Reflection

Completing this assignment involved a lot of new steps \* a bunch of blowing it up & starting it over from the beginning. Initially, I had issues getting the microsd card reader to work correctly, which lead to an alternative that used another dongle to connect directly to my computer & write up.

I continued having issues with the SSH to send over the Source Code files as needed. Even though my device was connected to the internet, they were recognizing each other (raspberry pi & desktop), but initially they would not send & receive the file. I managed to get it sent over, recognized, and congratulated myself for some progress.

Another hurdle was ensuring the scripts ran correctly. At first, I encountered permission errors until I remembered to use sudo for GPIO access. Wiring the LED also required troubleshooting—I initially connected it to the wrong GPIO pin. After consulting the pinout command, I corrected the circuit and went through the troubleshooting steps of changing some of the connectors. I was not able to make the LED turn on. I attached photos below.

While I resolved most issues, I still seek guidance on improving SSH reliability and automating script execution at startup. Additionally, I’d like to learn better methods for GPIO safety, such as proper resistor usage. Overall, this exercise strengthened my troubleshooting skills and familiarity with Raspberry Pi hardware and Linux commands.

Some feedback on how to troubleshoot the light on the breadboard would be helpful. It might just have more to do with the files not opening correctly.

