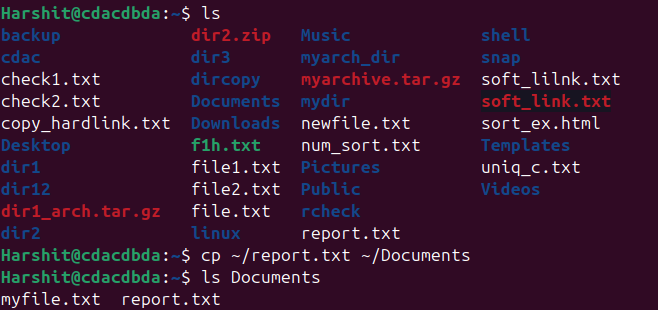
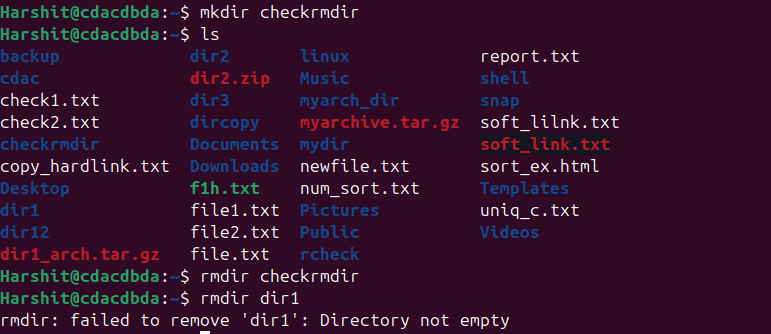
**Linux Commands Practice Questions -2**

**File and Directory Operations**

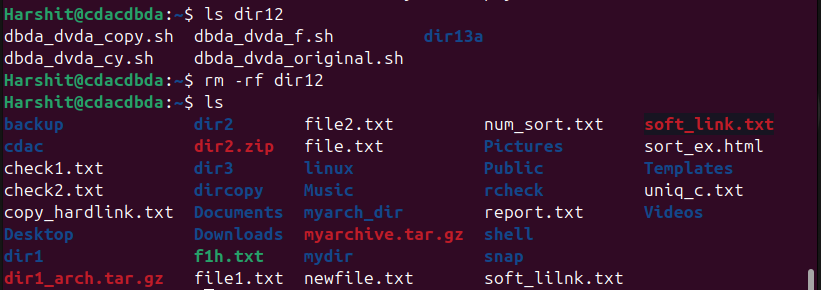
1. How do you copy a file named "report.pdf" from your home directory to a folder called "documents"?



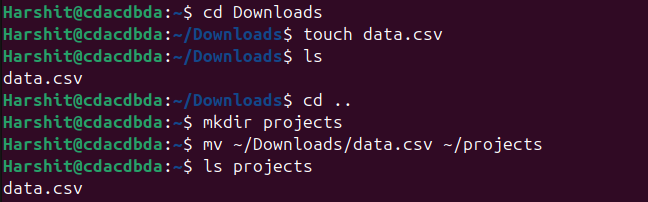
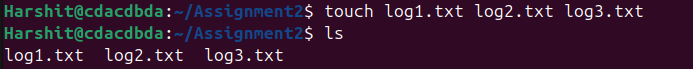
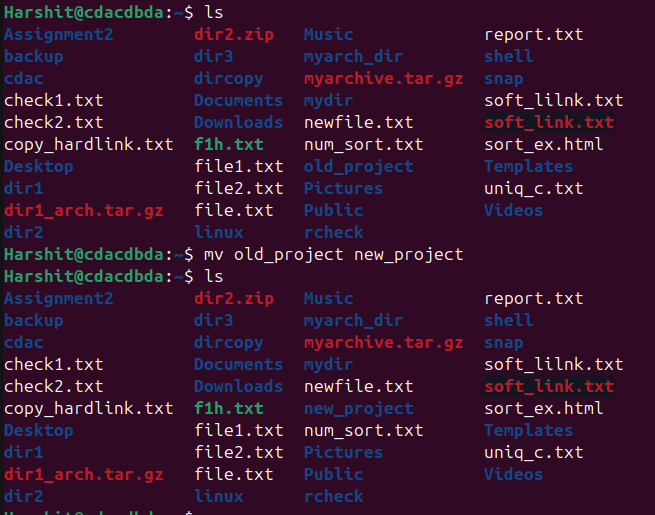
1. What is the difference between rmdir and rm -rf commands?



