



*Prepping BlueFruit &  
Installing Mu*

# **\*\*\*\*Software Needed\*\*\*\***

**(Mu Editor, Circuit Python Firmware,  
Circuit Python Libraries):**

# Downloads Required

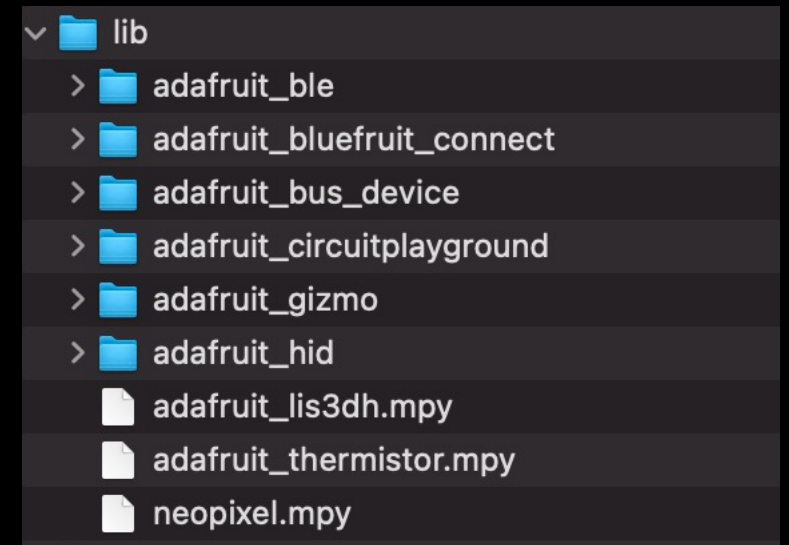
- Clone the repo (or download as zip) from [this location](#) for demo circuit python source code and library folder that will be loaded to your device in later steps.
- [Download Mu](#) – Editor for Circuit Python and includes REPL. (Required for Bluefruit Project). A text editor may also be used but Mu is recommended so you can use the REPL.
- [\(Optional\) Circuit Python v7 Libraries](#) – Download the full libraries for (v7.x) (a subset of libraries are included in above repo).
- [\(Optional\) Driver for Windows](#) – If your Bluefruit is not recognized with a legit USB cable and you are running Windows, you may need to install this.

