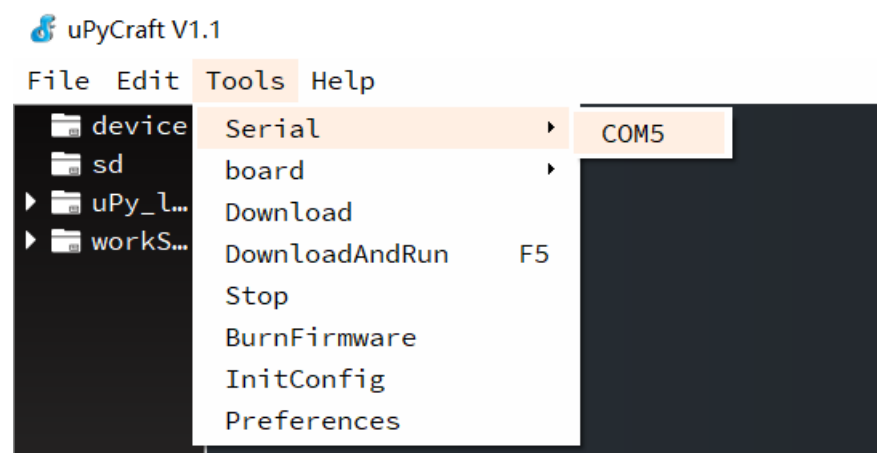


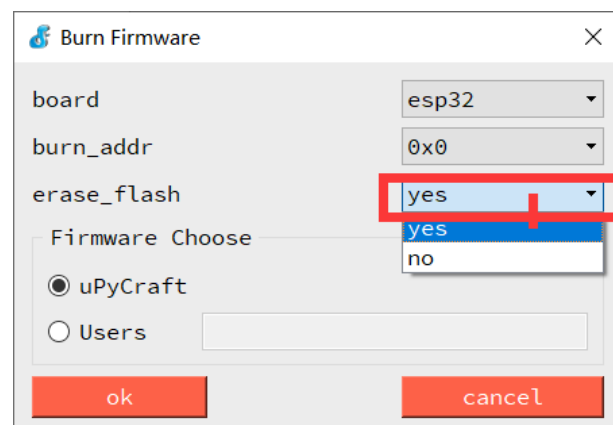
HOW TO ESP32

ESP32 is a series of low-cost, low-power microcontrollers. We use esp32 devkit v1, a development board based on esp-wroom-32 module. This document shows you how to install upycraft and program your ESP32.

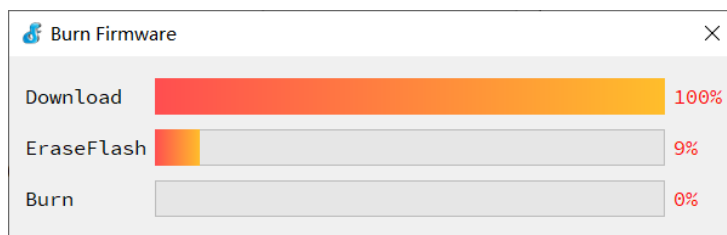
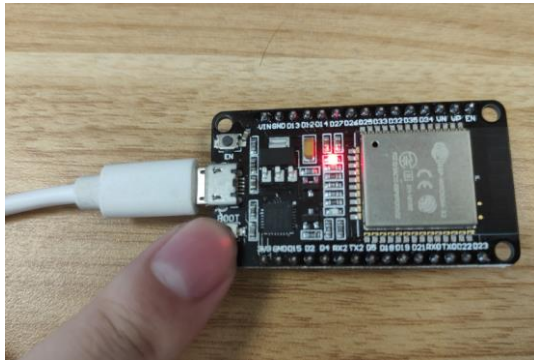
1. Install latest version of Python 3.7.X, don't forget to check "Add Python 3.7 to PATH". We assume you know how to install python.
2. Install CP210x driver. You can find it in the ESP32kit.zip file uploaded to piazza. Or you can download it in the following link:
<https://www.silabs.com/developers/usb-to-uart-bridge-vcp-drivers?tab=downloads>
3. Connect your esp32 to your computer
4. Open uPyCraft.exe. It will prompt you to install sourcecodepro font. Just ignore it, click ok.
5. Click Tools-Serial-COMx. The COM number will be different for different USB ports. This action will establish a connection between your computer and the esp32 board.