rmdir – removes the empty directories only as shown above



rm -rf :- removes the directories containing content forcefully

1. How do you move a file named "data.csv" from the "downloads" folder to the "projects" folder?  
   
2. What command shows your current location in the file system?  
   
3. How do you create three empty files named "log1.txt", "log2.txt", and "log3.txt" simultaneously?  
   
4. How do you change a directory name from "old\_project" to "new\_project"?  
   
5. How do you delete a file named "temp.log" without any confirmation prompt?  
   A computer screen shot of a program

   AI-generated content may be incorrect.
6. Display your current directory path using a command.  
   
7. Show directory contents with file sizes in human-readable format (KB, MB, GB).  
   A screen shot of a computer

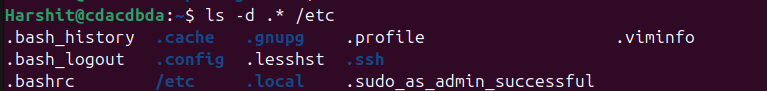
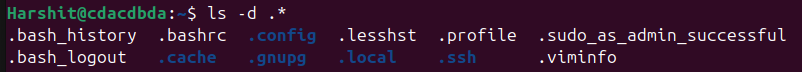
   AI-generated content may be incorrect.
8. Explain the meaning of the first character in file permissions (d, -, l) when using ls -l.  
   A screenshot of a computer screen

   AI-generated content may be incorrect.

“d” – Directory

“-” – Regular file

“l” – Symbolic Link

1. List all files including those starting with a dot (.) in the "/etc" directory.  
   
2. Show only files that start with a dot in your home directory.  
   
3. Create a directory structure "workspace/projects/web/frontend" in a single command.  
   
4. Create the following nested structure in one command:

company/

├── departments/

│ ├── hr/

│ ├── finance/

│ └── tech/

└── employees/

├── active/

└── former/

A computer screen shot of a computer code

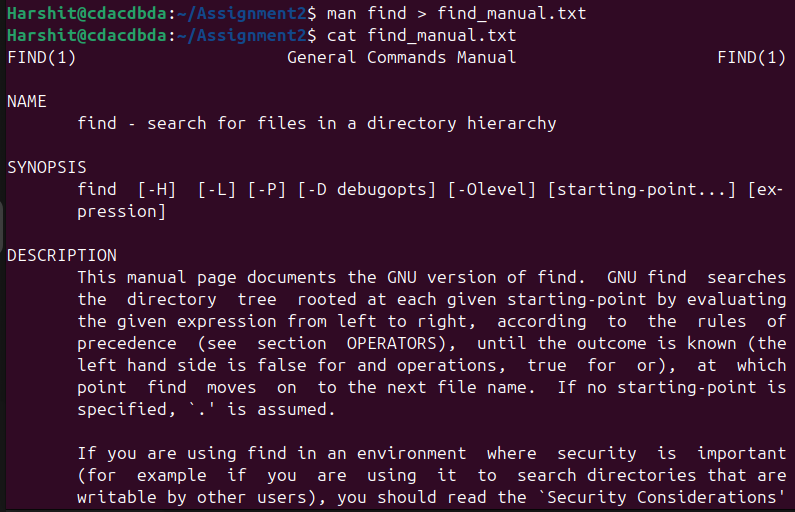
AI-generated content may be incorrect.

