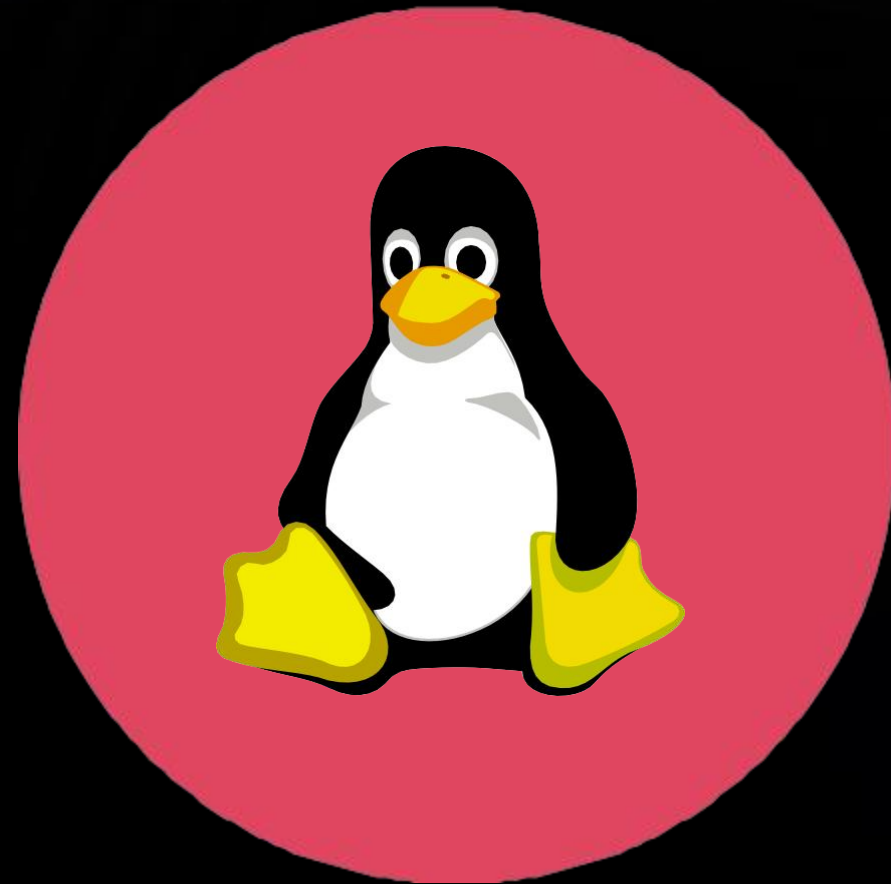
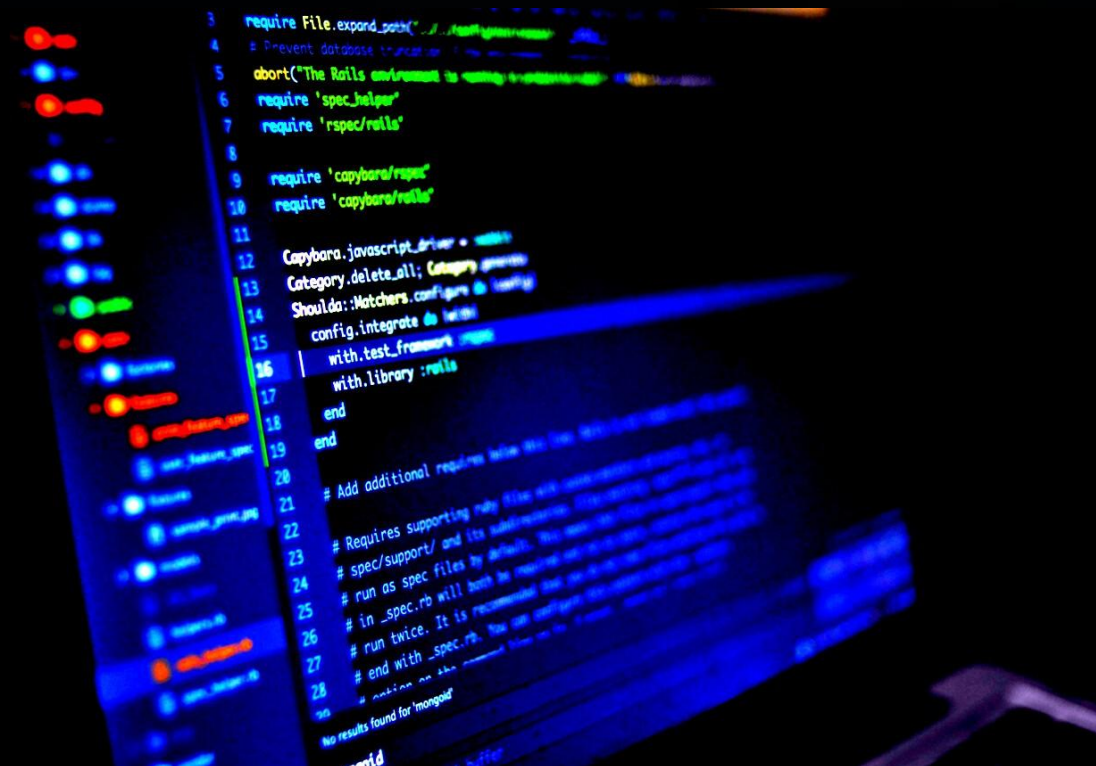


