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Top 20 most commonly used linux commands:

1. mkdir Command

Using this command users are able to create new directories.
Ex: $ mkdir linux_commands

```
(base) samina@samina-ThinkPad-T420:~$ mkdir linux_commands
(base) samina@samina-ThinkPad-T420:~$
```

We need to provide a path for new directory in case it is going to be placed in another directory

2. cd Command

This command is used to alter the current directory.
Ex: $ cd linux_commands

To go back to home directory we use ‘cd ~’ and to go back to the previous directory wrt the current directory we use ‘ cd ..’ .

```
(base) samina@samina-ThinkPad-T420:~$ cd linux_commands
(base) samina@samina-ThinkPad-T420:~/linux_commands$ cd ..
(base) samina@samina-ThinkPad-T420:~$
```

3.touch Command

This command is used to create new file.
Ex: touch file1.txt

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ touch file1.txt
(base) samina@samina-ThinkPad-T420:~/linux_commands$ touch file2.txt
```

3. cat Command

It is short for ‘concatenate’ and permits users to create files,redirect output,list the contents of a file and even concatenate multiple files.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ cat > file1.txt
hi,I am Samina Haque.
This is the 1st file created using cat command and touch command.
^Z
[1]+  Stopped                 cat > file1.txt
(base) samina@samina-ThinkPad-T420:~/linux_commands$ cat file1.txt
hi,I am Samina Haque.
This is the 1st file created using cat command and touch command.
(base) samina@samina-ThinkPad-T420:~/linux_commands$ cat >file2.txt
This is the 2nd file.
^Z
[2]+  Stopped                 cat > file2.txt
(base) samina@samina-ThinkPad-T420:~/linux_commands$ cat file1.txt file2.txt
hi,I am Samina Haque.
This is the 1st file created using cat command and touch command.
This is the 2nd file.
(base) samina@samina-ThinkPad-T420:~/linux_commands$
```

4. pwd Command.

Pwd stands for Print Working Directory.It will print the full system path of current directory.
To print a symbolic path use ‘pwd -L’.
To print the actual full path use ‘pwd -P’

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ pwd -L
/home/samina/linux_commands
(base) samina@samina-ThinkPad-T420:~/linux_commands$ pwd -P
/home/samina/linux_commands
```

5. ls Command

It is most commony used linux Command. It is used to list the directory of files and directories.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ ls
50_linux_commands.odp  file1.txt  file2.txt
```

6. alias Command

It is used to personalize and organize all your commands. It allows users to designate a name to a singleb command or even a string of commands.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ alias cls=clear
(base) samina@samina-ThinkPad-T420:~/linux_commands$
```

7. curl Command

This is high functional tool to recover data from URLS.(Uniform Resource Locators.)
To retrieve a file users have to state the exact file name to save it in.. Programmers can leverage the -o option.

```
base) samina@samina-ThinkPad-T420:~/linux_commands$ curl http://raw.github.com/smiths/linux/master/kernel/events/core.c -o core.c
 % Total    % Received % Xferd  Average Speed   Time    Time     Time  Current
                                Dload  Upload   Total   Spent    Left  Speed
 0     0    0     0    0     0      0      0 --:--:-- --:--:-- --:--:--     0
```

8.chmod Command

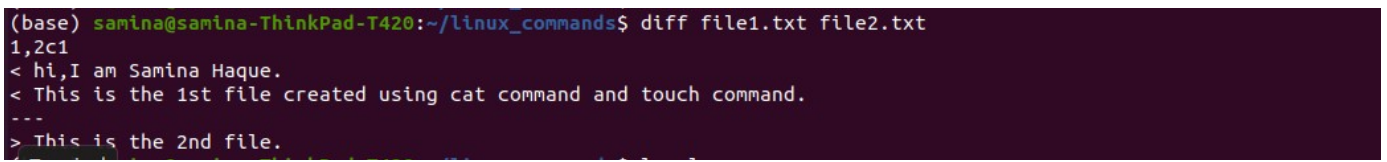
It allows user to alter or assign file permission flags on a file or folder. The permission defines who can read, write or run the file.
Representations:
‘u’ – the owner of the file.
‘g’ – a group.
‘o’ – users who are not the owner or a group member.
‘a’ – all tha above.
‘r’ – read, ‘w’ – write , ‘x’ – execute.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ chmod 764  file1.txt
```

0: No permission is assigned
1: Execute permission
2: it has to write permission
3: the user has write and execute permissions
4: users can only read with this permission
5: users have read and permission to execute
6: it indicates that you have both read and write permissions
7: it offers you to do anything with the file such as read, write and execute

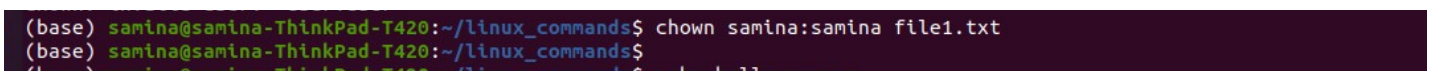
9. diff Command

It compares data between two text files and display the difference.



10. chown Command

It allows user to change the owner and the group owner of a particular file.