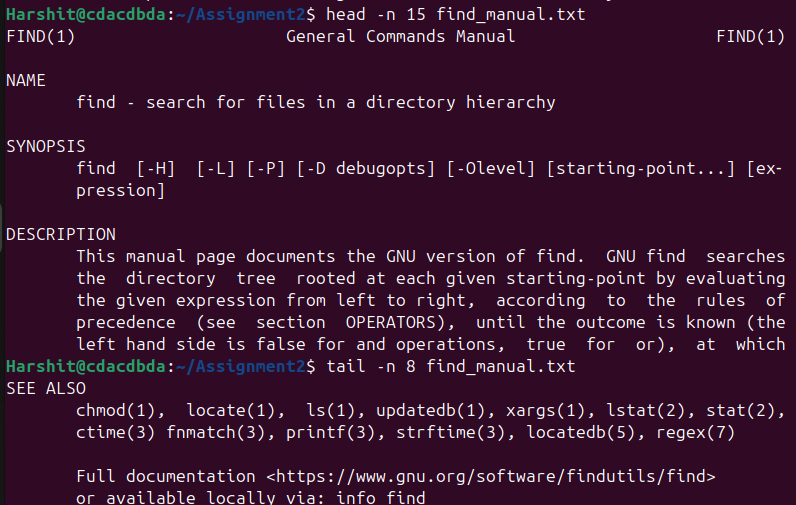
1. Create a directory named "test\_dir", then remove it and verify it's gone.  
   A computer screen shot of a program

   AI-generated content may be incorrect.

**File Content and Text Processing**

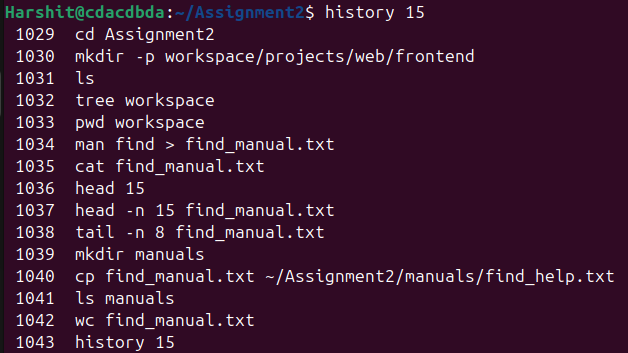
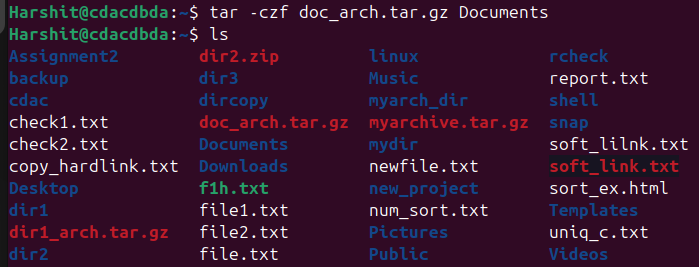
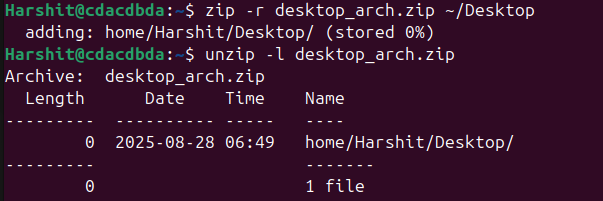
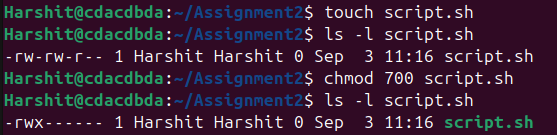
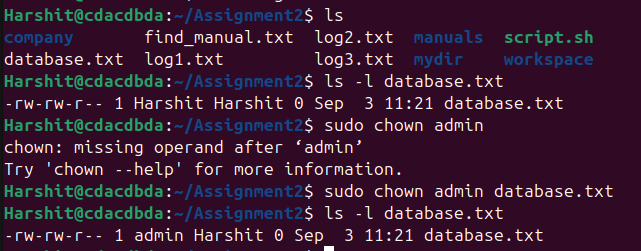
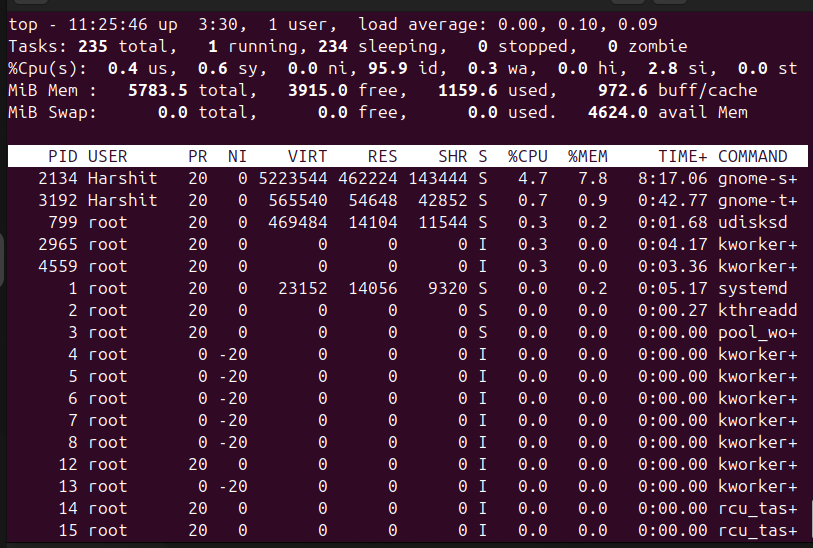
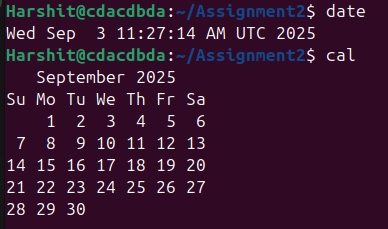
1. Save the manual page of the find command to a file named "find\_manual.txt".



