

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.

Ans:

Absolute path: cat /lib/security/pam-access

Relative path: cat ../security/pam-access

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

Ans:

Which mv

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

Ans:

All the sudo commands are stored in the /sbin directory. i.e., all the administrative commands such install, chown etc.,

4. Explain the difference between "the root directory" and "root's directory".

Ans:

"Root directory (/)" is the directory at the root of the tree system.

"Root's directory (~)" It's the home directory of the root user.

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

Ans:

Search path is the sequence of directories in which the executable files or shell built-ins will be searched for when asked to execute. User need not specify the path of the command when files are present in any of the folders, which are in the search path.

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

Ans:

printenv PATH

echo \$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).

Ans:

The shell first checks in the /usr/bin/ directory whether there is a file foo in it or not if there is then it will look for whether he has permission to execute it or not, if he does it will go ahead and execute the foo command. If not, then it'll check in the bin folder for the 'foo' and checks so on. It checks for foo in above mentioned order and if it doesn't find the file in any of the directories then it'll prompt the command not found message on the shell.

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

Ans:

It will not be in the path of non-root user until and unless a root user adds /sbin path files to the path of the non-root user.

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?

Ans:

If the current working directory is not there in your search path it will not look for the script in the current directory, which results in prompting of the "command not found" on the shell. So we must specify the directory for executing the command.

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

Ans:

In windows we have feasibility for making disk partitions and we name the partitions with the 'Drive letters' and each of these will be having its own directory tree. But that's not the case with the linux file system, which is organized as a single tree, and all the disks and storage devices will be mounted as subdirectories within the tree.

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

Ans:

Linux kernel will not understand the file extensions. They may be important for certain applications. In this case, we can store a text file, or a directory or a media file with that name. So, we can't really tell the contents of the file by the extension.

12. What command would show all lines containing the string "brace expansion" (ignoring case) in the man pages for Bash?

Ans:

man bash | grep -i "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".

Ans:

rm [AB]*406*.[txt,.text]

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

Ans:

**cd
cd ~**

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

Ans:

Files that are beginning with a dot are called hidden files. They are called hidden files because they're not shown by normal list commands (ls). They're generally configuration files/directories (., ..)