

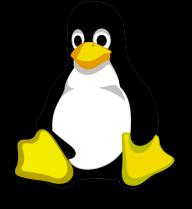
# LINUX 100+ COMMANDS

```
require File, expond gents

coort("The Roils surfaces to state to
```

## Get Ready with your Linux Setup for Practise





### How to check your current location?

#pwd





### How to display name of current logged-in user?







### How to check system date or time?



#date

#date %D

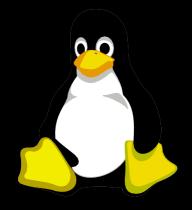


### How to display files and directory present in current location?



#1s

ls -lt



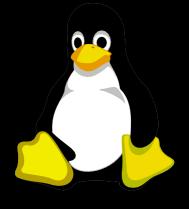
#### How to clear the linux terminal?

#clear



# Creating Deleting Editing.





### How to display content of a file on terminal?

#cat <file>





### How to read a file and Search for a word?

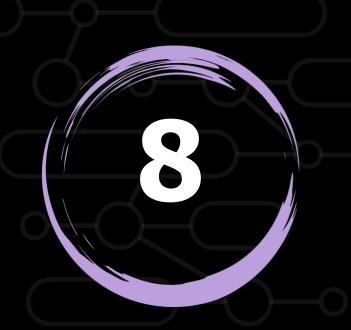
#less <file>





### How to view content of a file page by page?

#more <file>





#### How to create a file in Linux?

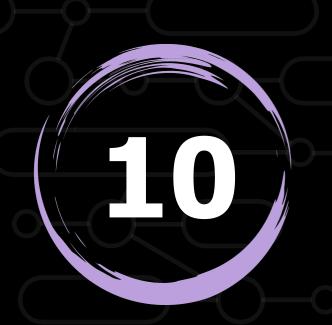
#touch <file name>

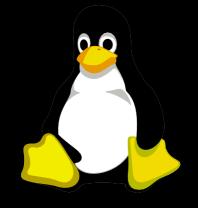




#### How to delete a file in Linux?

```
#rm <file name>
```





#### How to edit a file in Linux?

```
#vi <file name>
        #nano <file name>
11,12
```



### How to create a directory/folder in Linux?

```
#mkdir <dir_name>
```





### How to delete a directory/folder in Linux?

```
#rmdir <dir_name>

14,15
#rm -rf <dir_name>
```



#### How to change path or move to another folder in Linux?

```
#cd /path/folder
#cd ..
```



### How to copy and paste a file from one folder to another in Linux?

```
#cp <file> /dest/path
```

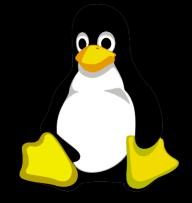




### How to copy content of a file to another file in Linux?

#cp fileA fileB

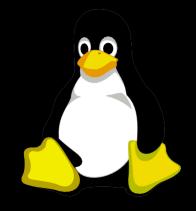




#### How to cut - paste a file from one folder to another in Linux?

```
#mv <file> /dest/path
```

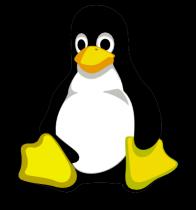




#### How to rename a file in Linux?

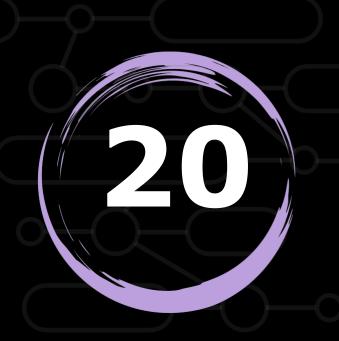
#mv fileA fileNewName

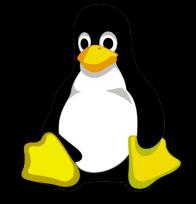




#### How to read or diplay top 5 lines from a file in Linux?

#head -5 file

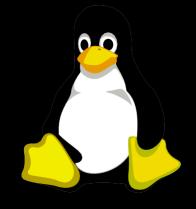