# Prepping the BlueFruit

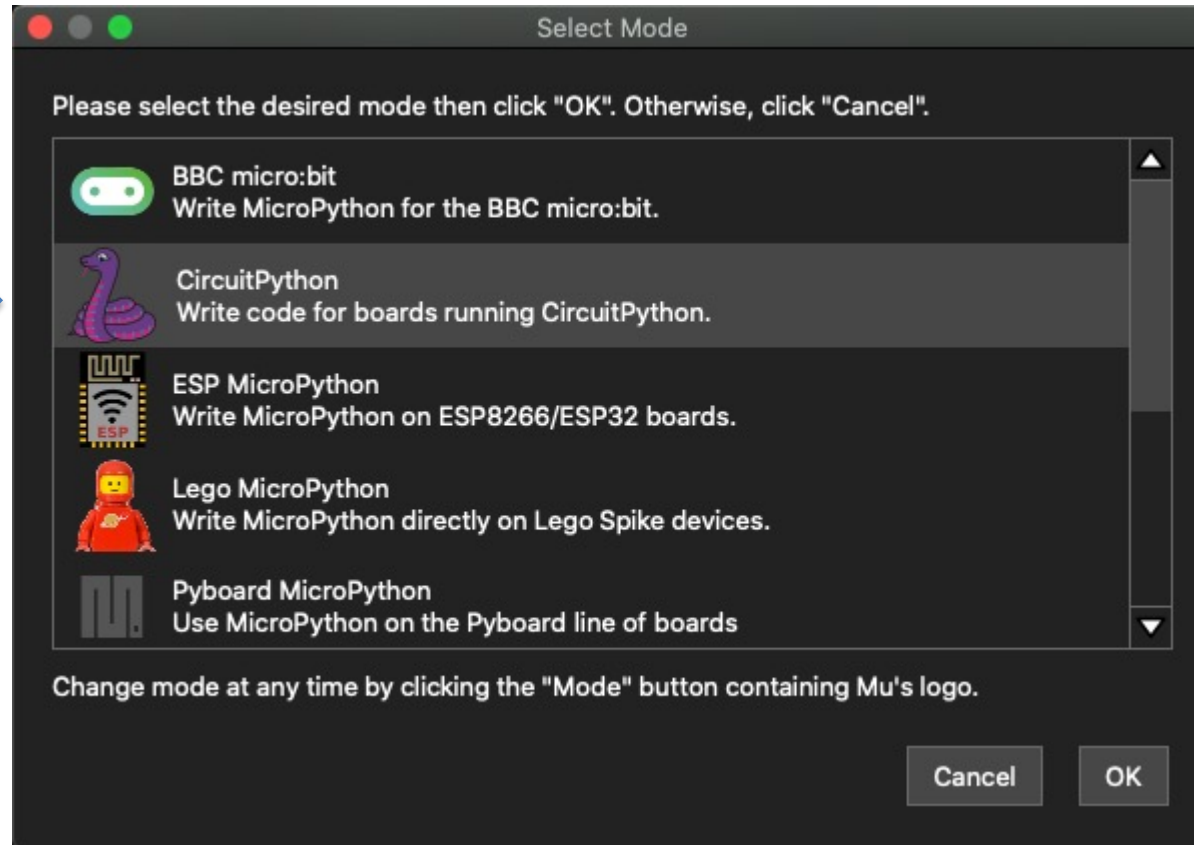
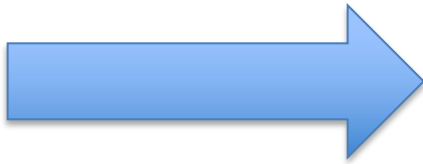
- Steps:
  - Connect Bluefruit with a USB cable you know works with Data
  - Double click middle button of Bluefruit to enter DFU mode (Device Firmware Update mode)
  - Browse to the USB drive (CPLAYBTBOOT)
  - Copy the file with the .UF2 extension from the repo (or download link below) to the CPLAYBTBOOT root directory (Wait for light sequence to change)
  - After updating, your Bluefruit storage will be renamed to CIRCUITPY and you will have a few files in there (code.py, which is a "Hello World" sketch).
- Alternatively, download latest uf2 file from here: (v7.1.0)
  - [https://circuitpython.org/board/circuitplayground\\_bluefruit/](https://circuitpython.org/board/circuitplayground_bluefruit/)

