

Box Display Trigger Input

Assignment 1

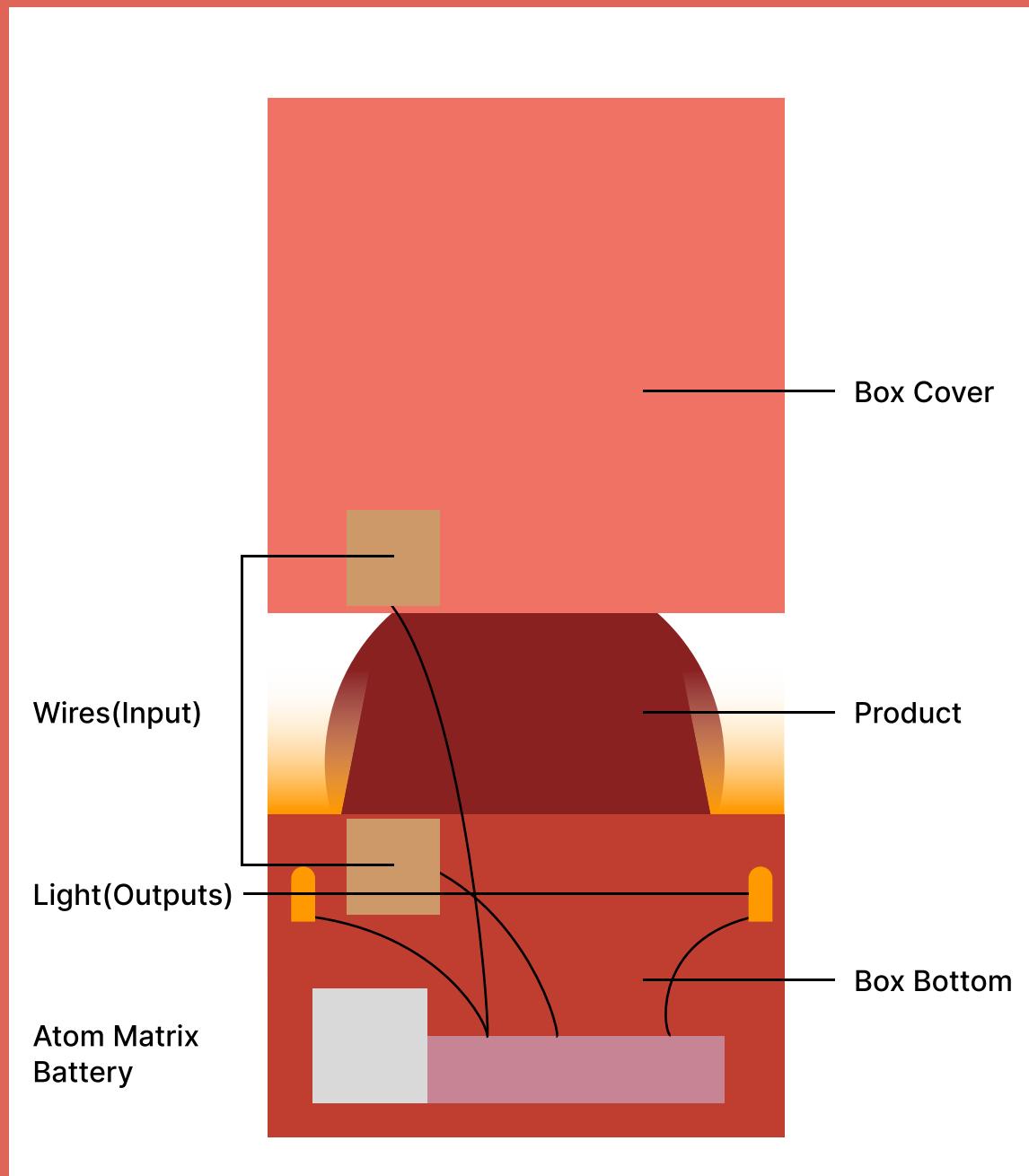
Initial Thought



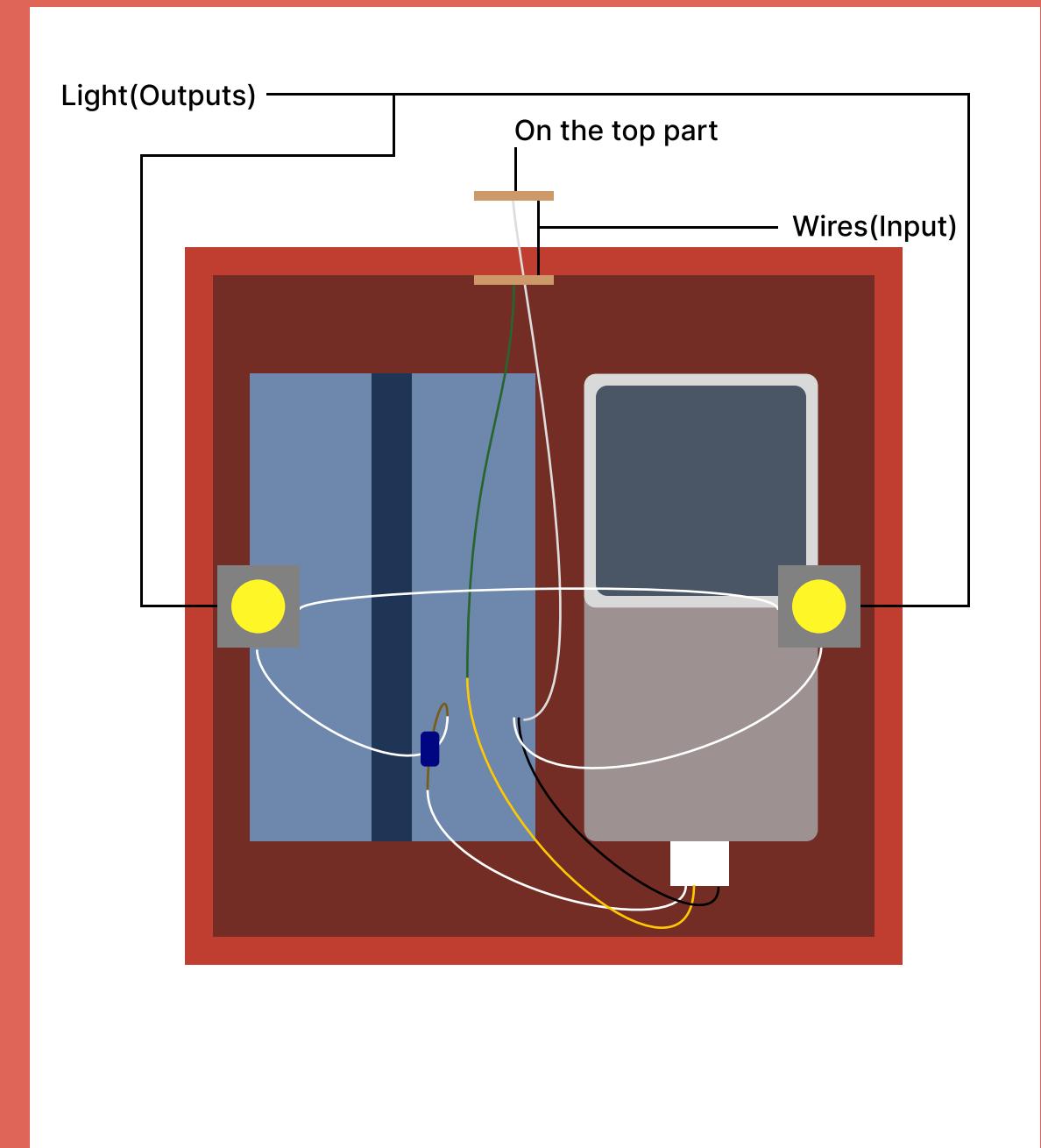
I love technology and I have many different boxes of tech-products inside my house, since I really like the feeling of receiving a new product, and open its box, I want to make the open box feeling even greater.

