**Lesson\_4\_Notes\_and\_Journal**

**2024.04.26**

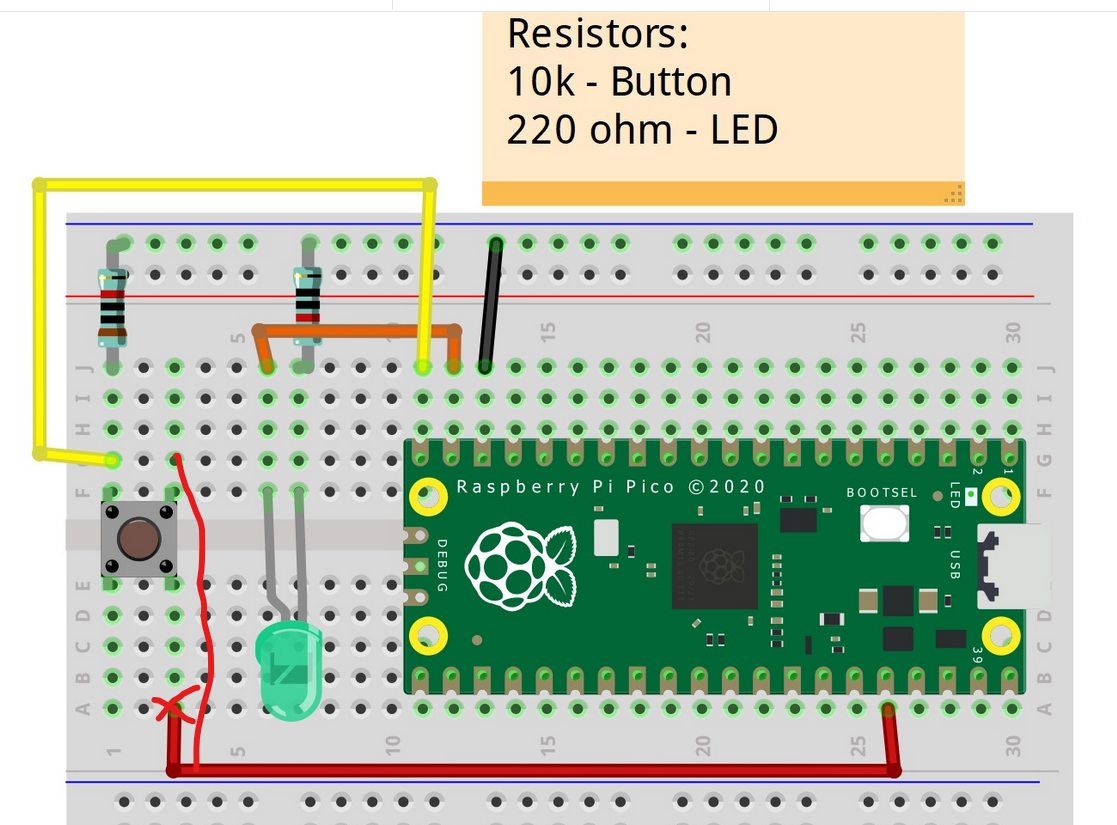
* Look at Code
* Look at Circuit
* Draw Circuit
* Build Circuit
* Start Lesson

