CSE 4502 (SWE) [Operating Systems Lab] Lab #03

Lab Task:

- 1. Task: Create a script that takes two directory paths as input and compares their contents. The script should identify files present in one directory but not in the other and provide a summary report.
- 2. Task: Develop a script that reads a list of filenames from a text file and checks if those files exist in a specified directory. The script should create a new directory called "missing files" and copy the non-existent files into it.
- 3. Task: Write a script that renames all files in a directory with a specific extension to include the current date and time as a prefix, maintaining the original extension.
- 4. Task: Create a script that interacts with a user to create a new directory structure. The user should be able to specify the directory names, subdirectories, and files.
- 5. Task: Write a script that calculates the total size of all files in a directory and its subdirectories, and displays the result in a human-readable format (e.g., KB, MB, GB).
- 6. Task: Create a script that checks the permissions of all files in a directory and its subdirectories. The script should generate a report listing files with insecure permissions.
- 7. Task: Develop a script that reads a list of file extensions from a text file and searches a directory for files with those extensions. The script should create subdirectories based on the extensions and move the files into their respective subdirectories.
- 8. Task: Write a script that recursively searches a directory and its subdirectories for files larger than a specified size and moves them to a designated "large files" directory.