For this time, I'm using the box for Homepod mini since it has enough space for me to do the wiring

Sketch

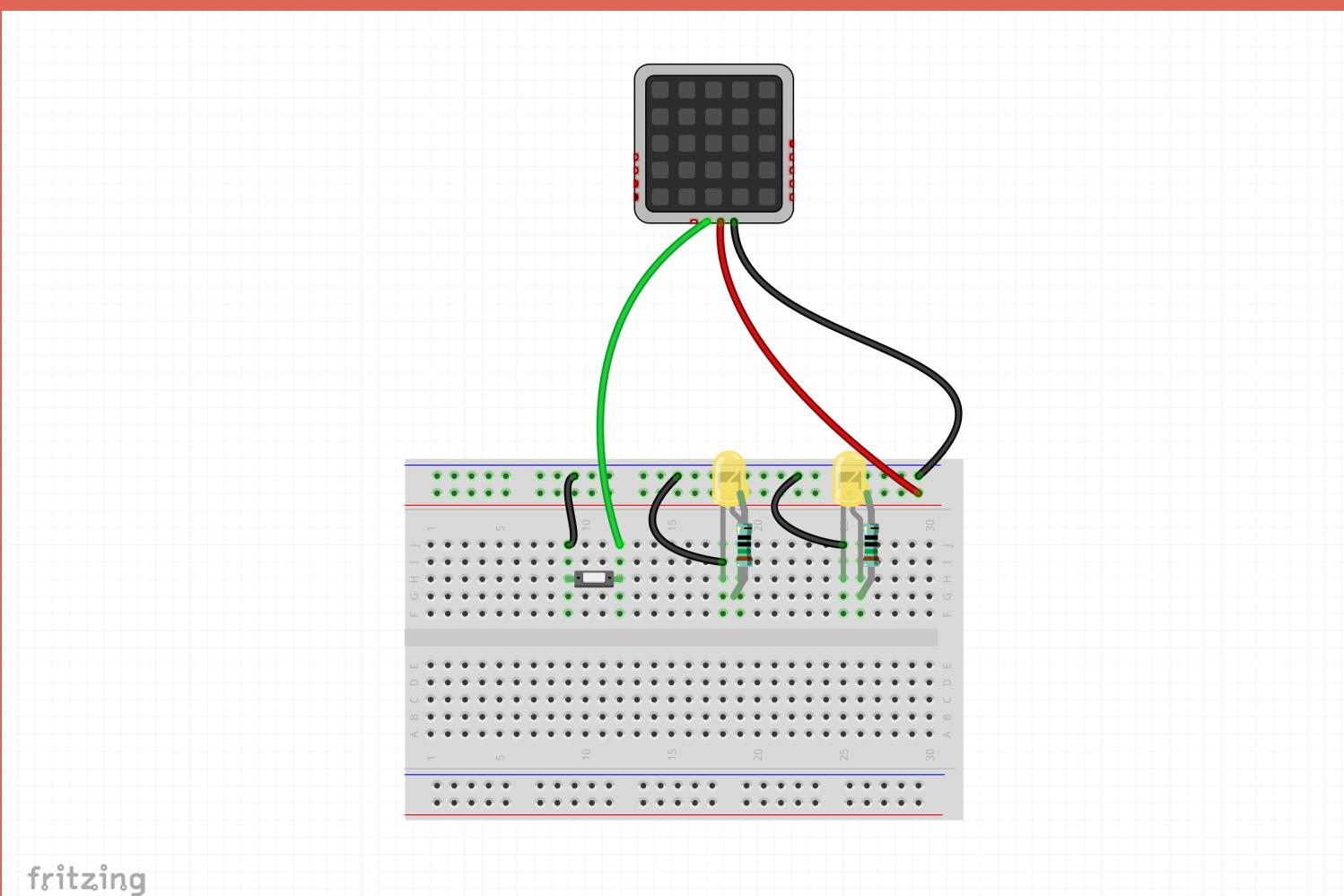


Front View

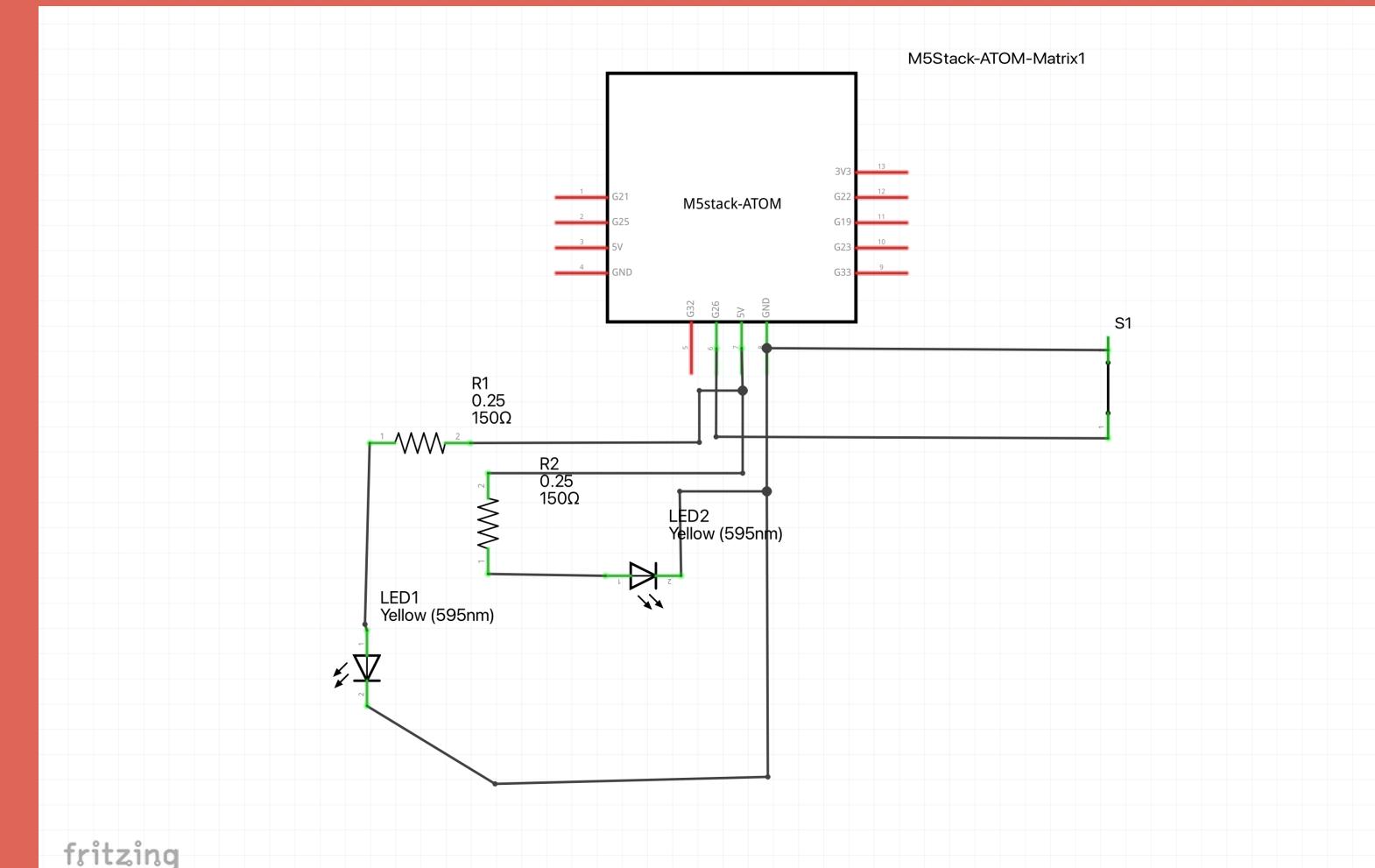


Top View

Fritzing Wiring