1. Display the first 15 lines and last 8 lines of "find\_manual.txt".  
   
2. Copy "find\_manual.txt" to a folder named "manuals" and rename the copy to "find\_help.txt".  
   A purple background with white text

   AI-generated content may be incorrect.
3. Count the total lines, words, and characters in "find\_manual.txt".



1. Show your last 15 executed commands.  
   
2. Create a tar.gz archive of your home directory's Documents folder.  
   
3. Create a zip archive of your Desktop folder and list its contents without extracting.  
   
4. Set permissions for "script.sh" to be readable, writable, and executable by owner only.  
   
5. Change the owner of "database.txt" to user "admin".  
   
6. Display currently running processes in your terminal, all system processes, and sort processes by CPU usage.  
   
7. Show the current date/time and display the calendar for the current month.  
   
8. Set the system date to January 15th, 2025, 2:30 PM.  
   

**System Information Commands**

1. Research and explain these commands: uptime, df, du, free.

A screenshot of a computer program

AI-generated content may be incorrect.

A computer screen shot of a program

AI-generated content may be incorrect.

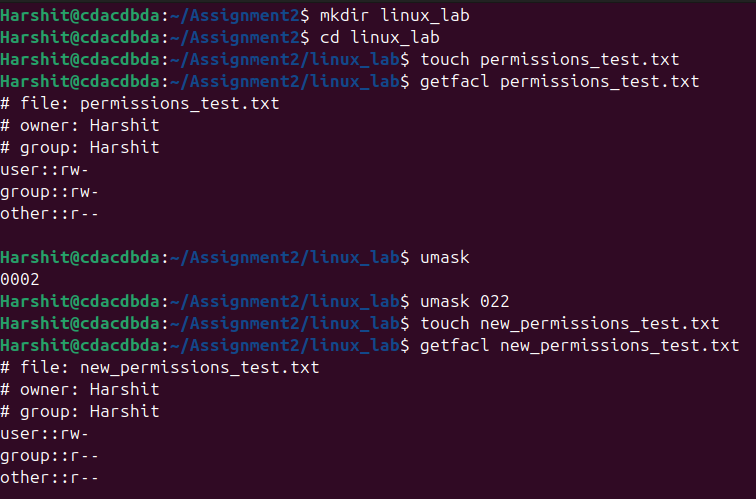
Uptime – Shows how long the system has been running

df – Shows amount of available disk space on file systems

du – This command estimates file and directory space usage

free – The free command displays the total amount of free and used physical and swap memory in the system

