

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.
  - 7.1.1. Identify two different AMD processors, provide the processor specifications, 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 specifications, 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 specifications, 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 specifications, 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.
  - 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. Explain how the processor works without errors.
    - 7.2.1.5. 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. Explain how the processor works without errors.
    - 7.2.2.5. 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. Explain how the processor works without errors.
    - 7.2.3.5. 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 a Portable Document Format (PDF) or word processing file containing the following.
    - 7.3.1.1. The computer manufacturer, model, and serial number.
    - 7.3.1.2. A picture of the main board with identification of the CPU or fan.
    - 7.3.1.3. The output of a program provides only CPU information.
    - 7.3.1.4. Provide the flags for the listed CPU with definitions.
    - 7.3.1.5. Provide a URL explaining a CPU vulnerability listed for the CPU.
  - 7.3.2. Submit the entire text file of the source code including the following.
    - 7.3.2.1. The remarks identify the purpose, outside help credit, author, and creation date.
    - 7.3.2.2. Reporting all possible information about the CPU to an output file.

- 7.3.3. Submit the entire text file containing the CPU output file data.
  - 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 section".
- 7.4.1. Submit a Portable Document Format (PDF) or word processing file containing the following.
    - 7.4.1.1. Provide a copy of the serial plotter with at least four light changes during code operation.
  - 7.4.2. Submit the entire text file of the source code for the lesson including the following.
    - 7.4.2.1. The remarks identify the purpose, outside help credit, author, and creation date.
    - 7.4.2.2. Entire code for the lesson.
  - 7.4.3. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used.