
Linux Commands

How to solve Big data
problem

Rudraprasad A S

1. pwd

Prints name of the working directory. (pwd prints the full pathname of the current working directory)

2. touch

touch is a standard Unix command-line interface program which is used to update the access date and / or modification date of a file or directory. In its default usage, it is the equivalent of creating or opening a file and saving it without any change to the file contents.

syntax:touch file.txt

If file.txt exists, touch updates its access and modification times to the current time. If file.txt doesn't exist, it is created as a new, empty file.

3. mkdir

Short for "make directory", mkdir is used to create directories on a file system. If the specified DIRECTORY does not already exist, mkdir creates it. More than one DIRECTORY may be specified when calling mkdir.

Figure 1 : Snapshots of commands – Pwd, touch and mkdir.

```
aaaaaaa@aaaaaaa-Inspiron-15-3552:~$ sudo su
[sudo] password for aaaaaa:
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# pwd
/home/aaaaaaa
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# touch 12.txt
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# touch acadglid
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# mkdir Rudra
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# ls
10.txt                PROJECT CODE drug data
120.txt               project.java
12.txt                pro.txt
acadglid              Public
ades-master           Rudra
ades-master.zip       rud.txt
AGASTHY               scala-2.10.6.tgz
agy                   spark-1.5.1.tgz
apache-hive-1.0.0-bin.tar.gz SW
apache-hive-1.0.1-bin.tar.gz SWE
bigdata               sweetey.txt
cit logo.docx         swe.txt
cit.txt               table
deemoni.txt           Templates
derby.log             tumkur.txt
Desktop               upstart-udev-bridge.10561.pid
diabetes.csv          upstart-udev-bridge.10653.pid
Documents             upstart-udev-bridge.10671.pid
Downloads             upstart-udev-bridge.10755.pid
examples.desktop      upstart-udev-bridge.10824.pid
free                  upstart-udev-bridge.10853.pid
```

4. rm

The rm Command. The rm (i.e., remove) command is used to delete files and directories on Linux and other Unix-like operating systems.

5. ls

In computing, ls is a command to list files in Unix and Unix-like operating systems. ls is specified by POSIX and the Single UNIX Specification.

When invoked without any arguments, ls lists the files in the current working directory.

Figure 2 : Snapshots of commands – rm and ls.

```
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# rm 10.txt
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# rmdir AGASTHY
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# ls
acadgld            heartd-c.csv       project.java        upstart-udev-bridge.12389.pid
ades-master        heart-h.csv        pro.txt            upstart-udev-bridge.12408.pid
ades-master.zip    HIVE IMPORTANT TUTORIAL Public             upstart-udev-bridge.12533.pid
agy               hive-to-upper-udf.jar rud.txt            upstart-udev-bridge.12534.pid
apache-hive-1.0.0-bin.tar.gz hive.txt           scala-2.10.6.tgz   upstart-udev-bridge.13310.pid
apache-hive-1.0.1-bin.tar.gz hue               spark-1.5.1.tgz    upstart-udev-bridge.13387.pid
bigdata           india.txt          sw                 upstart-udev-bridge.13425.pid
cit logo.docx      input.txt          swe                upstart-udev-bridge.14336.pid
cit.txt           in.txt            sweety.txt         upstart-udev-bridge.14421.pid
deemoni.txt       IRIS.csv          swe.txt            upstart-udev-bridge.15298.pid
derby.log         letter for datasets.docx table              upstart-udev-bridge.16049.pid
Desktop           mahout-distribution-0.9 Templates          upstart-udev-bridge.16260.pid
diabetes.csv      mahout-distribution-0.9.tar.gz tumkur.txt         upstart-udev-bridge.16947.pid
Documents         maven2-2.2.1      upstart-udev-bridge.10561.pid upstart-udev-bridge.17240.pid
Downloads         medi.txt           upstart-udev-bridge.10653.pid upstart-udev-bridge.17833.pid
examples.desktop metastore_db       upstart-udev-bridge.10671.pid upstart-udev-bridge.18173.pid
free             MODULE 5_ HBASE    upstart-udev-bridge.10755.pid upstart-udev-bridge.18711.pid
gasass           Music              upstart-udev-bridge.10824.pid upstart-udev-bridge.19034.pid
gassss          partition.odt      upstart-udev-bridge.10853.pid upstart-udev-bridge.20444.pid
gnana           Pictures           upstart-udev-bridge.11516.pid upstart-udev-bridge.21373.pid
gubbi.txt       pig_1495517788439.log upstart-udev-bridge.11568.pid upstart-udev-bridge.22327.pid
HADOOP          pig_1495864056969.log upstart-udev-bridge.11654.pid upstart-udev-bridge.22398.pid
hadoop-1.2.0     pro               upstart-udev-bridge.11951.pid upstart-udev-bridge.23618.pid
hadoop-1.2.0.tar.gz PROJECT CODE drug upstart-udev-bridge.11986.pid upstart-udev-bridge.23694.pid
heart-c.csv      PROJECT CODE drug data upstart-udev-bridge.12008.pid Videos
```

