1. What is a hard link?

A hard link creates a separate virtual file that contains information about the original file and where to locate it.

2. What is a symbolic link?

A symbolic link is simply a physical fi le that points to another fi le somewhere in the virtual directory structure. The two symbolically linked together fi les do not share the same contents.

3. List three characteristics of a hard link.

    a. A hard link is made with a physical address in the file.

    b. A hard link occurs within a single file.

    c. When a group or dataset is created, a hard link is also created.

4. List three characteristics of a symbolic link.

     a. Has a distinct inode

     b. Can work across volumes and file systems

     c. Is similar to shortcuts in the Windows OS

5. What does the history command do?

 To see a recently used commands list, just type the history command with no options

6. List the function of the tail command.

 The tail command displays the last lines in a file (the file’s “tail”)

7. List the function of the head command.

 The head command does what you’d expect; it displays a file’s first group of lines (the file’s “head”).

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

 $ head -14 [file’s name]

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

 searching data: using grep command. Often in a large file, you must look for a specific line of data buried somewhere in the middle of the file. Instead of manually scrolling through the entire file, you can let the grep command search for you

Sorting data: using sort command which is a popular function that comes in handy when working with large amounts of data. The sort command does what it says Searching for data

10.  What is a process?

 The Linux operating system calls a running program a process.

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

 $ ps

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

 # kill -s HUP 1325

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

Compress performs faster and with less memory usage, at the cost of a significantly lower compression ratio. To compress files we can use gzip, bzip2 and zip commands.

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

cp will keep the old file(s) while mv won't

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

An archive is a single file that contains any number of individual files plus information to allow them to be restored to their original form by one or more extraction programs. Archives are convenient for storing files. The Linux tar utility is a popular way to archive directory structures into a single file that can easily be ported to another system.