## LINUX COMMAND

```
pwd = (present working directory) showing current location of directory
mkdir = used for create new directory
rmdir = used for delete a directory
ls = show files in directory
cd = used for change current directory
vi = used for create new file or edit file
```

```
CentOS Linux 7 (Core)
Kernel 3.10.0-957.el7.x86_64 on an x86_64
localhost login: root
Password:
Last login: Fri Aug 25 04:23:56 on tty1
[root@localhost ~]# pwd
/root
[root@localhost ~]# ls
anaconda-ks.cfg
                 viraj
                ~]# mkdir vira
[root@localhost
[root@localhost ~]# ls
anaconda-ks.cfg
                 vira
                        vira j
                ~]# rmdir vira
[root@localhost
[root@localhost
                ~]# ls
anaconda-ks.cfg
                 vira j
[root@localhost
                ~l# cd viraj
[root@localhost viraj]# cd
[root@localhost ~]# cd /root
[root@localhost ~]# cd viraj
[root@localhost viraj]# ls
file1.csv
[root@localhost viraj]# vi file1.csv
```

```
cat = used for create file and display data in file and copy data of one file to another file touch = used for create empty or multiple files cp = used for copy mv = used for move or rename
```

```
"file1.csv" 6L, 114C written
[root@localhost viraj]# cat file1.csv
1, ∨iraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# touch file2.csv file3.csv
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# cat file2.csv
[root@localhost viraj]# cp file1.csv file2.csv
cp: overwrite 'file2.csv'? yes
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# cat file2.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# mv file2.csv file3.csv
mv: overwrite 'file3.csv'? yes
[root@localhost viraj]# cat file3.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# ls
file1.csv file3.csv
[root@localhost viraj]#
```

## Is Irt = show all permission in details

```
C
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# ls -lrt
total 8
-rw-r--r--. 1 root root 114 Aug 26 04:19 file1.csv
-rw-r--r--. 1 root root 114 Aug 26 04:22 file3.csv
-rw-r--r--. 1 root root 0 Aug 26 04:25 file2.csv
[root@localhost viraj]# cat file3.csv akash
1, viraj, kothrud
2, akash, warje
```

rm = used to remove file rm -rf = used for delete files ls -ltrh = show all permission describe

Is -Ir = show all details

```
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# ls
file1.csv file3.csv
[root@localhost viraj]# touch file2.csv
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# touch file4.csv file.csv
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv file4.csv file.csv
[root@localhost viraj]# rm file4.csv
rm: remove regular empty file 'file4.csv'? yes
[root@localhost viraj]# rm -rf file.csv
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# ls -ltrh
total 8.0K
-rw-r--r-. 1 root root 114 Aug 26 04:19 file1.csv
-rw-r--r-. 1 root root 114 Aug 26 04:22 file3.csv
-rw-r--r--. 1 root root 0 Aug 26 04:25 file2.csv
[root@localhost viraj]# ls -lr
total 8
-rw-r--r-. 1 root root 114 Aug 26 04:22 file3.csv
-rw-r--r-. 1 root root 0 Aug 26 04:25 file2.csv
-rw-r--r-. 1 root root 114 Aug 26 04:19 file1.csv
[root@localhost viraj]# grep viraj
^C
[root@localhost viraj]# grep file1.csv
akash
^c
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# _
```