11. echo Command

It is used to print a string of text passed as an argumrent to terminal window.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ echo hellooooooooo
hellooooooooo
```

12. find Command

It helps to finf the location of a file.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ find file1.txt
file1.txt
```

13. unnamed Command

It provides user with the system information of the system they are using.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ uname -a
Linux samina-ThinkPad-T420 5.4.0-26-generic #30-Ubuntu SMP Mon Apr 20 16:58:30 UTC 2020 x86_64 x86_64 x86_64 GNU/Linux
(base) samina@samina-ThinkPad-T420:~/linux_commands$
```

14. free Command

It provides user with a summary of the total available free space on the computer.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ free -h
              total        used        free      shared  buff/cache   available
Mem:          7.7Gi       1.2Gi       4.8Gi       352Mi       1.7Gi       5.9Gi
Swap:         9.8Gi          0B       9.8Gi
```

15. whoami Command

It tells the user with a username they are logged in as.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ whoami
samina
```

16. ps Command

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ ps -e
    PID TTY          TIME CMD
      1 ?        00:00:14 systemd
      2 ?        00:00:00 kthreadd
      3 ?        00:00:00 rcu_gp
      4 ?        00:00:00 rcu_par_gp
      6 ?        00:00:00 kworker/0:0H-kblockd
      8 ?        00:00:00 mm_percpu_wq
      9 ?        00:00:00 ksoftirqd/0
```

17.mv Command

I enables programmers to shift files and directories betwee other directories.
It can be used to rename files.

```
Try 'mv --help' for more information.
base) samina@samina-ThinkPad-T420:~/linux_commands$ mv file1.txt test.txt
base) samina@samina-ThinkPad-T420:~/linux_commands$ mv ~/home/samina/example.txt
```

18. passwd Command

Users can change the password for a user.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ passwd
Changing password for samina.
Current password:
New password:
Retype new password:
```

19. cp Command

It stands for copy, and its primary function is to copy files and directories. Coders can even copy multiple files or directories using cp.

```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ cp test.txt file2.txt
```

20.sudo Command

Most advanced command in linux. Dealing with it is critical as it requires root access. The most common use of the sudo command is to change the password for other user.

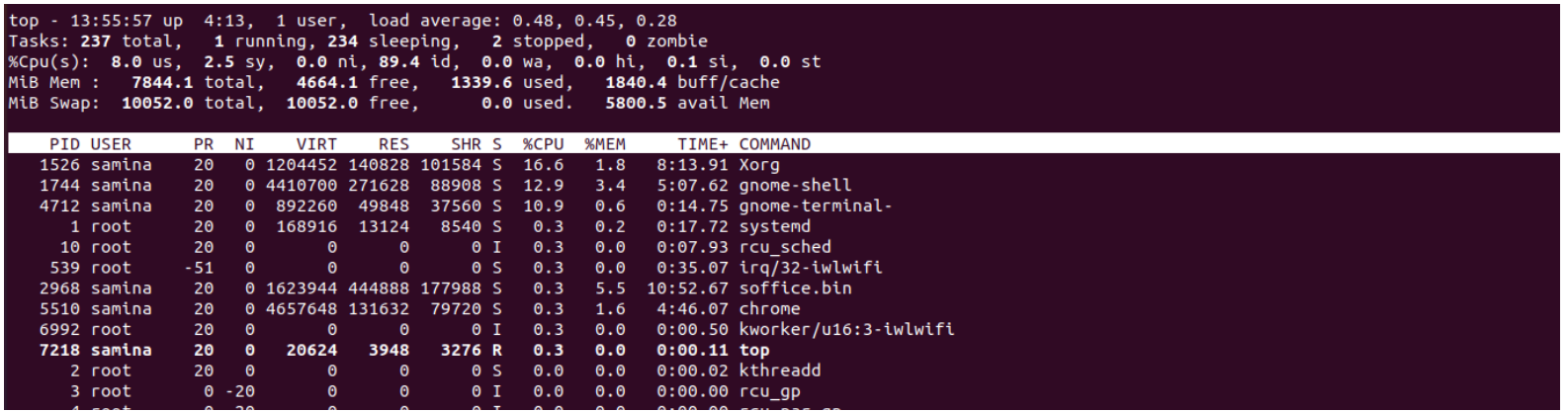
```
(base) samina@samina-ThinkPad-T420:~/linux_commands$ sudo -l
[sudo] password for samina:
Matching Defaults entries for samina on samina-ThinkPad-T420:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User samina may run the following commands on samina-ThinkPad-T420:
    (ALL : ALL) ALL
(base) samina@samina-ThinkPad-T420:~/linux_commands$
```

Brief Note on top Command:

The top command is a task management program that presents a real-time display of CPU and memory usage of the Linux computer. It is a simple status summary. The command is suitable for those who like to monitor the CPU performance of the Linux machine. The user only has to type ‘top’ in the terminal to run it.
Below are letters that define the statuses of the process:

R: Running
D: Uninterruptible sleep
S: Sleeping
T: stopped (often known as Traced)
Z: Zombie



Thank You