

## DTL Assignment: 40 LINUX Commands

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Div1 Comp, S5 batch

sudo:

```
anuksha@DESKTOP-M1Q8BM7: ~  
anuksha@DESKTOP-M1Q8BM7:~$ sudo -V  
Sudo version 1.9.9  
Sudoers policy plugin version 1.9.9  
Sudoers file grammar version 48  
Sudoers I/O plugin version 1.9.9  
Sudoers audit plugin version 1.9.9  
anuksha@DESKTOP-M1Q8BM7:~$
```

pwd:

```
Sudoers audit plugin version 1.9.9  
anuksha@DESKTOP-M1Q8BM7:~$ pwd  
/home/anuksha  
anuksha@DESKTOP-M1Q8BM7:~$
```

cd:

```
anuksha@DESKTOP-M1Q8BM7:~$ mkdir dtl  
anuksha@DESKTOP-M1Q8BM7:~$ cd /home/anuksha/dtl  
anuksha@DESKTOP-M1Q8BM7:~/dtl$
```

ls:

```
anuksha@DESKTOP-M1Q8BM7:~$ ls
dt1  dt12
```

cat:

```
anuksha@DESKTOP-M1Q8BM7:~/dt1$ cat >file1.txt
This is a sample text file.anuksha@DESKTOP-M1Q8BM7:~/dt1$ cat file1.txt
This is a sample text file.anuksha@DESKTOP-M1Q8BM7:~/dt1$
```

cp:

```
anuksha@DESKTOP-M1Q8BM7:~/dt1$ cp file1.txt /home/anuksha/hello
anuksha@DESKTOP-M1Q8BM7:~/dt1$ cd /home/anuksha
anuksha@DESKTOP-M1Q8BM7:~$ cd hello
anuksha@DESKTOP-M1Q8BM7:~/hello$ ls
file1.txt
```

mv:

```
anuksha@DESKTOP-M1Q8BM7:~/hello$ mv file1.txt file1new.txt
anuksha@DESKTOP-M1Q8BM7:~/hello$ file1new.txt
file1new.txt: command not found
anuksha@DESKTOP-M1Q8BM7:~/hello$ cat file1new.txt
This is a sample text file.anuksha@DESKTOP-M1Q8BM7:~/hello$
```

mkdir:

```
.  ..
anuksha@DESKTOP-M1Q8BM7:~/dt1$ mkdir dt12
anuksha@DESKTOP-M1Q8BM7:~/dt1$ ls
dt12
```

rmdir:

```
anuksha@DESKTOP-M1Q8BM7:~/dt1$ rmdir dt12
anuksha@DESKTOP-M1Q8BM7:~/dt1$ ls
anuksha@DESKTOP-M1Q8BM7:~/dt1$ _
```

touch:

```
anuksha@DESKTOP-M1Q8BM7:~/dt1$ touch file1.txt
anuksha@DESKTOP-M1Q8BM7:~/dt1$ ls
file1.txt
```

plocate:

```
anuksha@DESKTOP-M1Q8BM7:~$ locate -i sample
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples/getlogin.rb
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples/getpid.rb
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples/gettimeofday.rb
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples/hello.rb
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples/inotify.rb
/mnt/c/HashiCorp/Vagrant/embedded/gems/2.2.16/gems/ffi-1.15.0-x64-mingw32/samples/pty.rb
```

find:

```
anuksha@DESKTOP-M1Q8BM7:~$ find / -name file1new.txt
find: '/etc/polkit-1/localauthority': Permission denied
find: '/etc/ssl/private': Permission denied
/home/anuksha/hello/file1new.txt
```

grep:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ grep sample file1.txt
This is a sample text file.
anuksha@DESKTOP-M1Q8BM7:~/dtl$
```

df:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ df -h
Filesystem      Size  Used Avail Use% Mounted on
rootfs          476G  245G  232G   52% /
none            476G  245G  232G   52% /dev
none            476G  245G  232G   52% /run
none            476G  245G  232G   52% /run/lock
none            476G  245G  232G   52% /run/shm
none            476G  245G  232G   52% /run/user
tmpfs           476G  245G  232G   52% /sys/fs/cgroup
C:\             476G  245G  232G   52% /mnt/c
```

du:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ du -m /home/anuksha
0      /home/anuksha/dtl
0      /home/anuksha/hello
1      /home/anuksha
```

head:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ head file1.txt
This is a sample text file.anuksha@DESKTOP-M1Q8BM7:~/dtl$
```

tail:

```
This is a sample text file.anuksha@DESKTOP-M1Q8BM7:~/dtl$ tail file1.txt
This is a sample text file.anuksha@DESKTOP-M1Q8BM7:~/dtl$
```