Ashish



# LINUX COMMANDS



# Get Ready with your Linux Setup for Practise

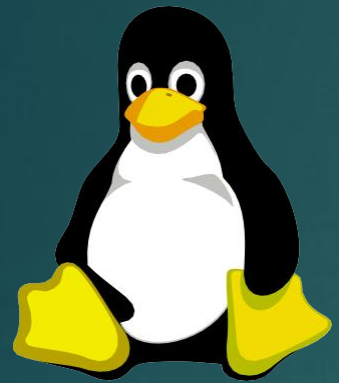




# How to check your current location?

#pwd

1

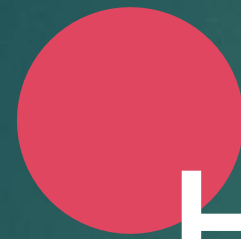


How to display name of current  
logged-in user?

#whoami

2





# How to check system date or time?

```
#date
```

```
#date %D
```

3



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

```
#ls
```

```
#ls -lt
```



# How to clear the linux terminal?

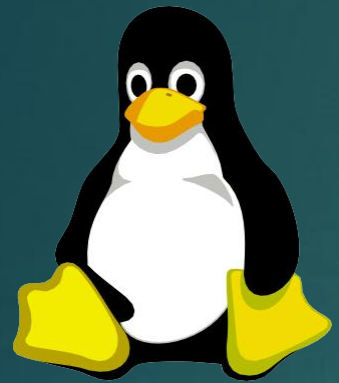
```
#clear
```

5

Creating  
Deleting  
Editing.