#### How to read or diplay bottom 5 lines from a file in Linux?

#tail -5 file



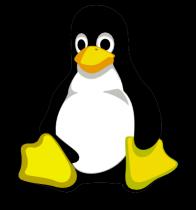


### How to SORT the content from a file in Linux?

```
#sort file
```

```
22
```

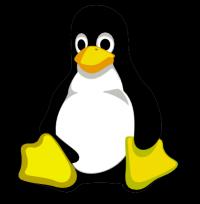
#sort -r file



### How to display UNIQUE content from a file in Linux?

#sort file | uniq





# A file has 9 lines. How to split this file in 3 different files in Linux?



#split -1 3 file



# How to search a word and display matching content from a file in Linux?

#grep "word" file

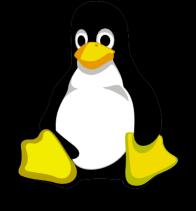




# How to search multiple words and display matching content from a file in Linux?

#egrep "word1 | word2" file





### How to use WILDCARDS in Linux? \* [] {}

```
#ls file*
#touch file{1..5}
```

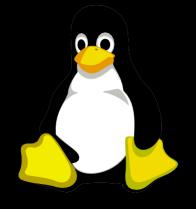




### How to SHUFFLE content of file in Linux?

#shuf file





### How to COUNT no. of lines in a file in Linux?

```
29
```

#wc -1 file



### How to check if two files are identical or not in Linux?

#cmp fileA fileB

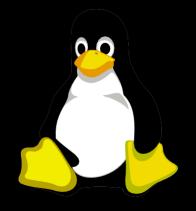




# How to compare and display difference between two files in Linux?

```
#diff -u fileA fileB
```

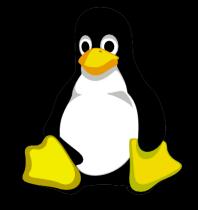




#### How to find a file in Linux?

#find /path/ -name <file>





#### How to find a file in Linux?

#updatedb

#locate <file>



#### Utility Commands



## How to display previously used commands in past?

#history

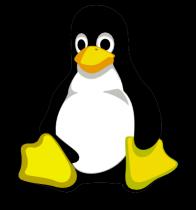




### How to check syntax and options available for a command?

#help





### How to read or get mor info about a command?

#man

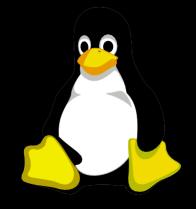




# How to check which executable is using for a command?

#which





### How to use calculator in Linux?

#### #bc

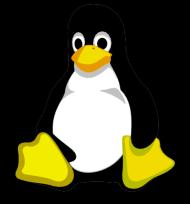




# How to check CALENDAR of last year in Linux?

#cal





# How to check How Long server has been running in Linux?

#uptime





### How to record your activity on termial in a file?

#script



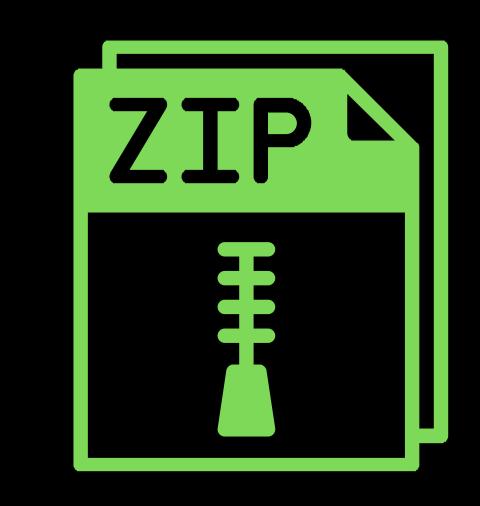


# How to create a short-cut of a long command in Linux?

#alias l="ls -ltr"