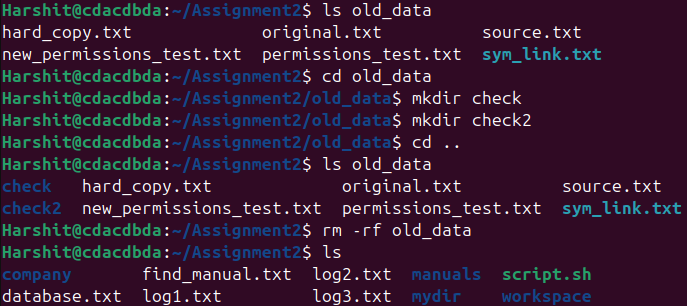
1. Create a directory "linux\_lab", navigate into it, create "permissions\_test.txt", check its default permissions, modify umask to 022, create "new\_permissions\_test.txt", and compare their permissions.



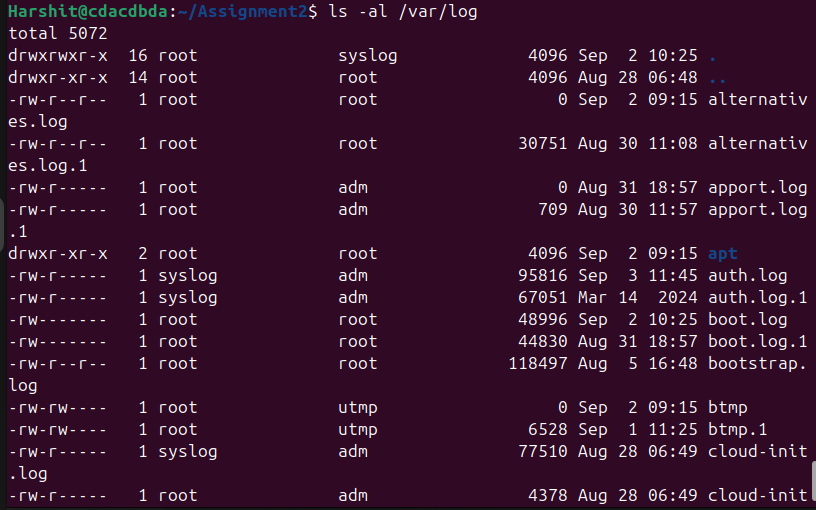
1. Create "original.txt" and make a hard link named "hard\_copy.txt" pointing to it.  
   A screenshot of a computer program

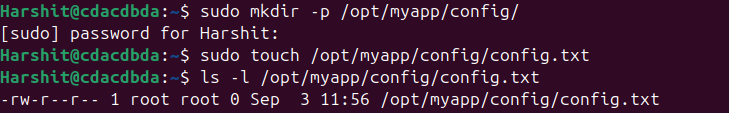
   AI-generated content may be incorrect.
2. Create "source.txt" and make a symbolic link named "sym\_link.txt" pointing to it.  
   A screen shot of a computer

   AI-generated content may be incorrect.
3. Copy the entire "projects" directory from a remote server to your local "Downloads" folder using SCP.
4. Download files from a public FTP server like ftp.gnu.org using command line FTP client.
5. How do you remove a directory named "old\_data" containing files and subdirectories?



1. List all files in "/var/log" showing detailed information including hidden files.



1. Create a file named "config.txt" in the path "/opt/myapp/config/" using command line.  
   
2. Search for the word "error" in all ".log" files within the current directory and subdirectories.

A screenshot of a computer error

AI-generated content may be incorrect.