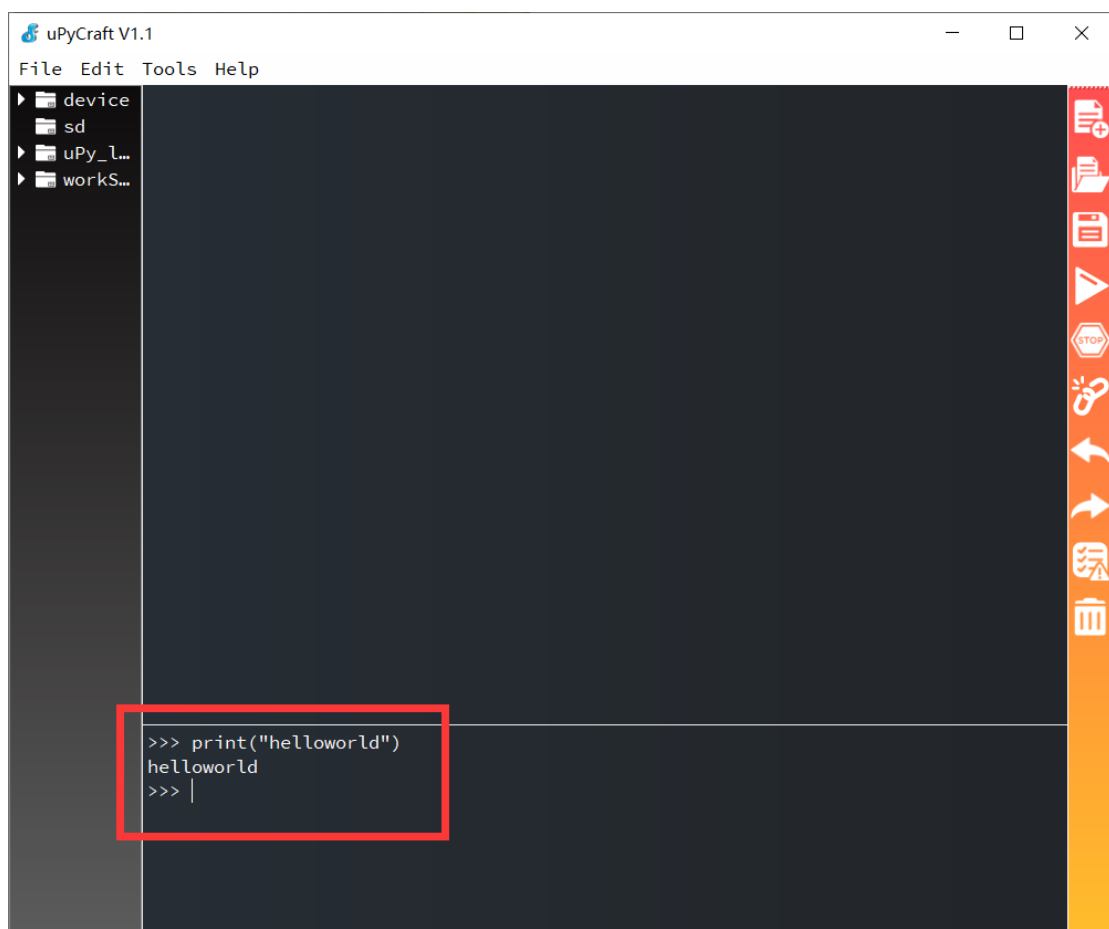
6. If it's the first time you connect your board, a window named "Burn Firmware" will appear. If somehow it doesn't, go to Tools-BurnFirmware, and you should see the following content. Select yes for erase_flash and select esp32 for board.



7. Click ok, Hold the BOOT button on your esp32 board until the second progress bar starts moving.



8. After burning process is done, it might prompt open serial error. Just click Tools-Serial-COMx to connect again, and the familiar ">>>" will appear. Now your board is running python. Try print helloworld.

