

Assignment Questions

File Management Script



Task 1: File Management Script

Write a Bash script that:

- Creates a directory named "backup" in the user's home directory.
- Copies all .txt files from the current directory into the "backup" directory.
- Appends the current date and time to the filenames of the copied files.

Task 2: System Health Check

Create a script that:

- Checks the system's CPU and memory usage.
- Reports if the CPU usage is above 80% or if the available memory is below 20%.
- Logs the results to a file named system_health.log.

Task 3: User Account Management

Write a script that:

- Reads a list of usernames from a file (e.g., user_list.txt).
- Creates a new user for each username.
- Generates a random password for each user and saves the username and password to a file named credentials.txt.

Task 4: Automated Backup

Create a script that:

- Takes a directory path as input from the user.
- Compresses the directory into a .tar.gz file.
- Saves the compressed file with a name that includes the current date (e.g., backup_2023-08-20.tar.gz).

Task 5: Simple To-Do List

Create a Bash script that:

- Implements a simple command-line to-do list.
- Allows the user to add tasks, view tasks, and remove tasks.
- Saves the tasks to a file (e.g., todo.txt).

Task 6: Automated Software Installation

Write a script that:

- Reads a list of software package names from a file (e.g., packages.txt).
- Installs each package using the appropriate package manager (apt, yum, etc.).
- Logs the installation status of each package.

Task 7: Text File Processing

Create a script that:

- Takes a text file as input.
- Counts and displays the number of lines, words, and characters in the file.
- Finds and displays the longest word in the file.