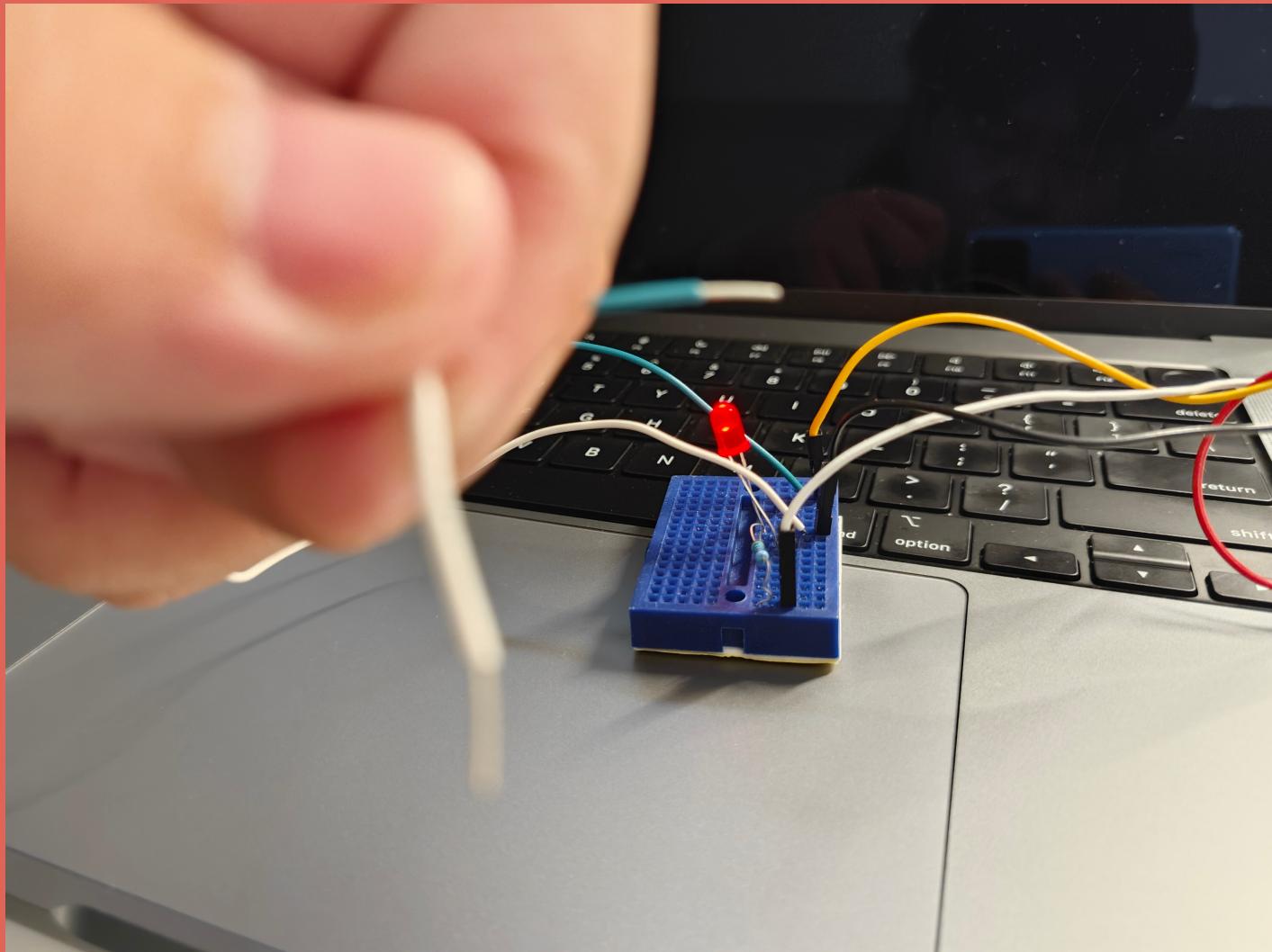


Breadboard Graph

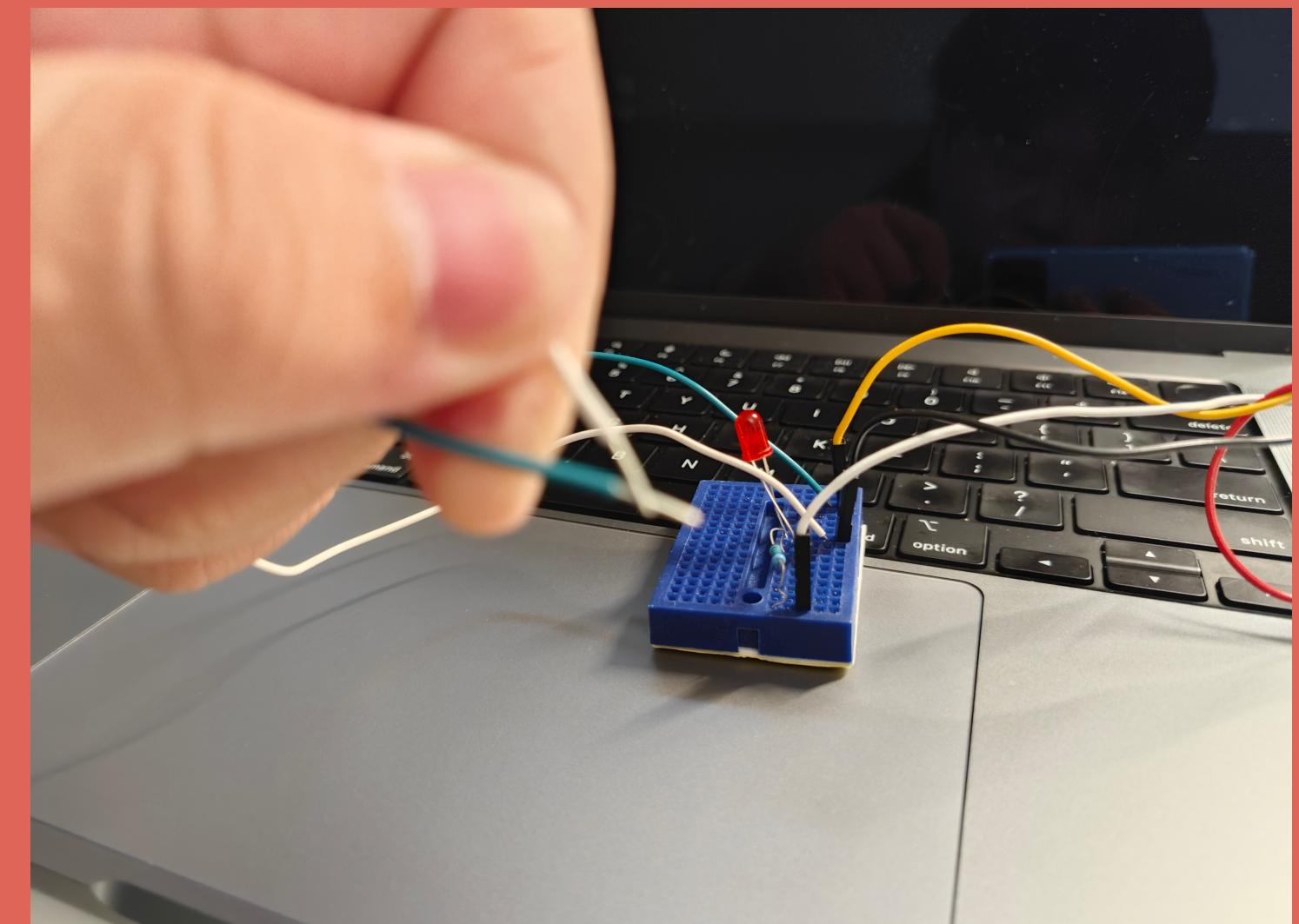


Schematic diagram

Wiring

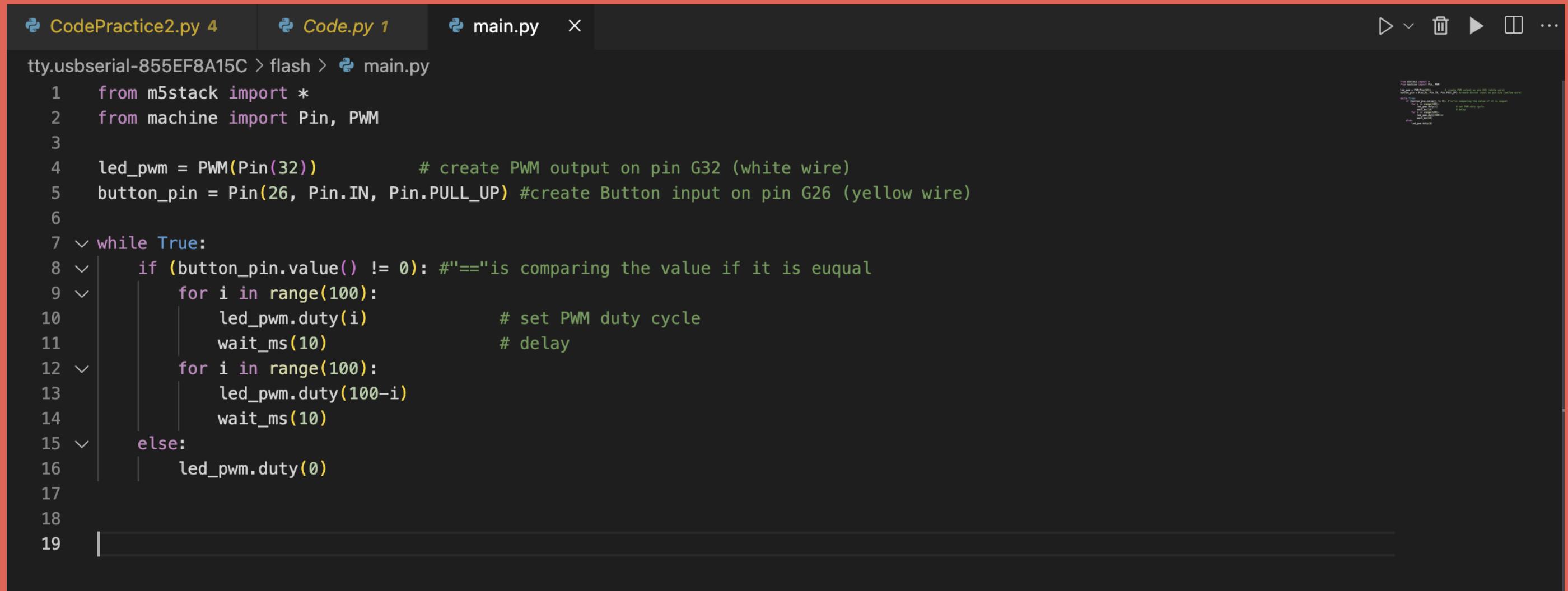


When the input is not connected
Light OFF



When the input is connected
Light ON

Code so far



```
tty.usbserial-855EF8A15C > flash > main.py

1  from m5stack import *
2  from machine import Pin, PWM
3
4  led_pwm = PWM(Pin(32))          # create PWM output on pin G32 (white wire)
5  button_pin = Pin(26, Pin.IN, Pin.PULL_UP) #create Button input on pin G26 (yellow wire)
6
7  while True:
8      if (button_pin.value() != 0): #=="is comparing the value if it is euqual
9          for i in range(100):
10              led_pwm.duty(i)          # set PWM duty cycle
11              wait_ms(10)            # delay
12          for i in range(100):
13              led_pwm.duty(100-i)
14              wait_ms(10)
15      else:
16          led_pwm.duty(0)
17
18
19
```