# Zip and Unzip of Files and Folders





### How to compress a file in Linux?

#gzip -k file

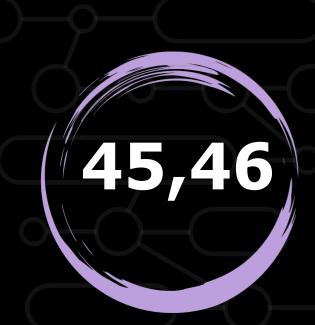




### How to decompress a file in Linux?

#gzip -d file

#gunzip file



### How to compress a folder in Linux?

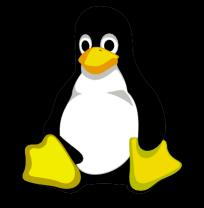
#tar -czf myfiles.tar.gz myfiles/



## How to decompress a folder in Linux?

#tar -xzf myfiles.tar.gz

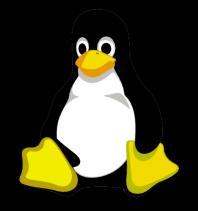




#### How to compress multiple files in one zipped file in Linux?

#zip myfiles.zip file1 file2



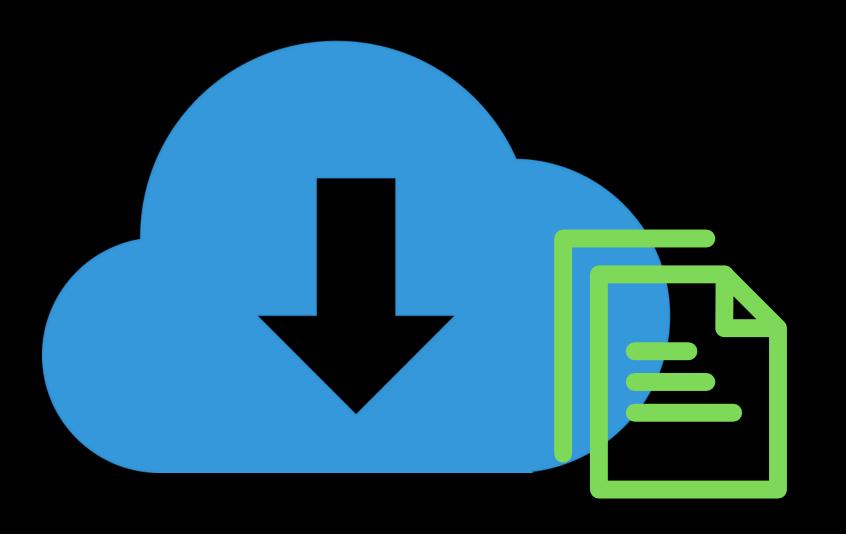


### How to list files in zipped file?

#unzip -1 myfiles.zip



# Downloading Files from Internet





### How to download a file from internet?

```
#wget URL_of_file

#wget -O opt_file.txt URL_Of_file
```

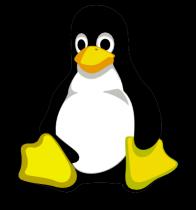




### How to call an API on Linux?

#curl http://numbersapi.com/random





### How to install an application on Linux?

#apt or yum/dnf

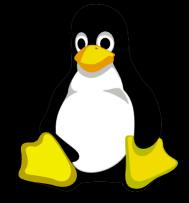




### How to check if an application is installed or not on Linux?

```
#rpm -qa | grep app
#dnf list installed
```





#### How to list available packages to install on Linux?

```
#apt search <package name>
```

#yum/dnf list available

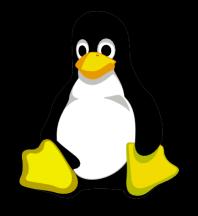




# How to start/stop a service on Linux?

#systemctl start/stop service\_name





### How to list all services on Linux?

#systemctl list-units --type=service --all

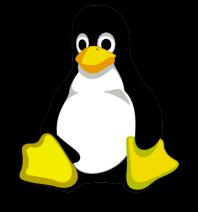




### How to list all existing Environment Variables on Linux?

#### #printenv

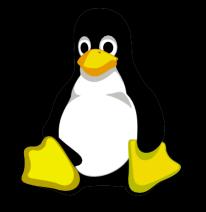




### How to ADD a new Environment Variables on Linux?

```
#export JAVA_HOME="/usr/lib/jvm/java_v"
#export PATH=$JAVA_HOME/bin:$PATH
```





