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G08125504  
Assignment 3  
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1. What is a hard link?

A hard link creates a separate virtual file that is physically the same file. The virtual file contains information about the original file and its location.

2. What is a symbolic link?

A symbolic link is a physical file that points to another file. The two files would be linked together but would not share the same contents (unlike the hard link).

3. List three characteristics of a hard link.

    a. shares same inode number

    b. has the actual contents of the original file

    c. Cannot link between different physical mediums

4. List three characteristics of a symbolic link.

     a. A pointer, so does not have the same contents

     b. has different inode number

     c. Can link across different physical mediums

5. What does the history command do?

The *history* command keeps track of all the commands used

6. List the function of the tail command

The *tail* command displays the last lines in a file. It displays 10 lines by default, which can be changed with the -n option.

7. List the function of the head command.

The *tail* command displays the first lines in a file. It displays 10 lines by default, which can be changed with the -n option.

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

$ head -n 14 filename

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

Sort can show data (in a file for example) in a particular order depending on options. Search will find data with a specific pattern.

10.  What is a process?

In Linux, a running program is a process

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

Using the *ps* command

$ ps

 By default it shows only your process. To show everything, use the e and f options

$ ps -ef

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

$ kill 1325

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

Compress means to change the format of the file to take up less space.

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

Copy creates a new file with the same contents while leaving the original, while move can rename and/or change the file’s location. Moving does not change the inode number of timestamp.

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

Archive creates a single file that contains the files and the directory structure.