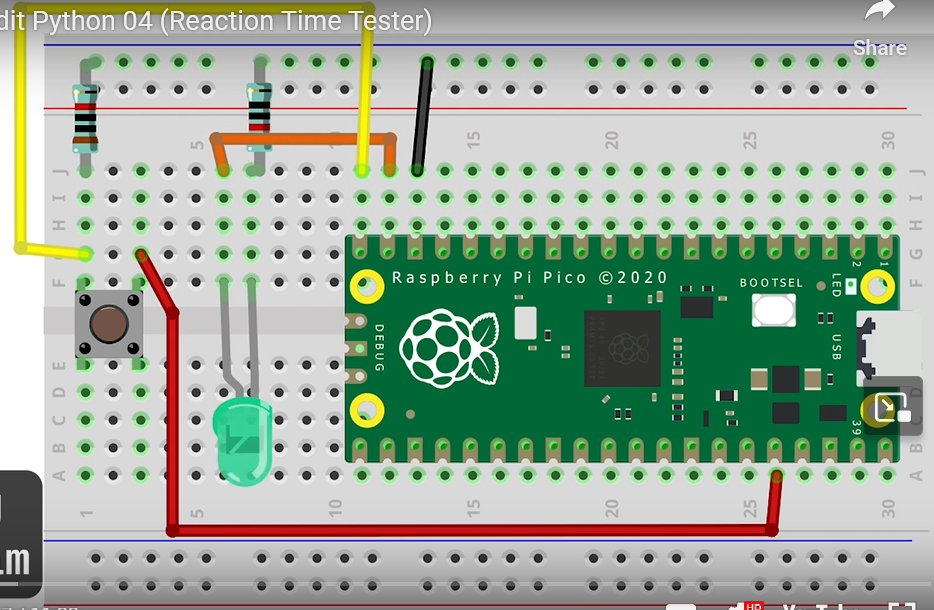
**Code**

* Glance at Code
* import machine
* import time
* # Define GPIO pins for the LED and button
* led\_pin = machine.Pin(14, machine.Pin.OUT)
* button\_pin = machine.Pin(15, machine.Pin.IN, machine.Pin.PULL\_DOWN)
* # Function to measure reaction time
* def reaction\_time\_tester():
* time.sleep(5)
* led\_pin.on() # Turn on the LED
* start\_time = time.ticks\_ms() # Get start time in milliseconds
* # Wait for button press
* while True:
* if button\_pin.value() == 1:
* end\_time = time.ticks\_ms() # Get end time in milliseconds
* reaction\_time = end\_time - start\_time # Calculate reaction time
* print('Reaction Time:', reaction\_time, 'ms')
* break
* led\_pin.off() # Turn off the LED
* # Call the function to start the reaction time tester
* reaction\_time\_tester()

**Circuit**

* Theirs





A close-up of a device

Description automatically generated

Brown 1

Black 0

Black 0

Red 2

Silver? ± 10%

10000 = 10 K Ω ± 10%

A computer screen shot of a device

Description automatically generated

??? Red 2

Red 2

Black 0

Black 0

Silver? ± 10%

220 Ω ± 10%

A close-up of a circuit board

Description automatically generated

Black – GND

Orange – GP14 -- LED

Yellow – GP15 -- Button

A computer screen shot of a computer

Description automatically generated

Red – 36 3V3 (OUT)

A colorful rectangular sign with text

Description automatically generated with medium confidence

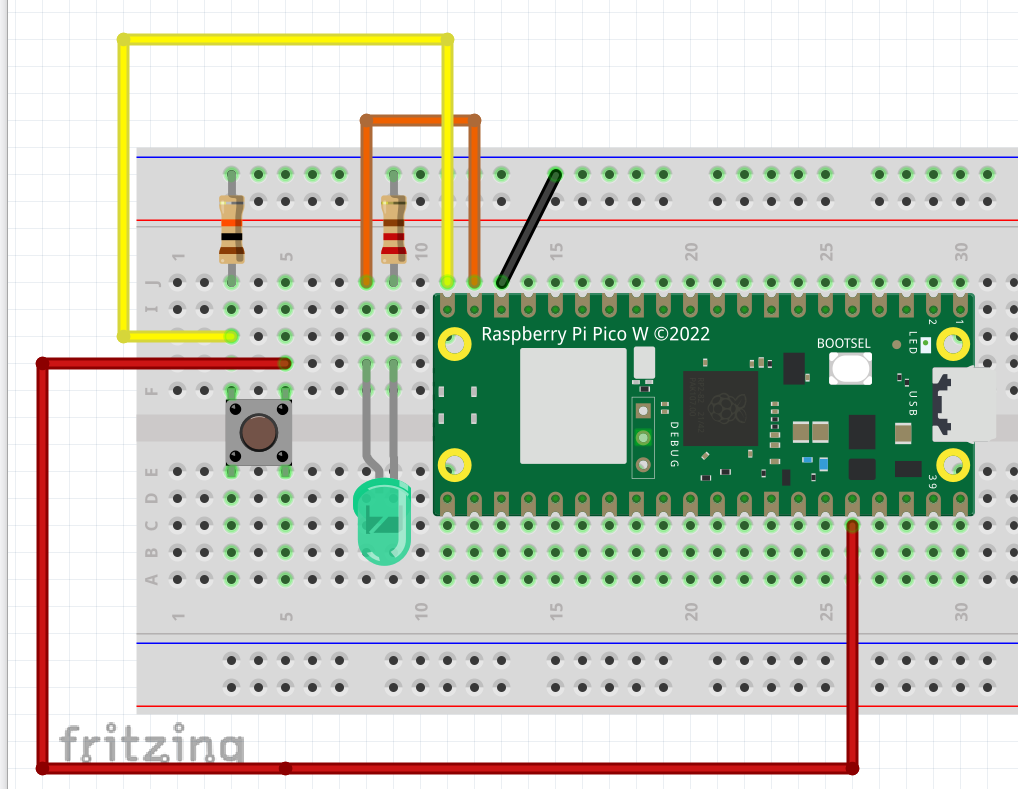
* Mine

Original from Web Site

A computer screen shot of a circuit board

Description automatically generated

Corrected



* As built