### How to ADD a new Environment Variables permanently on Linux?

Add env variable in ./bashrc file

#source ~/.bash profile



### How to print a specific column from a CSV file?

```
#awk -F , '{print $2}' file.csv
```





### How to display starting two characters of all line?

#cut -c1-2 file.txt



### How to display a specific line from a file?

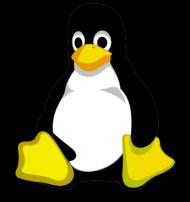
```
#sed -n '5p' file.txt
```



### How to replace a specific word within a file?

#sed -n 's/from/to/g' file.txt





# How to convert the content to Uppercase or Lowercase within a file?

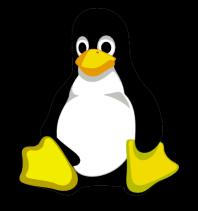
```
#tr [:lower:] [:upper:] <file.txt
#tr [:punct:] Z <file.txt
#tr [:digit:] Z <file.txt</pre>
```



# How to extend or shrink size of a file?

#truncate -s 100M file.txt





### How to display following line in vertical line? ABCDE

#echo "ABCDE" | fold -w1





### How to change user or login as different user in linux?

```
#su <user_name>
```





### How to exit as current user or close terminal in linux?

#exit





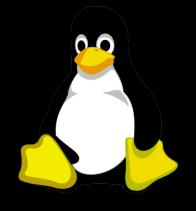
# If you are not root user, how to execute admin commands like installing new apps?

#sudo yum install httpd



# Access Remote Servers

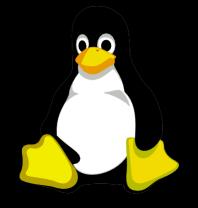




## How to access remote Linux server?

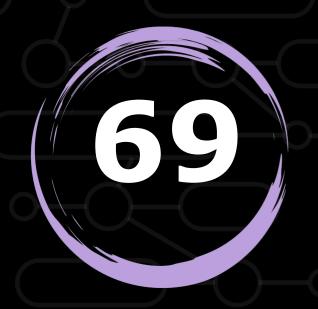
#ssh user@hostname





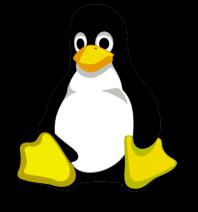
### How to copy a file to a remote Linux server?

#scp file user@hostname:/tmp/



### Working with Permissions





## How to check permissions of a file?

#1s -1tr

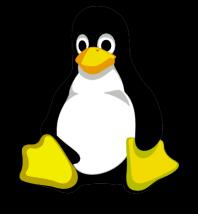


### How to modify permissions of a file?

#chmod a+rwx file.txt

```
u - user, g - group, o - other
```

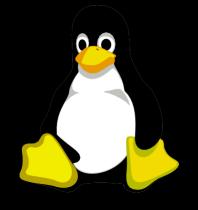
a - all



## How to change ownership of a file?

#chown root file.txt





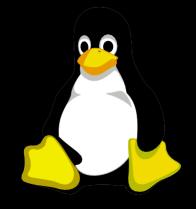
## How to change group ownership of a file?