1. Create a directory "myproject" with permissions 755 (rwxr-xr-x).

A computer screen with white text

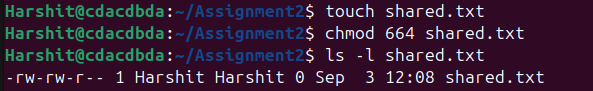
AI-generated content may be incorrect.

1. Create a compressed tar archive named "backup.tar.gz" containing all files and subdirectories in "/home/user/documents".

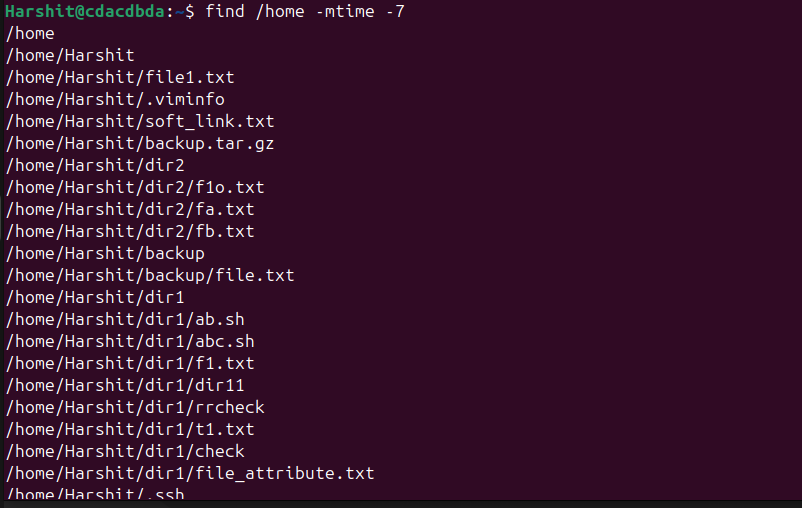
A computer screen shot of text

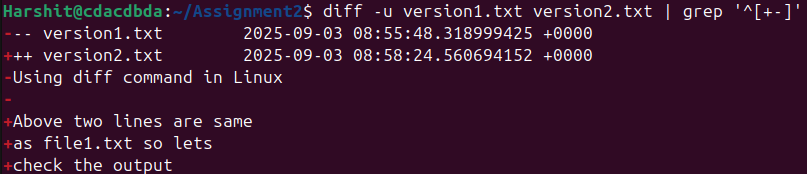
AI-generated content may be incorrect.

1. Give read and write permissions to owner and group, but only read permission to others for "shared.txt".



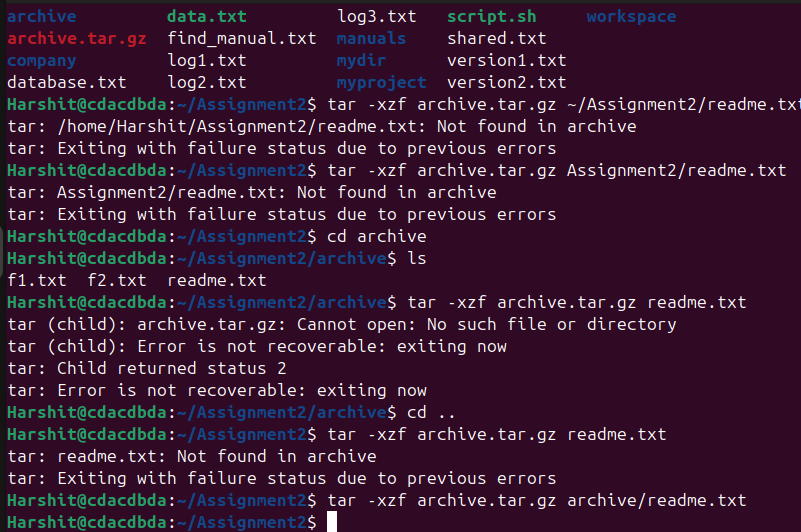
1. Find the size of "video.mp4" and display it in human-readable format (MB/GB).
2. Find all files in "/home" and subdirectories that were modified in the last 7 days.



