

1. What is a hard link?

- One file creates another virtual file with the means to divulge where the main file is and its contents. The contents of the virtual file are the same, and acts as if you are interacting with the original file.

2. What is a symbolic link?

- One physical file that points to another physical file within the directories. These two files do not share the same information.

3. List three characteristics of a hard link.

- a. Two physically similar files.
- b. Same file size and inode number
- c. Don't need to add any parameters when looking for the hard link file with `ln`.

4. List three characteristics of a symbolic link.

- a. One file points to the other, bigger file
- b. Does not share any of the same contents.
- c. The inode number is different from the original data file.

5. What does the history command do?

- It keeps tracks of the last 1000 commands you type and can recall them for you.

6. List the function of the tail command

- Shows the last 10 lines of a file.

7. List the function of the head command.

- Shows the first 10 lines of a file

8. How would you find the first 14 lines of a file?

- Probably by using the `cat` command to see all the lines.

9. What is the difference between 'searching' and 'sorting'?

- Sorting: sorts and reorders lines of a file by character unless specified with parameters
- Searching: Look for a specific line of data in a file using the `grep` command

10. What is a process?

- A running program in Linux

11. How do you find running processes on the system?

- Using the ps command and adding parameters

12. How would you kill a running process with the PID of 1325 ?

- `$ kill 1325`

13. What does it mean to 'compress' data ?

- To shrink big files into smaller files to save space

14. What is the difference between copy(cp) and move(mv) ?

- Copy(cp): To copy the contents of one file and move it to another destination, perhaps into another file to act as a brand new file.
- Move(mv): Renames a file to move it to a new location or just have a new name.

15. What does it mean to 'archive' a file or archive data ?

- Archiving files means to store many files into a single file, which can be recovered using extraction programs.