ip addr = showing ip address

```
Kernel 3.10.0-957.el7.x86_64 on an x86_64
localhost login: root
Password:
Last login: Mon Aug 28 02:18:39 on tty1
[root@localhost ~1# nmcli
        "Intel 82545EM"
        1 connection available
        ethernet (e1000), 00:0C:29:9D:B0:31, hw, mtu 1500
lo: unmanaged
        "lo"
        loopback (unknown), 00:00:00:00:00:00, sw, mtu 65536
Use "nmcli device show" to get complete information about known devices and
"nmcli connection show" to get an overview on active connection profiles.
Consult nmcli(1) and nmcli-examples(5) manual pages for complete usage details.
[root@localhost ~1# nmcli con up ens33
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnecti
on/1
[root@localhost ~]# ip addr
1: lo: <LOOPBACK,UP,LOWER UP> mtu 65536 qdisc noqueue state UNKNOWN group default glen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
      valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
      valid_lft forever preferred_lft forever
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default glen 10
ЙΝ
    link/ether 00:0c:29:9d:b0:31 brd ff:ff:ff:ff:ff:ff
    inet 192.168.159.129/24 brd 192.168.159.255 scope global noprefixroute dynamic ens33
      valid_lft 1790sec preferred_lft 1790sec
    inet6 fe80::7a82:4140:6135:cde9/64 scope link noprefixroute
      valid_lft forever preferred_lft forever
[root@localhost ~]#
```

comm = used for compare two files and display three column (non-matching in first file, non-matching in second and matching on both in third column)

grep = ('global regular expression print') used for search a word

sed = stream editor (change word, alphabet or data)

```
link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid Ift forever preferred Ift forever
2: ens33: (BROADCAST,MULTICAST,UP,LOWER_UP) mtu 1500 qdisc pfifo_fast state UP group default qlen 10
    link/ether 00:0c:29:9d:b0:31 brd ff:ff:ff:ff:ff:ff
    inet 192.168.159.129/24 brd 192.168.159.255 scope global noprefixroute dynamic ens33
       valid_lft 1790sec_preferred_lft 1790sec_
    inet6 fe80::7a82:4140:6135:cde9/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
[root@localhost ~]# ls
anaconda-ks.cfg viraj
[root@localhost ~]# cat viraj
cat: viraj: Is a directory
[root@localhost ~]# cd /viraj
-bash: cd: /viraj: No such file or directory
[root@localhost ~1# cd viraj
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
Iroot@localhost virajl# cat file1.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# cat file2.csv
[root@localhost viraj]# cat file3.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# vi file3.csv
```

tr = change content small to capital or capital to small

uniq = for sorting data

wc = count (line, word, character)

exit = for exit terminal exit

```
4, rushi, ghokalenagar
du/aditya
5, ashu, nagar
du/aditya
6, rohan, katraj
du/aditya
[root@localhost viraj]# cat file1.csv | tr 'viraj' 'VIRAJ'
1, VIRAJ, kothRud
2, AkAsh, wARJe
3, AdItyA, hInJwAdI
4, RushI, ghokAlenAgAR
5, AshIsh, hAdApsAR
6, RohAn, kAtRAJ
[root@localhost viraj]# cat file1.csv lunique
-bash: unique: command not found
[root@localhost viraj]# sort file1.csv |unique
-bash: unique: command not found
[root@localhost viraj]# file1.csv lunique
-bash: unique: command not found
-bash: file1.csv: command not found
[root@localhost viraj]# cat file1.csv luniq
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# sort file1.csv luniq
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# wc file1.csv
  6 18 114 file1.csv
[root@localhost viraj]# exit_
```

```
sort = used to sort files in alphabetical order

gzip = for create zip file

gunzip = for remove zip file

find = used to find particular file within a directory (byname, bytype, bytime)

date = display the date

cal = display the calender
```

```
[root@localhost viraj]# cat file1.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# sort file1.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# gzip file1.csv
[root@localhost viraj]# ls
file1.csv.gz file2.csv file3.csv
[root@localhost viraj]# gunzip file1.csv.gz
[root@localhost viraj]# ls
file1.csv file2.csv file3.csv
[root@localhost viraj]# find ashish file1.csv
find: 'ashish': No such file or directory
file1.csv
[root@localhost viraj]# find . -name *3.csv
.∕file3.csv
[root@localhost viraj]# date
Tue Aug 29 13:13:49 IST 2023
[root@localhost viraj]# cal
     August 2023
Su Mo Tu We Th Fr Sa
          2
            3
               4
       1
      8 9 10 11 12
13 14 15 16 17 18 19
20 21 22 23 24 25 26
27 28 🛂 30 31
[root@localhost viraj]#
```

