1. Suppose that the Current Working Directory is /lib/modules, give a single "CAT" command using a relative pathname

and a command using an absolute pathname, that would print out the contents of the regular file /lib/security/pam-access.

CAT filename

CAT/lib/security/pam access

2. What is the standard command to determine the pathname/location of the mv command/program?

mv filename1 ../../DestinationLocation

3. What is the purpose of the /sbin subdirectory? (I.e., what is normally stored there?)

It the root directorryin the linux that contains the executable programs.

4. Explain the difference between “the root directory” and “root’s directory”.

/ is the root directory

/root is the roots directory

5. Explain what the term “search path” means in the context of a shell (like Bash).

A search path is the sequence of directories where the shell looks for commands to execute. Directories usually contain normal files, but can also contain executable files, called either programs or commands. .

6. What are two commands that could be used to display your current search path?

Echo $PATH

printenv PATH

7. Suppose your current env PATH variable is set to /usr/bin:/bin:/usr/local/bin. Explain what

the shell does when you type the command “foo” at a prompt (and type return).

8. Logged in as a non-root user, is /sbin in your search path? Explain why it is or is not

there.

No we can not see the /sbin in the non root user. /sbin is similar to /bin, which contains executable programs needed to boot (i.e., start) the system, except that /sbin's programs are normally executed only by the root user. Thus, /sbin is by default not in the PATH environmental variable of ordinary users, but it is for the root account.

9. Suppose you have created a shell script named foo and have made it executable, but

when you type it as a command (“foo”), Bash says: “command not found”. What is

wrong and what must you do to run the command?

Execute it using the current path mentioned along with the file name

<current path>/foo

10. Explain why the Linux does not have drive letters like Windows does.

The Linux directory structure doesn’t just use different names for folders, it uses an entirely different layout. For example, on Windows, an application might store all its files in C:\Program Files\Application. On Linux, its files would be split between multiple locations – its binaries in /usr/bin, its libraries in /usr/lib, and its configuration files in /etc/.

11. What is the contents of a file ~/song.mp3?

12. What command would show all lines containing the string “brace expansion” (ignoring

case) in the man pages for Bash?

Grep -v “brace expansion”

13. What command would delete some files from the directory /tmp, where the relevant

filenames have this pattern: they begin with “A” or “B”, contain the string “406”, and

have a (final) extension of “.txt” or “.text”.

ls -lrt | grep -i | awk '{print "rm -rf " $NF }' | sh

14. What are the commands that will reset the current working directory to your home directory, regardless of what directory you are currently in?

cd

15. What are hidden files in Linux/UNIX, why are they called that, and what are they

commonly used for?

In Unix, like operating system any file can folder that starts with a dot character, commonly called a dot file (or) dotfile. So, it is to be treated as hidden files. Here, the command is “ls -a”. It is commonly used for storing user preference.