# Circuit Python Libraries (V7)

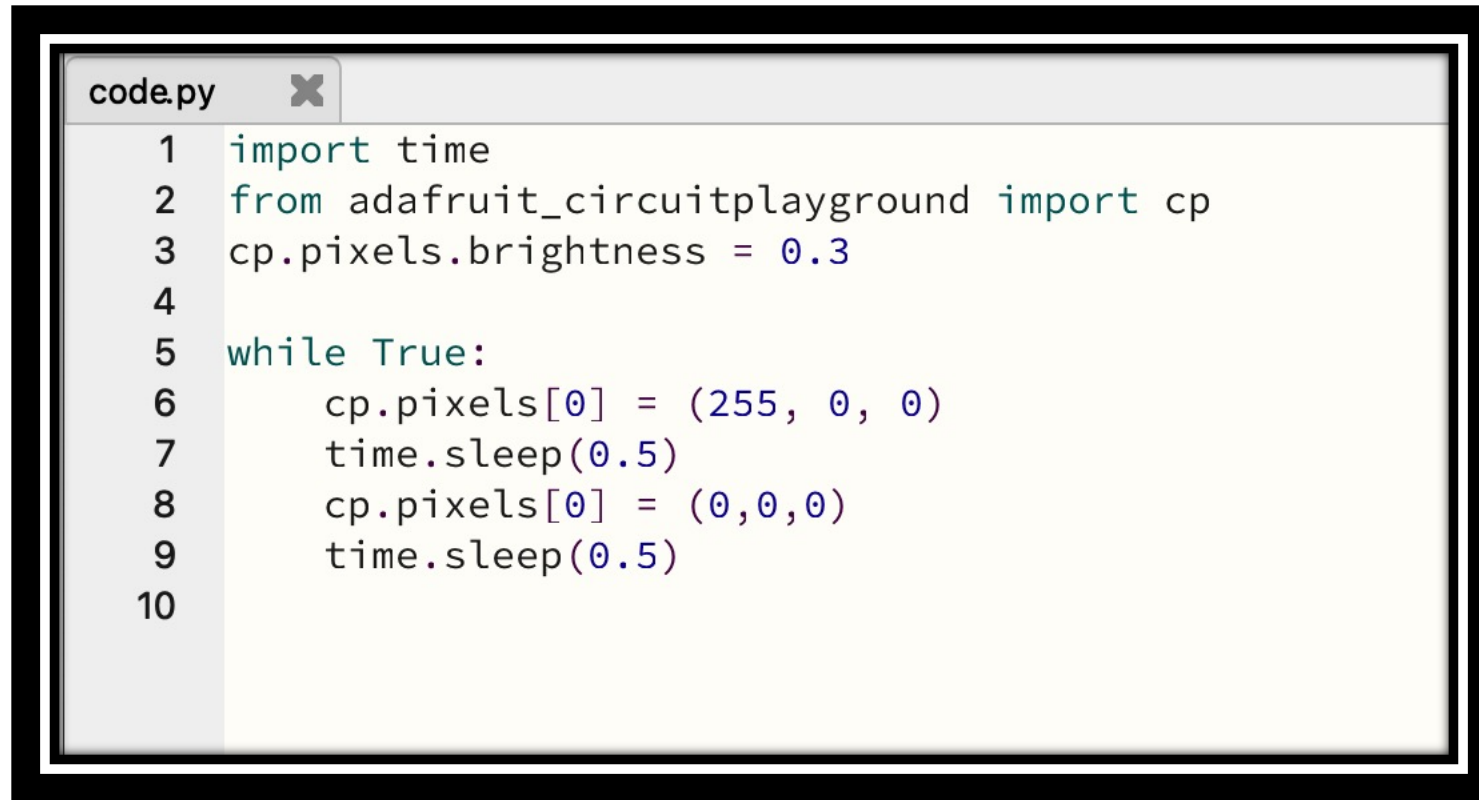
- Copy the lib directory from the repo to the CIRCUITPY root folder (bluefruit storage). The folder structure should look like the image on the right.
- Optional: Download full Circuit Python Libraries (v7) :  
<https://circuitpython.org/libraries>



# After installing, open Mu, and select “CircuitPython”



# Creating your first program

A screenshot of a code editor window with a tab labeled 'code.py' and a close button. The editor contains a Python script with line numbers 1 through 10 on the left margin. The script imports the 'time' module and the 'cp' module from 'adafruit\_circuitplayground'. It sets the brightness of the LED strip to 0.3. Then, it enters a 'while True:' loop that alternates between setting the LED strip color to red (255, 0, 0) and blue (0, 0, 0) with a 0.5-second delay between each change.

```
1 import time
2 from adafruit_circuitplayground import cp
3 cp.pixels.brightness = 0.3
4
5 while True:
6     cp.pixels[0] = (255, 0, 0)
7     time.sleep(0.5)
8     cp.pixels[0] = (0,0,0)
9     time.sleep(0.5)
10
```

Save as “code.py” into root folder of CIRCUITPY USB Drive and watch the magic happen.

Copy/Rename any of the files prefixed with .py files to “code.py” in the root folder to run that code.