6. echo

The echo Command. echo is a built-in command in the bash and C shells that writes its arguments to standard output. A shell is a program that provides the command line (i.e., the all-text display user interface) on Linux and other Unix-like operating systems.

Figure 3 : Snapshots of commands – echo.

```
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# echo prasad
prasad
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa#
```

7. cat

Concatenate and print the content of files. Cat command concatenate FILE(s), or standard input, to standard output. With no FILE, or when FILE is -, it reads standard input.

8. who

The standard Unix command who displays a list of users who are currently logged into the computer. The “ who” command is related to the command w, which provides the same information but also displays additional data and statistics.

9. cd

The cd command, also known as chdir (change directory), is a command-line OS shell command used to change the current working directory in operating systems such as Unix, DOS, OS/2, AmigaOS (where if a bare path is given, cd is implied), Windows, and Linux. It is also available for use in shell scripts and batch files.

10. date

Date command is helpful to display date in several formats. It also allows you to set systems date and time.

11. cal

Display a conveniently-formatted calendar from the command line. In general, if no options are given, cal displays the current month at the command line. It's a quick and convenient way to glance at the dates of the month, and can be useful as part of a login script.

Figure 4 : Snapshots of commands – .cat, who, cd, date and cal

```
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# cat input.txt
1234  harish  234  prof
2345  suhas   567  lect
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# cat input.txt>sample.txt
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# cat sample.txt
1234  harish  234  prof
2345  suhas   567  lect
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# who
aaaaaa  tty7          2017-08-04 17:43 (:0)
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# cd gnana
bash: cd: gnana: Not a directory
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# cd ades-master
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa/ades-master# cd ..
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# date
Fri Aug  4 18:04:05 IST 2017
root@aaaaaa-Inspiron-15-3552:/home/aaaaaa# cal
      August 2017
Su Mo Tu We Th Fr Sa
                1  2  3  4  5
 6  7  8  9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 29 30 31
```

12. mv

The mv command is used to move or rename files

mv renames file SOURCE to DEST, or moves the SOURCE file (or files) to DIRECTORY.

13. cp

cp command in Linux/Unix. cp is a Linux shell command to copy files and directories.

14. which

Which command is very small and simple command to locate executables in the system.

It allows user to pass several command names as arguments to get their paths in the system.

which commands searches the path of executable in system paths set in \$PATH environment variable.

Figure 5 : Snapshots of commands – mv, cp and which

```
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# mv sample.txt sample1.txt
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# cat sample1.txt
1234    harish  234    prof
2345    suhas   567    lect
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# cp sample1.txt sample2.txt
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# cat sample2.txt
1234    harish  234    prof
2345    suhas   567    lect
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# which echo
/bin/echo
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# which date
/bin/date
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa# which cal
/usr/bin/cal
root@aaaaaaa-Inspiron-15-3552:/home/aaaaaaa#
```

15. vi

The UNIX vi editor is a full screen editor and has two modes of operation:

- Command mode commands which cause action to be taken on the file,
- Insert mode in which entered text is inserted into the file.

Figure 6 : Snapshots of commands – vi

```

VIM - Vi IMproved

        version 7.4.1689
        by Bram Moolenaar et al.
Modified by pkg-vim-maintainers@lists.alioth.debian.org
Vim is open source and freely distributable


        Help poor children in Uganda!
type  :help iccf<Enter>      for information

type  :q<Enter>              to exit
type  :help<Enter> or <F1>    for on-line help
type  :help version7<Enter>  for version info


        Running in Vi compatible mode
type  :set nocp<Enter>       for Vim defaults
type  :help cp-default<Enter> for info on this

```