zcat = display compressed filesl

time = display time to execute command

sleep = hold terminal specific time (it takes in sec)

df = display disc space of file system

clear = used to clear terminal

```
file1.csv file2.csv file3.csv
[root@localhost viraj]# gzip file1.csv
[root@localhost viraj]# zcat
gzip: compressed data not read from a terminal. Use -f to force decompression.
For help, type: gzip -h
[root@localhost viraj]# zcat viraj
gzip: viraj.gz: No such file or directory
[root@localhost viraj]# zcat file1.csv.gz
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# zcat file1.csv
1, viraj, kothrud
2, akash, warje
3, aditya, hinjwadi
4, rushi, ghokalenagar
5, ashish, hadapsar
6, rohan, katraj
[root@localhost viraj]# time
real
        2000.0m0
        2000.0m0
user
        2000.0m0
[root@localhost viraj]# sleep 5
[root@localhost viraj]# df
                                     Used Available Use% Mounted on
Filesystem
                        1K-blocks
/dev/mapper/centos-root 15923200 1027392
                                            14895808
                                                       7% /
devtmpfs
                           485828
                                        0
                                              485828
                                                       0% /dev
                                              497948
tmpfs
                           497948
                                        0
                                                       0% /dev/shm
tmpfs
                           497948
                                     7772
                                              490176
                                                       2% /run
                           497948
                                              497948
                                                       0% /sys/fs/cgroup
tmpfs
                                        0
/dev/sda1
                                                      14% /boot
                          1038336
                                   135280
                                              903056
                                              99592
                            99592
                                        0
                                                       0% /run/user/0
[root@localhost viraj]# clear
```

## tac = it is reverse of cat command

```
5, ashu, nagar
6, rohan, katraj
7,saurabh,balajinagar
8, suyash, dattwadi
9, ksaurabh, punecity
10, ashish, hadapsar
11, prasad, wagholi
12, ram, narhe
[root@localhost viraj]# id
uid=0(root) gid=0(root) groups=0(root) context=unconfined_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
[root@localhost viraj]# more file3.csv
1, vira, kothrud
2, akash, warje
3, adu, malvan
4, rushi, ghokalenagar
5, ashu, nagar
6, rohan, katraj
7, saurabh, bala jinagar
8, suyash, dattwadi
9, ksaurabh, punecity
10, ashish, hadapsar
11, prasad, wagholi
12, ram, narhe
[root@localhost viraj]# tac file3.csv
12, ram, narhe
11, prasad, wagholi
10, ashish, hadapsar
9,ksaurabh,punecity
8, suyash, dattwadi
7, saurabh, bala jinagar
6, rohan, katraj
5, ashu, nagar
4, rushi, ghokalenagar
3, adu, malvan
2, akash, warje
1, vira, kothrud
[root@localhost viraj]#
```

```
1, vira, kothrud
[root@localhost viraj]# cat file3.csv
1, vira, kothrud
2, akash, warje
3, adu, mal∨an
4, rushi, ghokalenagar
5, ashu, nagar
6, rohan, katraj
7, saurabh, bala jinagar
8, suyash, dattwadi
9, ksaurabh, punecity
10, ashish, hadapsar
11, prasad, wagholi
12, ram, narhe
[root@localhost viraj]# head file3.csv
1, vira, kothrud
2, akash, warje
3, adu, mal∨an
4, rushi, ghokalenagar
5, ashu, nagar
6, rohan, katraj
7, saurabh, bala jinagar
8,suyash,dattwadi
9,ksaurabh,punecity
10, ashish, hadapsar
[root@localhost viraj]# tail file3.csv
3, adu, mal∨an
4, rushi, ghokalenagar
5, ashu, nagar
6, rohan, katraj
7, saurabh, bala jinagar
8,suyash,dattwadi
9,ksaurabh,punecity
10, ashish, hadapsar
11, prasad, wagholi
12, ram, narhe
[root@localhost viraj]#
```

