

File Permission & Ownership

1. What command do you use to view the permission of file "test.txt" ?
2. Explain what the following file permission means
 - a. -rwxr-xr-x
 - b. -r-wrwxr--
 - c. -rwxr--r--
3. What does the chmod command do?
 - a. Changes the owner of a file
 - b. Changes the permissions of a file
 - c. Changes the name of a file
 - d. Changes the location of a file
4. What is the command to change ownership of a file Sample.txt to a user called Kevin?
5. What does the 'chmod 755 filename' command do to the file's permission ?
6. The 'chmod 644 filename' command gives read and write permissions to the owner and read permissions to the group and others.
 - a. True
 - b. False
7. Symbolic permissions are represented by numeric values.
 - a. True
 - b. False
8. Use **chown** command to change the user and group of a File. Give example.
9. The command to remove write permissions for the group from a file named file.txt is ?
10. What is the purpose of umask command?
11. Explain what the permissions drwxr-xr-- indicate about a directory.
12. If you want to ensure that a script file named **script.sh** is executable only by the owner, which command would you use? Write with both symbolic & octal mode.
13. How would you recursively change the permission of all files and directories inside a directory called "Permission" to 774?
14. How to make a file read-only for everyone using symbolic mode command ?
15. Change the group of a file named **Sample** to **sports** .

I/O redirect

1. What does the command command > file.txt do?
 - a. Appends the output of the command to file.txt
 - b. Overwrites the content of file.txt with the output of the command
 - c. Displays the content of file.txt
 - d. Copies file.txt to the command output
2. Which command will redirect standard error to a file named error.log?
 - a. command 2> error.log
 - b. command > error.log
 - c. command 2>> error.log
 - d. command &> error.log
3. What symbol is used to append output to a file?
 - a. >
 - b. >>
 - c. <
 - d. |

4. What does command `< input.txt` do?
 - a. Reads from input.txt and sends it to the command as standard input
 - b. Writes output from the command to input.txt
 - c. Appends input.txt to the command output
 - d. Displays the content of input.txt
5. You want to save the output of a command, but you also want to see the output on the terminal. What command would you use?
6. If you want to count the number of lines in file.txt but the command produces an error and you want to capture that error in a separate log file, how would you do that?
7. What does the command `cat file.txt | grep "search_term"` do?
8. How can you redirect both standard output and standard error of a command to the same file? Provide an example.

Filters

1. What does the `grep` command do?
 - a. Sorts lines of text
 - b. Searches for patterns in files
 - c. Counts the number of lines
 - d. Displays file content
2. Which option would you use with `grep` to perform a case-insensitive search?
3. What command would you use to sort the contents of a file named data.txt?
4. Which command displays only unique lines from a file?
5. What is the output of `'wc filename'` ? explain.
6. To find all lines containing "error" in a file named log.txt, you would use ?
7. The command `sort -r file.txt` sorts the file _____.
8. Write a command to display only the first column in `ls -l` output .
9. You have a file named students.txt that contains names and grades. How would you extract just the names from each line, assuming names are the first column and are separated by commas?
10. You want to find all occurrences of the word "success" or "error" in a log file. What command would you use?