

System Maintenance  
CPTR 1122  
Lab 05

- Contact your instructor with your questions about the assignments.
- The student must insure all the answers are free from any malware.
- The student must insure 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.

**Lab05: Chapter 8: Magnetic Storage**

- 5.1. Upload your document to the D2L Bright Space Assignment section 5.1 before the due date found in the 1122a.pdf document.
  - 5.1.1. Select a working lab or similar computer to create a short video (no more than 10 minutes in length) showing the following. [ 12 points ]
    - 5.1.1.1. Demonstration the computer is functioning.
    - 5.1.1.2. Demonstration of proper ESD protection.
    - 5.1.1.3. Demonstrate proper parts management.
    - 5.1.1.4. Demonstrate removal of a disk drive or DVD drive.
    - 5.1.1.5. Demonstrate the installation of a disk drive or DVD drive.
    - 5.1.1.6. Demonstration the disk drive or DVD drive is functioning properly.
  - 5.1.2. The video must include the face of the single individual getting lab section credit. Multiple faces will result in no credit for any individuals. [ 12 points ]
  - 5.1.3. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [ 1 point ]
- 5.2. Upload your document to the D2L Bright Space Assignment section 5.2 before the due date found in the 1122a.pdf document.
  - 5.2.1. Create a Linux virtual machine with the following information in a PDF file. This may not be the same distribution/version used in any other class. [ 12 points ]
    - 5.2.1.1. The full name of the installation media.
    - 5.2.1.2. The default partitioning information of the distribution using encrypted LVM.
    - 5.2.1.3. Show the encrypted LVM partition has a separate /home directory that is at least 5GB larger than recommended.
    - 5.2.1.4. Show the distribution is current with updates.
  - 5.2.2. Provide a separate word processing document with the following. [ 12 points ]
    - 5.2.2.1. All the virtual machine configurations.
    - 5.2.2.2. All the configuration options selected during installation.
    - 5.2.2.3. How to update the operating system.
  - 5.2.3. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [ 1 point ]
- 5.3. Upload your document to the D2L Bright Space Assignment section 5.3 before the due date found in the 1122a.pdf document.
  - 5.3.1. Select a working Windows or Macintosh computer to complete the following. [ 24 points ]
    - 5.3.1.1. Provide the initial partition table of a USB drive in a text file.
    - 5.3.1.2. Modify the partition settings into three equal size partitions. Show the new partition table in a text file.
    - 5.3.1.3. Format each new partition with the default operating system file format. Show the format type in each partition in a text file.
    - 5.3.1.4. Put at least one file in each partition. Show all the files in each partition in a text file.
  - 5.3.2. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [ 1 point ]
- 5.4. Upload your document to the D2L Bright Space Assignment section 5.4 before the due date found in the 1122a.pdf document.
  - 5.4.1. Document completion of "Lesson 3: Controlling the Speed of the Blink."
    - 5.4.1.1. Provide a copy of the source code in a text file that includes the following. [ 8 points ]
      - 5.4.1.1.1. The purpose of the code.

- 5.4.1.1.2. All sources of help with the code.
- 5.4.1.1.3. Your name and code creation date.
- 5.4.1.1.4. The complete source code according with the lab instructions.
- 5.4.1.2. Provide a copy of the source code in a text file that includes the following. [ 8 points ]
  - 5.4.1.2.1. The purpose of the code.
  - 5.4.1.2.2. All sources of help with the code.
  - 5.4.1.2.3. Your name and code creation date.
  - 5.4.1.2.4. The complete source code with a modification you made. Identify the modification.
  - 5.4.1.2.5. Identify if your modification did or did not work. Explain what did happen.
- 5.4.1.3. Identify in a text file the optimal setting of the potentiometer. [ 8 points ]
- 5.4.2. Identify if an AI type program was used to complete this lab section. If an AI program is used, identify the AI system used. [ 1 point ]