24 September 2020

<div align="center">Lec-3</div>

1. What is a hard link?

   a. Creates a separate virtual file that contains information about the original file and where to locate it

2. What is a symbolic link?

   a. A physical file that points to another file somewhere in the virtual directory structure.

3. List three characteristics of a hard link.

   a. Physically the same as the original file

   b. Shares the same inode number of the original file

   c. No parameter is needed on the ln command

4. List three characteristics of a symbolic link.

   a. The two symbolically linked together files do not share the same contents

   b. Has a different inode number from the original data

   c. Followed by a —> symbol in the $ ln command listing

5. What does the history command do?

   a. The bash shell keeps track of the commands you have used

   b. You can recall and reuse the last command in your history list

   c. You can force the command history to be written to the .bash_history file before leaving a shell session

6. List the function of the tail command.

   a. Displays the last lines in a file (the file's "tail")

      i. By default, it shows the last 10 lines in the file

7. List the function of the head command.

   a. Displays a file's first group of lines (the file's "head")

      i. By default, it displays the first 10 lines of text

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

   a. $ head -14 [file_name]

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

   a. Searching finds files while sorting organizes them

10. What is a process?

    a. A running program

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

    a. By using the $ ps command

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

    a. # kill 1325

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

    a. Encode information using fewer bits than the original representation

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

    a. Copy keeps the original file while move does not

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

    a. To store files/data that are no longer actively used for long-time retention