

Linux commands

🕒 Created	@August 30, 2024 9:54 PM
📂 Class	O.S

- ls - list the files and directories in the current directory

```
ls
```

- cd - change the current directory

```
cd dir_name
```

- mkdir - create a new directory

```
mkdir rohan
```

- rmdir - remove a directory

```
rmdir rohan
```

- pwd - print the current working directory

```
pwd
```

- cp - copy files or directories

```
#We will copy a file called example.txt from the current d  
irectory to a directory called backup  
cp example.txt backup/
```

- mv - move or rename files or directories

```
mv example.txt backup/
```

- rm - remove files or directories

```
rm example.txt
```

- touch - create a new empty file or update the timestamp of an existing file

```
touch shayan.txt
```

- cat - concatenate and display files

```
cat example.txt
```

- man - manual for a command

```
man ls
```

- htop - an interactive process viewer and system monitor

```
htop
```

- `chmod` - change the permissions of a file or directory

```
# The first digit represents the owner of the file/directory
# The second digit represents the group that the file/directory belongs to
# The third digit represents all other users
# 0 (no permission)
# 1 (execute only)
# 2 (write only)
# 3 (write and execute)
# 4 (read only)
# 5 (read and execute)
# 6 (read and write)
# 7 (read, write, and execute)

chmod 700 file.txt
```

- `chown` - change the owner of a file or directory

```
chown new_owner example.txt
```

- `tar` - create or extract compressed archive files

```
# x: extract files from an archive
# t: list the contents of an archive
# r: append files to an existing archive
# z: use gzip compression
# j: use bzip2 compression
```

```
# cf: create file
#xf: extract file
tar cf archive.tar file1 file2 file3
```

- gzip - compress files

```
gzip file.txt
```

- gunzip - decompress compressed files

```
gunzip file.txt.gz
```

- ssh - connect to a remote server securely

```
ssh username@server_address
```

- scp - securely copy files between systems

```
scp myfile.txt user@remotehost:/home/user/
```

- ping - test network connectivity

```
ping 8.8.8.8
```

- ifconfig - display or configure network interfaces

```
ifconfig
```

- netstat - display network connection information

```
netstat
```

- route - view or configure network routing tables

```
route [options] [add/delete/show]
```

- top - display system resource usage and processes

```
top
```

- ps - display information about running processes

```
ps aux
```

- kill - terminate a process

```
kill [PID]
```

- systemctl - control system services and settings

```
# Start the nginx service  
systemctl start nginx
```

```
# Check the status of the nginx service
systemctl status nginx

# Stop the nginx service
systemctl stop nginx
```

- service - control system services

```
service apache2 start
```

- useradd - add a new user to the system

```
useradd harry
```

- passwd - change the password for a user

```
passwd harry
```

- userdel - delete a user from the system

```
userdel harry
```

- su - switch user to become another user

```
su john
```

- `sudo` - execute a command as another user or with elevated privileges

```
sudo
```

- `uptime` - display system uptime and load average

```
uptime
```

- `df` - display disk space usage

```
df
```

- `du` - display disk usage by file or directory

```
du
```

- `mount` - mount a file system

```
sudo mount /dev/sdb1 /mnt/usb
```

- `umount` - unmount a file system

```
sudo umount /mnt/usb
```

- `date` - display or set the system date and time

```
date
```

- whoami - display the current user name

```
whoami
```

- which - locate a program or command in the system path

```
ls
```

- finger - displays all the information about user

```
finger harry
```

- uname - display system information

```
uname  
uname -a
```

- history - display a list of previously executed commands

```
history
```

- echo - display text or variables to the console

```
echo 'I need Tshirt from codeswear!'
```


- tee - redirect output to both a file and the console

```
$ ls | tee file.txt
```

- locate - locate any file on the system

```
locate file.txt
```

- sort - sort lines of text in a file or input

```
cat file.txt  
banana  
orange  
apple  
sort file.txt  
apple  
banana  
orange
```

- uniq - remove duplicate lines from a file or input

```
cat file.txt  
apple  
orange  
banana  
apple  
banana  
uniq file.txt  
apple
```

```
orange  
banana
```

Copy

- head/tail - display the first/last few lines of a file or input

```
#display first 10 lines  
head file.txt
```

```
#display last 10 lines  
tail file.txt
```