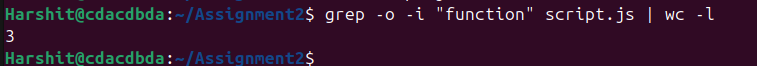
1. Compare "version1.txt" and "version2.txt" and show only the differences.  
   
2. Synchronize "/home/user/photos" with "/backup/photos" preserving all file attributes.  
   A computer screen with white text

   AI-generated content may be incorrect.
3. Extract characters 10-25 from each line in "data.txt".  
   A screenshot of a computer

   AI-generated content may be incorrect.
4. Extract only the file "readme.txt" from "archive.tar.gz" without extracting the entire archive.

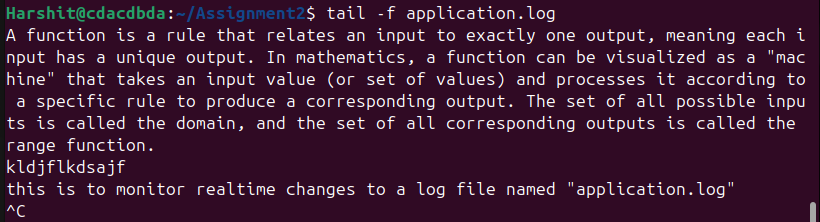


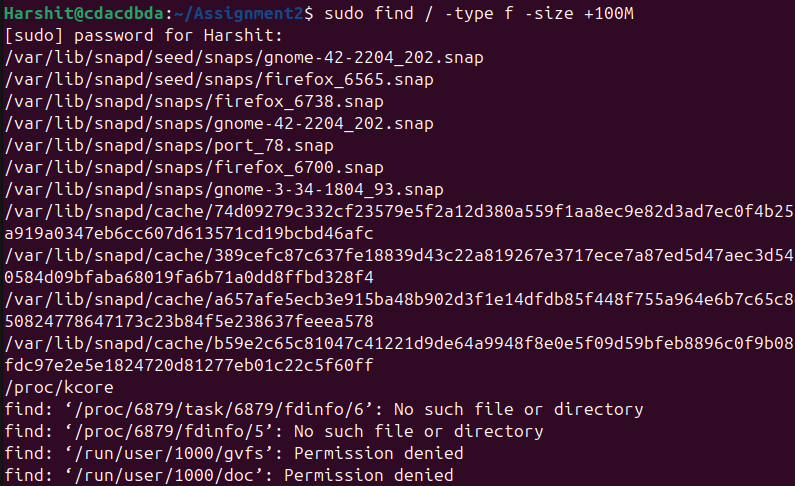
1. Count how many times the word "function" appears in "script.js".



**Advanced Questions**

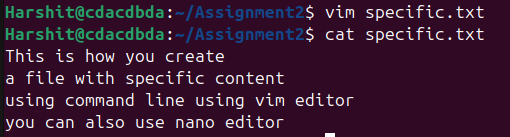
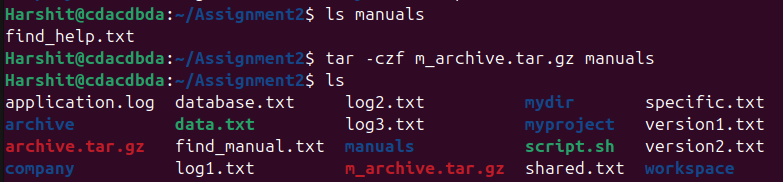
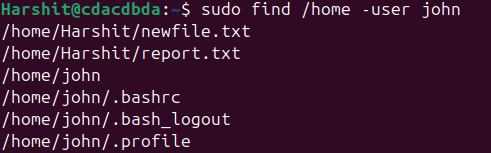
1. How do you monitor real-time changes to a log file named "application.log"?



