**2024\_05\_02\_Help\_Note**

I am not clear if the significant mismatches in diagrams, code, and video are intentional.

If so, WELL DONE! This really matches up with the real world quite well! But, you should probably brag about that.

If not, well I assume you already know the issues….

I have a couple of questions to discuss:

**Lesson 3:**

I changed the code:

if light\_value **>** LIGHT\_THRESHOLD: #Was <

Now the LED is on when the room is bright – Numerical Value is 17xxx to 20xxx

And the LED is off when I cover the sensor with my finger – Numerical Value is 59xxx to 62xxx

Room light on vs off at night (quite dark) doesn’t change values!

Is this reasonable performance based on the components supplied?

**Lesson 4:**

I am having a much worse time than on any earlier lesson.

There seem to be more circuit variations between the photos and videos than I can keep up with.

I “think” I have built the version in the video most recently.

My code seems to hang waiting for a button press and I haven’t been able to come up with a wiring plan and code combination to resolve.

My latest code is:

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():

led\_pin.off() # Turn off the LED

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() > 0.5:

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()