## **HDFS Command**

hdfs dfs -ls <path> = used to list all the files

hdfs dfs -mkdir <folder name> = to create a directory

hdfs dfs -touchz <file\_path> = to create any empty file

```
root@localhost:/home/training
File Edit View Search Terminal Help
[root@localhost training]# hdfs dfs -ls
Found 1 items
             - root supergroup
drux-----
                                         0 2023-08-28 08:30 .staging
[root@localhost training]# hdfs dfs -mkdir sanu
[root@localhost training]# hdfs dfs -ls
Found 2 items
                                         0 2023-08-28 08:30 .staging
drwx----- - root supergroup
drwxr-xr-x - root supergroup
                                        0 2023-08-30 02:50 sanu
[root@localhost training]# hdfs dfs -mkdir sanu/file.txt
[root@localhost training]# hdfs dfs -ls
Found 2 items
drwx----- - root supergroup
drwxr-xr-x - root supergroup
                                         0 2023-08-28 08:30 .staging
                                         0 2023-08-30 02:53 sanu
[root@localhost training]# hdfs dfs -ls /sanu
ls: '/sanu': No such file or directory
[root@localhost training]# hdfs dfs -ls sanu
Found 1 items
             - root supergroup
                                         0 2023-08-30 02:53 sanu/file.txt
drwxr-xr-x
[root@localhost training]# hdfs dfs -touchz sanu/mysis.txt
[root@localhost training]# hdfs dfs -ls sanu
Found 2 items
drwxr-xr-x - root supergroup
-rw-r--r-- 1 root supergroup
                                         0 2023-08-30 02:53 sanu/file.txt
                                         0 2023-08-30 02:55 sanu/mysis.txt
[root@localhost training]# |
```

hdfs dfs -copyFromLocal /root/projteam.csv /practice = To copy files/folders from local file system to hdfs store

hdfs dfs -cat /practice/projteam.csv = display the file content

```
root@localhost:~
 File Edit View Search Terminal Help
                                                              50 2023-08-30 03:00 /sanu
 ΓW - Γ - - Γ - -
                    1 root
                                supergroup
                                                               0 2023-08-03 06:00 /tmp
drwxrwxrwt
                      hdfs
                                supergroup
                                                                0 2023-08-03 06:17 /user
drwxrwxrwx
                       hue
                                supergroup
drwxr-xr-x - hdfs supergroup 0 2013-07-27 09:23 /vi

drwxr-xr-x - hdfs supergroup 0 2014-07-27 09:23 /vi

[root@localhost ~]# hdfs dfs -ls /practice

[root@localhost ~]# hdfs dfs -copyFromLocal /root/projteam.csv

[root@localhost ~]# hdfs dfs -ls /
                                                               0 2014-07-27 09:23 /var
Found 10 items
drwxr-xr-x
drwxr-xr-x
                                                               0 2023-08-22 07:56 /DATA
0 2023-08-04 05:52 /DA_hive_data
0 2023-08-04 07:00 /business
                       root
                                supergroup
                       root
                                supergroup
drwxr-xr-x
                                supergroup
                       root
drwxr-xr-x
drwxr-xr-x
                                                               0 2023-08-04 07:13 /business1 0 2023-08-24 07:57 /hbase
                       root
                                supergroup
                      hbase supergroup
drwxr-xr-x
                                supergroup
                                                                0 2023-08-30 03:05 /practice
                                                              50 2023-08-30 03:00 /sanu
0 2023-08-03 06:00 /tmp
 FW - F - - F - -
                    1 root
                                supergroup
drwxrwxrwt
                      hdfs
                                supergroup
                                                               0 2023-08-03 06:17 /user
0 2014-07-27 09:23 /var
drwxrwxrwx
                      hue
                                supergroup
 irwxr-xr-x - hdfs supergroup 0 2014-07-27 09:123 /var

[root@localhost ~]# hdfs dfs -copyFromLocal /root/projteam.csv /practice

[root@localhost ~]# hdfs dfs -ls /practice
drwxr-xr-x
Found 1 items
                   1 root supergroup
                                                             83 2023-08-30 03:32 /practice/projteam.cs
[root@localhost ~]# |
```

