

ECE Lab 1 Readme

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Commits

Kyle Chen commit ID: 5077bf568c1963973eec7b1542b57a671cdc94ad

Eli Moss Commit ID: 751cde3e7a89abeb840072487af7dba52db4a624

Part 0

Kyle Chen:

The image shows two side-by-side windows. The left window is a terminal with a dark background. It shows a user named 'kylec' at a prompt 'kylec@college10-100-64-61-35 Lab01_part0 %'. The user has entered 'cd Lab01' and 'ls', which lists files 'BOARD.o', 'Lab01_part1', 'Lab01_part3', 'Lab01_part0', 'Lab01_part2', and 'a.out'. Then the user entered './a.out', which printed 'Hello World!'. The prompt is now 'kylec@college10-100-64-61-35 Lab01 %'. The bottom of the terminal shows icons for file, folder, and other functions, with 'Default (Lab01_part3)' and 'Auto' selected. The right window is a serial monitor interface with a light blue header. It has a 'Line ending' dropdown set to 'None'. Below the header is a 'Start Monitoring' button and several icons. The main area shows the output of the serial port: '---- Opened the serial port /dev/tty.usbmodem14403 ----' followed by ten 'Hello World!' messages.

Eli Moss:

```
Last login: Tue Apr 1 13:46:38 on ttys001
elimoss@eduroam-169-233-174-212 Lab01 % ./HelloWorld
Hello World!
elimoss@eduroam-169-233-174-212 Lab01 %
```

A screenshot of a terminal window with a dark background. At the top, there is a navigation bar with five tabs: 'PROBLEMS', 'OUTPUT', 'DEBUG CONSOLE', 'TERMINAL' (which is highlighted with a yellow underline), and 'PORTS'. Below the tabs, the terminal displays ten lines of text, each reading 'Hello World!' in a light-colored monospace font.

Part1

Kyle Chen:

i=0: [45, 207, 70, 41, 4]
i=1: [45, 207, 70, 41, 4]
i=2: [45, 207, 70, 41, 4]
i=3: [45, 70, 207, 41, 4]
i=4: [41, 45, 70, 207, 4]
i=5: [4, 41, 45, 70, 207]

Eli Moss:

i = 0 [45, 207, 70, 41, 4]
i = 1 [45, 207, 70, 41, 4]
i = 2 [45, 207, 70, 41, 4]
i = 3 [45, 70, 207, 41, 4]
i = 4 [41, 45, 70, 207, 4]
i = 5 [4, 41, 45, 70, 207]

Part2

Kyle Chen:

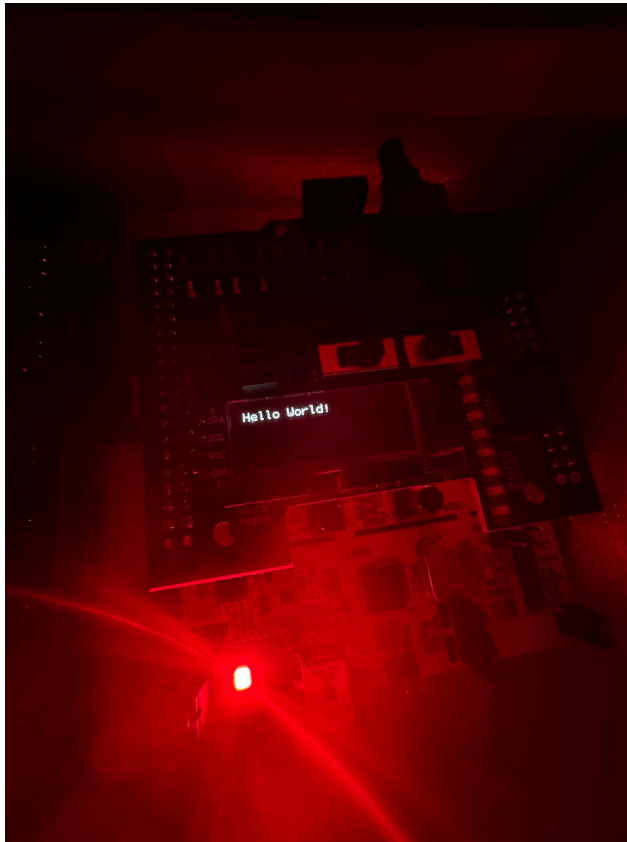
```
Line ending None
Start Monitoring
*** Failed to open the serial port /dev/tty.
BLTH ***
*** Failed to open the serial port /dev/tty.
BLTH ***
---- Opened the serial port /dev/tty.usbmodem
14403 ----
F      C
0.0 -018
20.0 -007
40.0 0004
60.0 0016
80.0 0027
100.0 0038
120.0 0049
140.0 0060
160.0 0071
180.0 0082
200.0 0093
220.0 0104
240.0 0116
260.0 0127
280.0 0138
300.0 0149
K      F
0.000 -459.7
20.000 -423.7
40.000 -387.7
60.000 -351.7
80.000 -315.7
100.000 -279.7
120.000 -243.7
140.000 -207.7
160.000 -171.7
180.000 -135.7
200.000 -99.7
220.000 -63.7
240.000 -27.7
260.000 8.3
280.000 44.3
300.000 80.3
---- Closed the serial port /dev/tty.usbmodem
14403 ----
```