diff:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ diff file1.txt file2.txt
1c1
< This is a sample text file.
\ No newline at end of file
---
> This is another text file for comparison purposes.
```

tar:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ tar -cvf newfile.tar /home/anuksha
tar: Removing leading '/' from member names
/home/anuksha/
/home/anuksha/.bashrc
/home/anuksha/.bash_logout
/home/anuksha/.motd_shown
/home/anuksha/.profile
/home/anuksha/.sudo_as_admin_successful
/home/anuksha/dtl/
/home/anuksha/dtl/file1.txt
/home/anuksha/dtl/file2.txt
tar: /home/anuksha/dtl/newfile.tar: file is the archive; not dumped
/home/anuksha/dtl2
/home/anuksha/hello/
/home/anuksha/hello/file1new.txt
```

chmod:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ chmod +x file2.txt
anuksha@DESKTOP-M1Q8BM7:~/dtl$
```

chown:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ chown anuksha file2.txt
```

kill:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ ps ux
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
anuksha    49  0.0  0.0  14216  3816 tty1    S   15:46   0:00 -bash
anuksha  2017  0.0  0.0  15520  1928 tty1    R   17:25   0:00 ps ux
anuksha@DESKTOP-M1Q8BM7:~/dtl$ kill SIGKILL 49
-bash: kill: SIGKILL: arguments must be process or job IDs
```

ping:

```
anuksha@DESKTOP-M1Q8BM7:~/dtl$ ping google.com
PING google.com (142.250.192.46) 56(84) bytes of data:
64 bytes from bom12s15-in-f14.1e100.net (142.250.192.46): icmp_seq=1 ttl=56 time=74.1 ms
64 bytes from bom12s15-in-f14.1e100.net (142.250.192.46): icmp_seq=2 ttl=56 time=59.3 ms
64 bytes from bom12s15-in-f14.1e100.net (142.250.192.46): icmp_seq=3 ttl=56 time=76.2 ms
64 bytes from bom12s15-in-f14.1e100.net (142.250.192.46): icmp_seq=4 ttl=56 time=96.9 ms
64 bytes from bom12s15-in-f14.1e100.net (142.250.192.46): icmp_seq=5 ttl=56 time=184 ms
```

wget:

```
anuksha@DESKTOP-M1Q8BM7:~$ wget https://www.loggly.com/wp-content/uploads/2015/05/Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf
--2023-02-06 17:30:55-- https://www.loggly.com/wp-content/uploads/2015/05/Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf
Resolving www.loggly.com (www.loggly.com)... 184.28.235.67, 184.28.235.66
Connecting to www.loggly.com (www.loggly.com)|184.28.235.67|:443... connected.
HTTP request sent, awaiting response... 200 OK
Length: 987562 (964K) [application/pdf]
Saving to: 'Linux-Cheat-Sheet-Sponsored-By-Loggly.pdf'
```

uname:

```
anuksha@DESKTOP-M1Q8BM7:~$ uname -a
Linux DESKTOP-M1Q8BM7 4.4.0-19041-Microsoft #2311-Microsoft Tue Nov 08 17:09:00 PST 2022 x86_64 x86_64 x86_64 GNU/Linux
anuksha@DESKTOP-M1Q8BM7:~$
```

top:

```
anuksha@DESKTOP-M1Q8BM7: ~
top - 17:35:10 up 1:48, 0 users, load average: 0.52, 0.58, 0.59
Tasks: 4 total, 1 running, 3 sleeping, 0 stopped, 0 zombie
%Cpu(s): 1.2 us, 1.4 sy, 0.0 ni, 97.3 id, 0.0 wa, 0.1 hi, 0.0 si, 0.0 st
MiB Mem : 15773.3 total, 7413.0 free, 8136.3 used, 224.0 buff/cache
MiB Swap: 49152.0 total, 49001.0 free, 151.0 used. 7506.4 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR S  %CPU  %MEM    TIME+  COMMAND
    1 root        20   0    8964    420   344 S   0.0   0.0   0:00.14 init
  2021 root        20   0    9312    240   188 S   0.0   0.0   0:00.01 init
  2022 anuksha    20   0   14248   3784   3676 S   0.0   0.0   0:00.09 bash
  2036 anuksha    20   0   15824   2256   1580 R   0.0   0.0   0:00.04 top
```

history:

