

Linux Basic Commands

1. Which command is used to know the current working directory?

Ans: pwd

2. How would you find out its contents?

Ans: ls

3. Identify the commands with inputs to do the following

a. create a directory d1

Ans: mkdir d1

b. create a subdirectory d2 in d1

Ans: mkdir -p d1/d2

c. change to directory d2

Ans: cd d2

d. create an empty file "f1.txt"

Ans: touch f1.txt

e. display the contents of "f1.txt"

Ans: cat f1.txt

f. view the contents of d1 from current directory d2

Ans: ls ../d1

4. Use the ls command with its options. How will you identify directories from the listing?

Ans: (i) ls -l provides a long listing format that includes permissions, owner, group, size, and modification date.

(ii) ls -F:- Using ls -F appends a/ to the names of directories, making it easier to identify them at a glance.

(iii) ls -lF:- can make it easier to identify directories by both format and append symbols.

5. Use ls to do the following

a. List files with single character names.

Ans: ls

b. List hidden files also. [Note: Hidden files are files having name started with a "."]

Ans: ls -a

c. Suppose there are files tb1.1, tb2.1, tb3.1, tb10.1. Write command to list all the files (Hint: use wild card characters)

Ans: ls tb?.1 tb10.1

6. Write the command to list all files in descending order of their size.

Ans: ls -ls

7. Suppose there are files temp1, temp2, temp3. Write command to remove the files without listing them explicitly

Ans: rm temp

8. Which command is used to list top few lines in the file?

Ans: head -n <number of lines> <file name>

9. Create a directory "testdir"

Ans: mkdir testdir

10. Use cp command to do the following

a. Copy the file tb1.1 (created above) in the same directory.

Ans: cp tb1.1 tb1 copy.1

b. Write a command to copy all the files i.e tb1.1, tb2.1, tb3.1.....tb10.1 in a new directory -"new"

Ans: To create new directory: mkdir -p new

To copy all the files to the new directory: cp tb* 1 new/

c. Create a subdirectory in new in named "new1".

Ans: mkdir -p new/new1

d. Write a command to copy selectively only tb2.1, tb6.1, tb7.1 and tb10.1 in the directory new1.

Ans: `cp tb2.1, tb6.1, tb7.1, tb10.1 new/new1/`

e. Write a command to copy the entire directory "new" to a directory "newprogs". [Note: use the R option of "cp" command]

Ans: `cp -R new newprogs`

11. Find out the difference between

a. "mv" & "cp"

Ans: "mv" relocates or renames files/directories without duplication. "cp" duplicates files/directories, keeping the original intact.

b. "rm", "rmdir"

Ans: "rm" can delete files and directories (with -r for directories). "rmdir" only deletes empty directories

c. "mkdir" and "mkdir -p"

Ans: "mkdir" creates a single directory and returns an error if parent directories are missing

"mkdir -p" creates a specified directory along with any required parent directories.

12. Use a single command rmdir once to remove "testdir" and all its sub directories and files created above.

Ans: `rm -r testdir`

13. Which command is used to get the manual information of a command?

Ans: `man command name`

14. If you are not able to change to a directory what could be the likely cause?

Ans:

1. The specified directory may not exist or may be misspelled.
2. may not have the necessary permission to access the directory.
3. Using an absolute path incorrectly

4. might be trying to "cd" into a file instead of a directory.

5. There could be issue with the filesystem itself that prevent access to the directory

15. Explain the differences among the following commands:

Ans: a. cd/: Goes to the root directory.

b. cd. Moves to the Parent directory

c. cd: Moves to the user's home directory

d. cd....: Moves to the grandparent directory