hdfs dfs -put /root/projteam.csv /practice = To copy files/folders from local file system to hdfs store

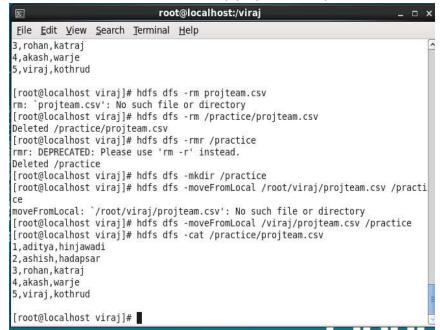
hdfs dfs -copyToLocal /practice/projteam.csv/root = To copy files/folders from hdfs store to local file system



hdfs dfs -rm projteam = delete files from hdfs

hdfs dfs -rmr /practice = delete directory from hdfs

hdfs dfs -moveFromLocal /root/viraj/projteam.csv /practice = move file from local to hdfs



hdfs dfs -get /practice/projteam.csv /viraj = To copy files/folders from hdfs store to local file system

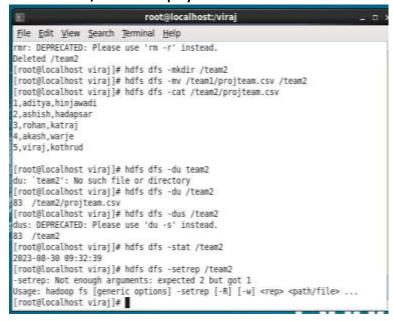
hdfs dfs -cp /practice/projteam.csv /team1 = used to copy files within hdfs

```
t@localhost:/viraj
File Edit View Search Terminal Help
4,akash,warje
5, viraj, kothrud
[root@localhost viraj]# ls
mg2.csv mg.csv mumbai.csv nasik.csv pune.csv
[root@localhost viraj]# hdfs dfs -get /practice/projteam.csv /viraj
[root@localhost viraj]# ls
mg2.csv mg.csv mumbai.csv
                             nasik.csv projteam.csv pune.csv
[root@localhost viraj]# hdfs dfs -mkdir /team1
[root@localhost viraj]# hdfs dfs -cp /practice/projteam.csv /team1
[root@localhost viraj]# hdfs dfs -cat /teaml
cat: '/team1': Is a directory
[root@localhost viraj]# hdfs dfs -cat /teaml/projteam.csv
1,aditya,hinjawadi
2,ashish,hadapsar
3, rohan, katraj
4,akash,warje
5, viraj, kothrud
[root@localhost viraj]# hdfs dfs -mkdir /team2
[root@localhost viraj]# hdfs dfs -cp /teaml/projteam.csv /team2
[root@localhost viraj]# hdfs dfs -mkdir /team2
mkdir: '/team2': File exists
[root@localhost viraj]# ■
```

hdfs dfs -mv /team1/projteam.csv /team2 = used to move files within hdfs hdfs dfs -du /team2 = display the size of each file in directory

hdfs dfs -dus /team2 = display the total size of directory/file

hdfs dfs -stat /team2 = display the last modified time of directory or path



hdfs dfsadmin -safemode get = display safemode status

hdfs dfsadmin -safemode enter = for safemode on

hdfs dfsadmin -safemode leave = for safemode off

hdfs dfsadmin -report = display the report