```
anuksha@DESKTOP-M1Q8BM7: ~
anuksha@DESKTOP-M1Q8BM7:~$ history
 1 sudo apt update
 2 sudo apt upgrade
 3 sudo apt update
 4 sudo -V
 5 pwd
 6 cd
 7 cd /home/anuksha/file
 8 mkdir dt1
 9 cd /home/anuksha/dt1
10 ls
11 ls -a
12 ls -a
13 mkdir dt12
14 ls
15 cd /home/anuksha
16 ls
17 mkdir dt12
18 ls
19 rmdir dt12
20 cd dt1
21 rmdir dt12
22 ls
23 touch file1.txt
24 ls
25 cat >file1.txt
26 cat file1.txt
27 cat >file1.txt
28 cat file1.txt
29 cp file1.txt /home/anuksha/dt12
30 cd /home/anuksha/dt12
31 cd /home/anuksha
32 mkdir dt12
33 mkdir hello
34 ls
35 cd dt1
36 \cp file1.txt /home/anuksha/hello
37 cd hello
38 cp file1.txt /home/anuksha/hello
39 cd /home/anuksha
40 cd hello
```

man:

```
anuksha@DESKTOP-M1Q8BM7: ~
LS(1)
NAME
ls - list directory contents

SYNOPSIS
ls [OPTION]... [FILE]...

DESCRIPTION
List information about the FILES (the current directory by default). Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.
Mandatory arguments to long options are mandatory for short options too.

-a, --all
do not ignore entries starting with .

-A, --almost-all
do not list implied . and ..

--author
with -l, print the author of each file

-b, --escape
print C-style escapes for nongraphic characters

--block-size=SIZE
with -l, scale sizes by SIZE when printing them; e.g., '--block-size=M'; see SIZE format below

-B, --ignore-backups
do not list implied entries ending with ~

-c
with -lt: sort by, and show, ctime (time of last modification of file status information); with -l: show ctime and sort by name; otherwise: sort by
ctime, newest first

-C
list entries by columns

--color[=WHEN]
colorize the output; WHEN can be 'always' (default if omitted), 'auto', or 'never'; more info below

-d, --directory
Manuel page 16(1) - Page 1 (press h for help or q to quit)
```

echo:

```
anuksha@DESKTOP-M1Q8BM7:~$ echo hello world
hello world
```

zip,unzip:

```
anuksha@DESKTOP-M1Q8BM7:~$ zip archive.zip file2.txt
zip warning: name not matched: file2.txt

zip error: Nothing to do! (archive.zip)
```

hostname:

```
anuksha@DESKTOP-M1Q8BM7:~$ hostname -a
DESKTOP-M1Q8BM7
```

useradd, userdel:

```
anuksha@DESKTOP-M1Q8BM7:~$ useradd john
useradd: Permission denied.
useradd: cannot lock /etc/passwd; try again later.
anuksha@DESKTOP-M1Q8BM7:~$
```

apt-get:

```
anuksha@DESKTOP-M1Q8BM7:~$ sudo apt install zip
[sudo] password for anuksha:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
unzip
```

nano, vi,jed:

```
anuksha@DESKTOP-M1Q8BM7:~$ vi hello.c_
```

```
anuksha@DESKTOP-M1Q8BM7:~$ nano hello.py_
```

alias, unalias:

```
anuksha@DESKTOP-M1Q8BM7:~$ alias k='kill'
anuksha@DESKTOP-M1Q8BM7:~$ unalias k
anuksha@DESKTOP-M1Q8BM7:~$
```

su:

```
anuksha@DESKTOP-M1Q8BM7:~$ su -p
Password:
su: Authentication failure
anuksha@DESKTOP-M1Q8BM7:~$ su -s
su: option requires an argument -- 's'
Try 'su --help' for more information.
anuksha@DESKTOP-M1Q8BM7:~$ su -l
Password:
su: Authentication failure
anuksha@DESKTOP-M1Q8BM7:~$
```

htop:

```
anuksha@DESKTOP-M1Q8BM7:~$ htop -h
htop 3.0.5
(C) 2004-2019 Hisham Muhammad. (C) 2020 htop dev team.
Released under the GNU GPLv2.

-C --no-color           Use a monochrome color scheme
-d --delay=DELAY        Set the delay between updates, in tenths of seconds
-F --filter=FILTER       Show only the commands matching the given filter
-h --help               Print this help screen
-H --highlight-changes[=DELAY] Highlight new and old processes
-M --no-mouse           Disable the mouse
-p --pid=PID[,PID,PID...] Show only the given PIDs
-s --sort-key=COLUMN     Sort by COLUMN in list view (try --sort-key=help for a list)
-t --tree               Show the tree view (can be combined with -s)
-u --user=[USERNAME]     Show only processes for a given user (or $USER)
-U --no-unicode          Do not use unicode but plain ASCII
-V --version             Print version info

Long options may be passed with a single dash.

Press F1 inside htop for online help.
See 'man htop' for more information.
```

ps:

```
anuksha@DESKTOP-M1Q8BM7:~$ ps -u
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
anuksha   2169  0.0  0.0  14248  3784 tty1    S    18:23   0:00 -bash
anuksha   2186  0.0  0.0   15520  1928 tty1    R    18:28   0:00 ps -u
```