# 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 exists r 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