#chgrp paul file.txt



### Memory Info

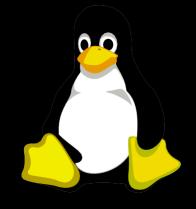




### How to check free RAM space?

### #free





## How to check % Memory and CPU Utilization?

#top





### How to check disk Utilization?

### #du



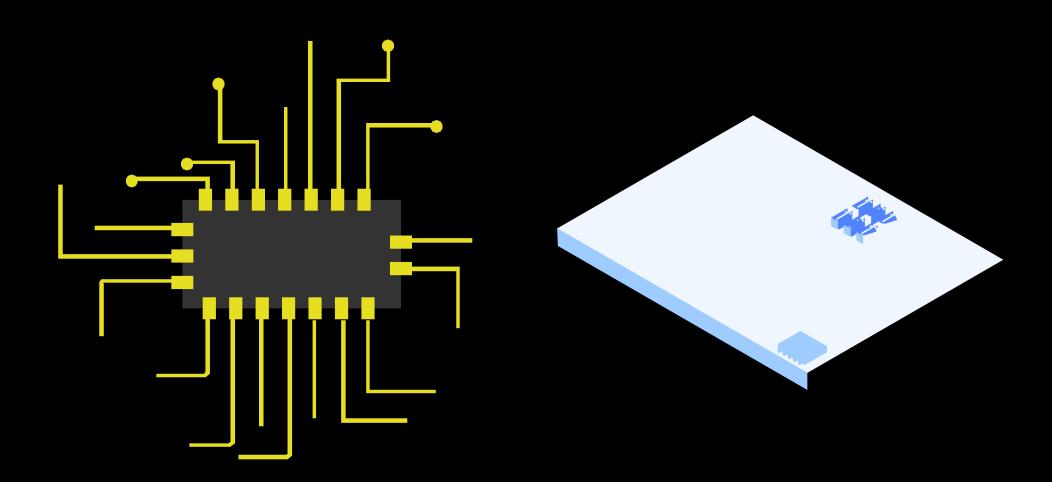


## How to check filesystem available and disk space allocated?

#df



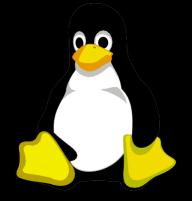
### System INFO





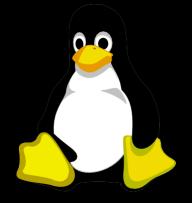
### How to check hostname of your linux server?

#hostname



## How to check cpu/core/thread info of your linux server?

#1scpu



## How to check type of architecture of your linux server?

#arch



## How to see list of storage devices, disk partition on your linux server?

#1sb1k

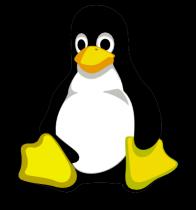
80



### How to see OS name of linux server?

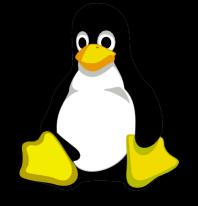
#uname -a

### Process Management



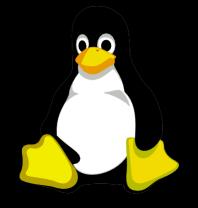
### How to check if a process(java) is running or not?

```
#ps -ef | grep java
```



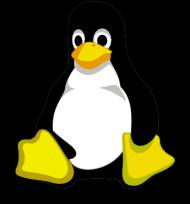
### How to get PID of a process?

#pgrep chron



### How to stop a process by PID?

#kill -9 PID



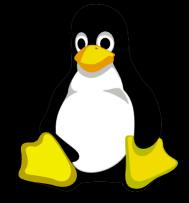
## How to stop a process by its name?

#pkill httpd



### How to see all the active jobs?

#jobs



## How to resume a job in background?

#bg



## How to resume a job in foreground?

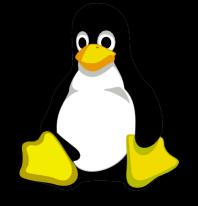
#fg

88

### How to run a script in background?

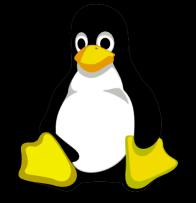
```
#nohup ./script >/dev/null &
```

### Networking Info



### How to check IP of your machine?

#ifconfig



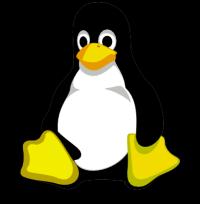
### How to check if a server or website is accesible or not?

