

System Maintenance  
CPTR 1122  
Lab 07

- Contact your instructor with your questions about the assignments.
- The student must insure all the answers are free from any malware.
- The student must ensure all answers are legal as defined by the class syllabus.
- All parts of your answers must be neat and easy to read.
- Paragraphs are at least four properly constructed English sentences.
- Embedding documents within documents does not work with the D2L Bright Space assignments.
- Plagiarism will not be tolerated.
- Unless noted, all lab sections must be done as unprivileged login.
- Labeling answers is highly recommended.

## 7. [Lab07: Computer Hardware](#)

- 7.1. Upload each answer to the D2L Bright Space Assignment section 7.1 before the due date found in the 1122a.pdf document. Submit a Portable Document Format (PDF) or word processing file containing the following. Put your answer in a single document.
  - 7.1.1. Identify two different AMD processors, provide the processor maximum speed, supported operating systems, and the URL of all information sources in a PDF file.
  - 7.1.2. Identify two different Intel processors, provide the processor maximum speed, supported operating systems, and the URL of all information sources in a PDF file.
  - 7.1.3. Identify two different ARM processors, provide the processor maximum speed, supported operating systems, and the URL of all information sources in a PDF file.
  - 7.1.4. Identify two different RISC V processors, provide the processor maximum speed, supported operating systems, and the URL of all information sources in a PDF file.
  - 7.1.5. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.
  
- 7.2. Upload each answer to the D2L Bright Space Assignment section 7.2 before the due date found in the 1122a.pdf document. Submit a Portable Document Format (PDF) or word processing file containing the following. Put your answer in a single document.
  - 7.2.1. Select an AMD processor and a known error in that processor. Provide the following.
    - 7.2.1.1. Identify the error.
    - 7.2.1.2. Explain how the error works.
    - 7.2.1.3. Explain how the error may be exploited.
    - 7.2.1.4. Provide your source(s) of information
  - 7.2.2. Select an Intel processor and a known error in that processor. Provide the following.
    - 7.2.2.1. Identify the error.
    - 7.2.2.2. Explain how the error works.
    - 7.2.2.3. Explain how the error may be exploited.
    - 7.2.2.4. Provide your source(s) of information
  - 7.2.3. Select an ARM processor and a known error in that processor. Provide the following.
    - 7.2.3.1. Identify the error.
    - 7.2.3.2. Explain how the error works.
    - 7.2.3.3. Explain how the error may be exploited.
    - 7.2.3.4. Provide your source(s) of information
  - 7.2.4. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.
  
- 7.3. Upload each answer to the D2L Bright Space Assignment section 7.2 before the due date found in the 1122a.pdf document.
  - 7.3.1. Submit the entire text file of the source code including the following.
    - 7.3.1.1. The remarks identify the purpose, outside help credit, author, and creation date.
    - 7.3.1.2. Report the hostname to the output file.
    - 7.3.1.3. Reporting all possible information about the CPU to the output file.
  - 7.3.2. Submit the written script entire text file containing the CPU output file data from host 01
  - 7.3.3. Submit the written script entire text file containing the CPU output file data from host 02
  - 7.3.4. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.

- 7.4. Upload each answer to the D2L Bright Space Assignment section 7.4 before the due date found in the 1122a.pdf document. Complete the "Lesson 06: Sound Sensitive LED Light".
  - 7.4.1. Submit the entire text file of the source code for the lesson including the following.
    - 7.4.1.1. The remarks identify the purpose, outside help credit, author, and creation date.
    - 7.4.1.2. Entire code for the lesson.
  - 7.4.2. Provide a copy of the serial plotter with at least four light changes during code operation using the default code.
  - 7.4.3. Submit the entire text file of the source code for the lesson including the following.
    - 7.4.3.1. The remarks identify the purpose, outside help credit, author, and creation date.
    - 7.4.3.2. Entire code for the lesson.
    - 7.4.3.3. A modification to the code operation you made.
    - 7.4.3.4. An explanation of the modification impact on the Arduino.
  - 7.4.4. Provide a copy of the serial plotter with at least four light changes during code operation using your modified code.
  - 7.4.5. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.