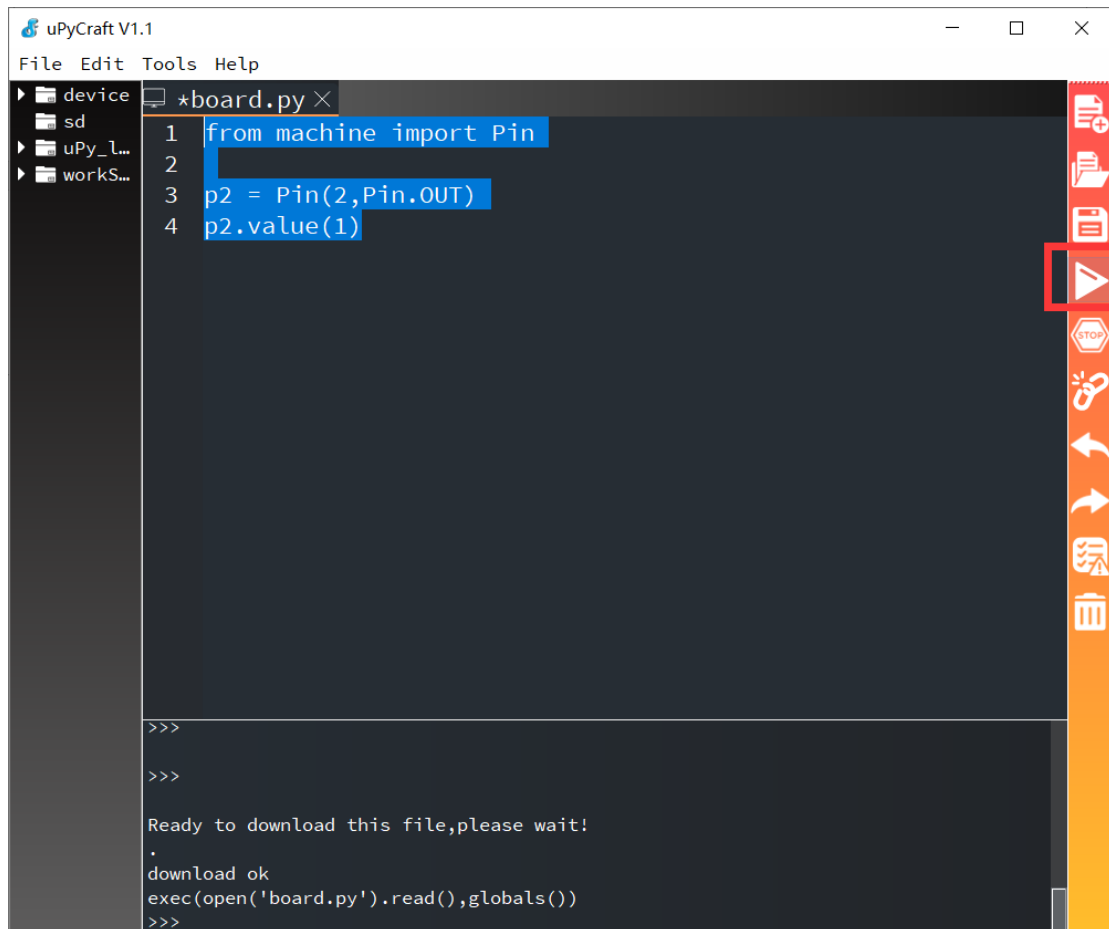


HOW TO LET THERE BE LIGHT

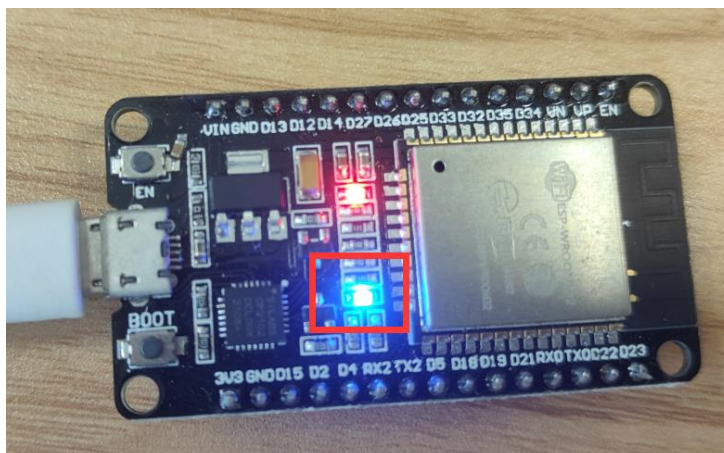
1. Press Ctrl+N to create a new file. Fill in the following code:

```
from machine import Pin
p2 = Pin(2,Pin.OUT)
p2.value(1)
```

2. Press Ctrl+S to save it, Then click this button to download and run. Or simply press F5.



The onboard LED should turn on like this.



For more information about this IDE and how to use it, you can visit:

<http://docs.dfrobot.com.cn/upycraft/>

FOR more information about pins and GPIO, you can visit:

<https://docs.micropython.org/en/latest/esp32/quickref.html#pins-and-gpio>