1. How do you find all files larger than 100MB in your entire file system?  
   

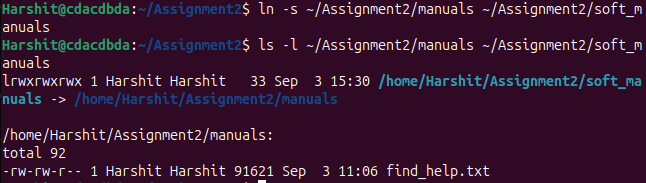
A computer screen shot of a program

AI-generated content may be incorrect.

1. How do you create a file with specific content using command line without opening an editor?  
   
2. How do you compress a directory using gzip and preserve the original?  
   
3. How do you find all files owned by user "john" in the "/home" directory?  
   
4. How do you schedule a command to run every day at 9 AM using cron?
5. How do you check disk usage of the current directory and sort by size?  
   A screenshot of a computer

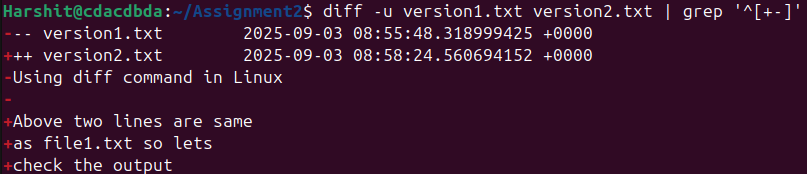
   AI-generated content may be incorrect.
6. How do you find and kill a process by name?  
   A screenshot of a computer screen

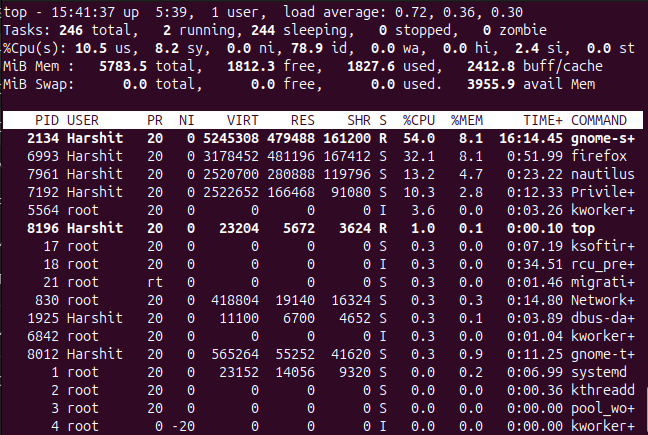
   AI-generated content may be incorrect.
7. How do you create a symbolic link that points to a directory instead of a file?

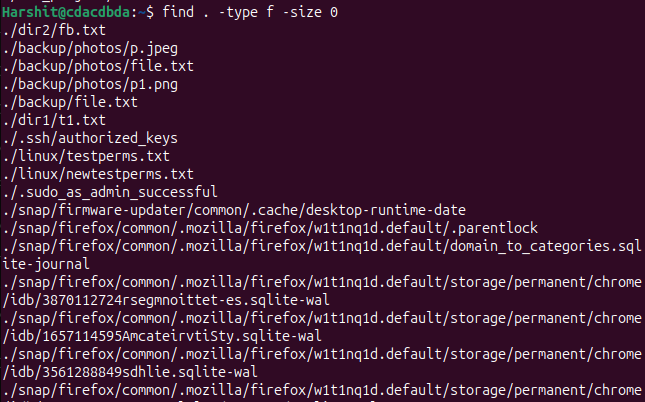


1. How do you find all executable files in your PATH?

1. How do you merge two sorted files into one sorted file?  
   A computer screen shot of a computer

   AI-generated content may be incorrect.
2. How do you display only unique lines from a file that contains duplicates?  
   
3. How do you monitor system resource usage in real-time?



1. How do you find files that are exactly 0 bytes (empty files)?  
   
2. How do you change file timestamps without modifying content?
3. How do you create a file that can only be read by the owner and no one else?  
   A computer screen with text

   AI-generated content may be incorrect.
4. How do you find broken symbolic links in a directory?
5. How do you copy files while preserving their original timestamps?
6. How do you display the last 50 lines of a log file and continue monitoring new additions?  
   