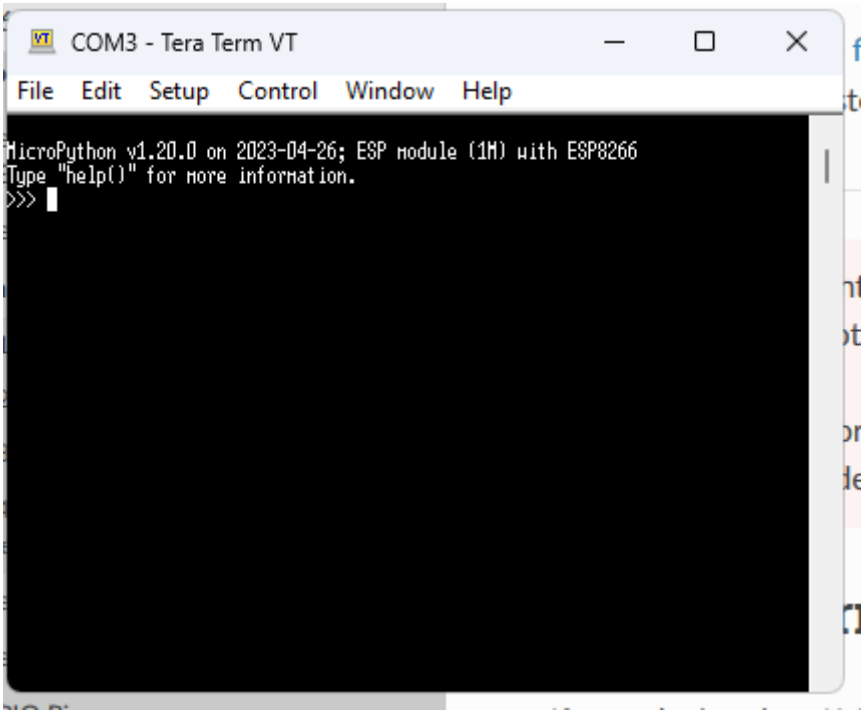
The first thing you need to do is download the most recent MicroPython firmware .bin file to load onto your ESP8266 device. You can download it from the MicroPython downloads page. Builds for 512 kb, 1024 kb and 2048 kb flash memory sizes are available to download. The first ones are very limited in functionalities due to the higher constraint on the available size, so use a chip with at least 1024 kb of flash memory available and download the correct version.

Once you have the MicroPython firmware (compiled code), you need to load it onto your ESP8266 device. There are two main steps to do this: first you need to put your device in boot-loader mode, and second you need to copy across the firmware. To achieve this, a tool called esptool.py can be used. It is possible to install it via pip with the following command:

```
pip install esptool
```

To flash the MicroPython firmware:

```
esptool.py erase_flash
esptool.py write_flash --flash_size=detect 0 esp8266-<build_specific>.bin
```




## Serial prompt

Once you have the firmware on the device you can access the REPL (Python prompt) over UART0 through the USB-serial converter on-board. The baudrate is 115200.

## WiFi

After a fresh install and boot the device configures itself as a WiFi access point (AP) that you can connect to. The ESSID is of the form MicroPython-xxxxxx where the x's are replaced with part of the MAC address of your device (so will be the same every time, and most likely different for all ESP8266 chips). The password for the WiFi is micropythoN (note the upper-case N). Its IP address will be 192.168.4.1 once you connect to its network.