#ping www.google.com



#### How to check if a IP:PORT is accessible and open or not?

#telnet IP Port



### How to check if port is open or not on our server?

```
#netstat -putan | grep 80
```



## How to check all hubs in network path to reach a website?

#traceroute

94



### How to restart our linux server?

#reboot



# How to shutdown our linux server?

#shutdown

#### User Creation

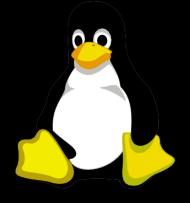






# How to create a new user on our linux server?

#useradd



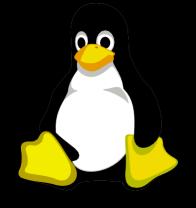
## How to change password for the user?

#passwd



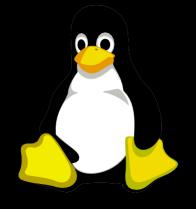
## How to create a new group on our linux server?

#groupadd



# How to check UserID or GroupID of a user?

#id user



#### How to delete a user or group?

```
#userdel <user>
#groupdel <group>
```

101,2



# How to schedule a script to run on a particular date/time?

```
#at
```

#crontab

103,4

### THANK YOU!



#### useradd

- groupadd usermod
- userdel
- groupdel
- passwdid



- ifconfig
- ping
  netstat
- traceroute
- telnet

#### PROCESS MANAGEMENT

- sleep
- ps
- pgrep
- kill
- pkill
- jobs
- bg
- fg
- nohup

#### SYSTEM INFO

hostname

lscpu

• arch

lsblk

uname -a

#### MEMORY INFO

- topfree
- du
- df

# CHANGE USER & REMOTE SERVER ACCESS

- sudo
- exit
- ssh
- scp



chmod

- chown
- chgrp



- awk
- cut
- sed
- tr
- truncate
- fold



- printenvexport
- source

# INSTALL & MANAGE APPLICATIONS

- apt or yum/dnf
- dpkg or rpm
- systemctl

#### DOWNLOAD FILES

wget

• curl

#### COMPRESS DECOMPRESS

- tar gzip
- gunzip
- zip
- unzip

# OTHER USEFUL COMMANDS

- history
  - help
- man
- which
  - bc

- cal
- script
- uptime
- alias



- shuf
- WC
- diff
- cmp
- find
- locate



- cd
- cp
- mv
- grep
- egrep

head

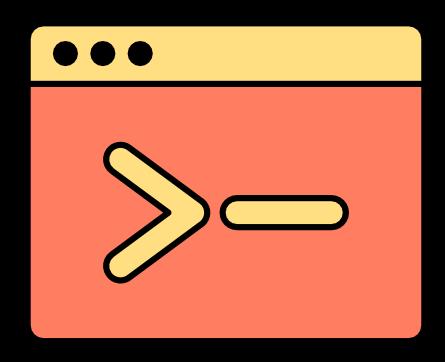
- tail
- sort
- uniq
- split

# FILES & DIRECTORIES MANAGEMENT

- cat
- less
- more
- touch
- rm

- vi
- nano
- mkdir
- rmdir

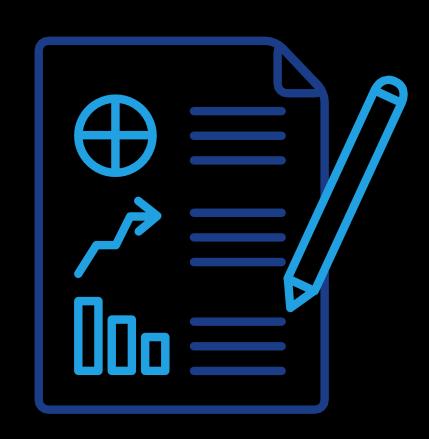
# Some Useful Utility Commands



#### Installing Applications

#### Environment Variables

#### String/Text Operations



#### Working with Permissions





# Scripting and Automating task

# SCRIPTING & AUTOMATION

at

- crontab
- bash or sh



#### reboot

shutdown

# FIREWALL SETTINGS

- firewall-cmd --list-all
- firewall-cmd --add-port=20201/tcp