Eli Moss:

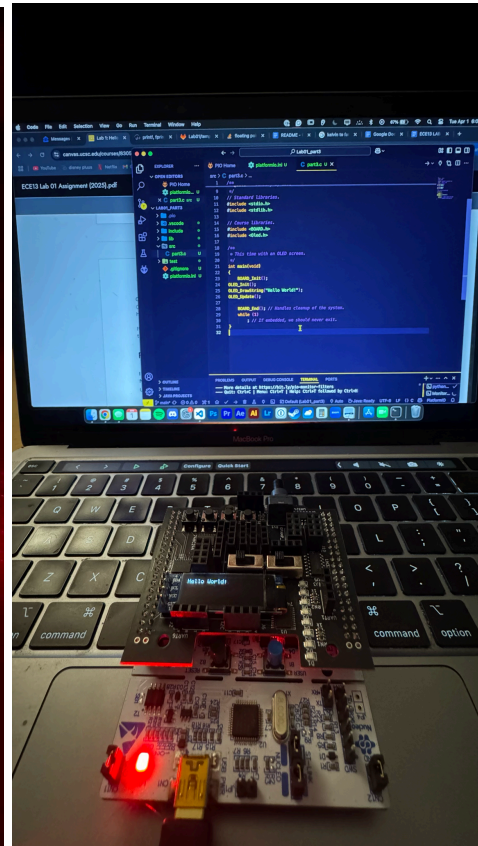
```
quit. C C C
F      C
0.0 -018
20.0 -007
40.0 0004
60.0 0016
80.0 0027
100.0 0038
120.0 0049
140.0 0060
160.0 0071
180.0 0082
200.0 0093
220.0 0104
240.0 0116
260.0 0127
280.0 0138
300.0 0149
K      F
000.000 -459.7
020.000 -423.7
040.000 -387.7
060.000 -351.7
080.000 -315.7
100.000 -279.7
120.000 -243.7
140.000 -207.7
160.000 -171.7
180.000 -135.7
200.000 -99.7
220.000 -63.7
240.000 -27.7
260.000 8.3
280.000 44.3
300.000 80.3
```

Part3

Kyle Chen:



Eli Moss:



Reflection

Eli Moss:

1. We used a group chat where we communicated plans for submission as well as asked for help and shared ideas about problems we ran into and how to solve them. While we certainly could have done more (like meet up in person), we never felt the need, and found this sort of light communication more conducive to our success

2. Some setup issues, and had to ask people and TAs to fully figure it all out. No issues communicating and contacting each other as a group, and the group helped clear up these issues for each other.
3. Make installation and command instructions more clear for MAC users. While there is some guidance, the Homebrew section was particularly vague, and could use a little more specific direction as it is quite unintuitive with no guidance. Other than that, lab was very straightforward

Kyle Chen:

1. We made a group chat where we could talk with one another. Most of the discussion was minor troubleshooting with the environment and also understanding the assignment.
2. I was never able to get the helloworld.c compiling for x86 with the inclusion of the board header file, so I commented it out. Turns out it was because of the usage of curly quotes, instead of straight quotes, that was copied from the pdf instructions.
3. A few comments:
 - a. Putting the code blocks in a PDF meant that sometimes the code that was copied was incorrect (see 2), and just messy. Would be better in a website.
 - b. I feel like there was a lot of information bloat. My experience during the lab section was that the majority of students relatively unfamiliar with computers were *still* confused with the instructions. Many little details can be cut because they just aren't relevant to what the students are learning at *this* point in time.
 - c. The organization of the topics could be improved; I would suggest putting all the minimum required computer knowledge (e.g. shell commands, how git works) in a separate, and *single* introductory document. And leave the lab document as a simple list of instructions, e.g. try to compile and run the helloworld.c on the board. The document was hard to search for things and read through.
 - d. This assignment did not have to be 26 pages long.