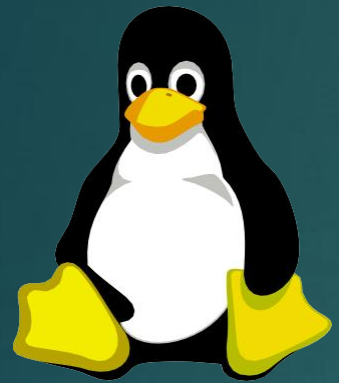




# How to display content of a file on terminal?

```
#cat <file>
```

6



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

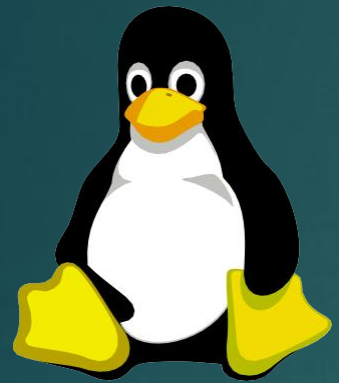
```
#less <file>
```

7



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

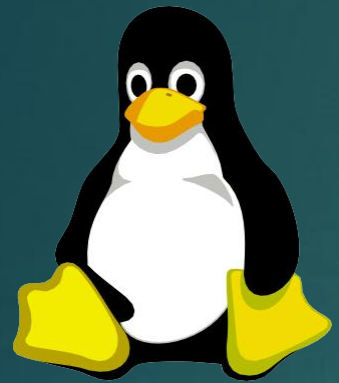
```
#more <file>
```



# 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>
```

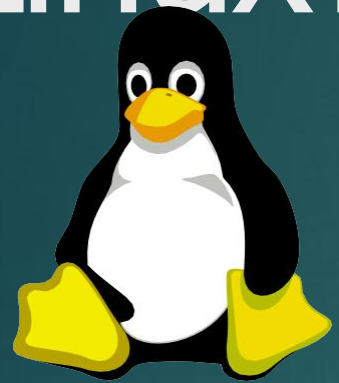
11,12



# How to create a directory/folder in Linux?

```
#mkdir <dir_name>
```

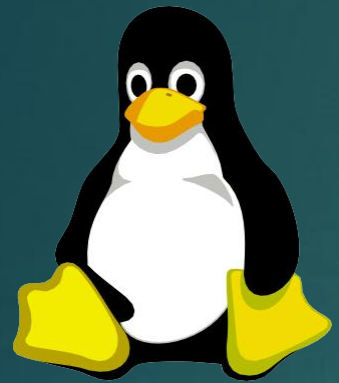
# How to delete a directory/folder in Linux?



```
#rmdir <dir_name>
```

```
#rm -rf <dir_name>
```

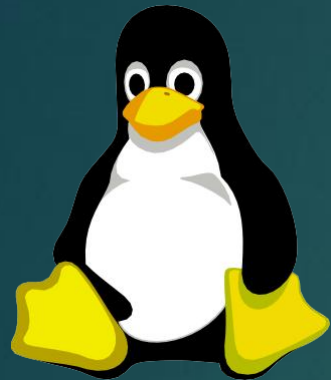




# How to change path or move to another folder in Linux?

```
#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?

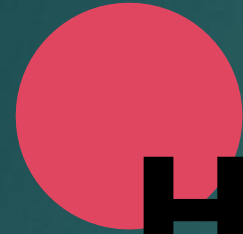
```
#mv <file> /dest/path
```





# How to rename a file in Linux?

```
#mv fileA fileNewName
```



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

```
#head -5 file
```





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

```
#tail -5 file
```





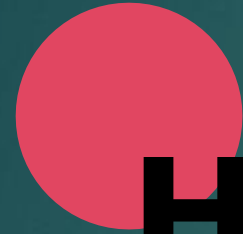
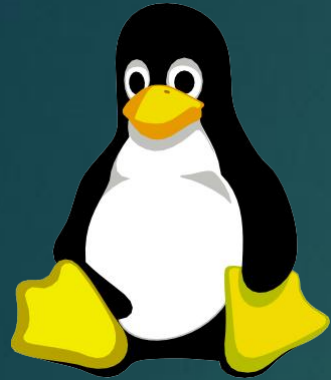
# How to SORT the content from a file in Linux?

```
#sort file
```

```
#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
```

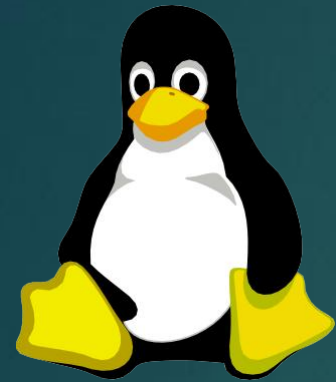




# How to search a word and display matching content from a file in Linux?

```
#grep "word" file
```



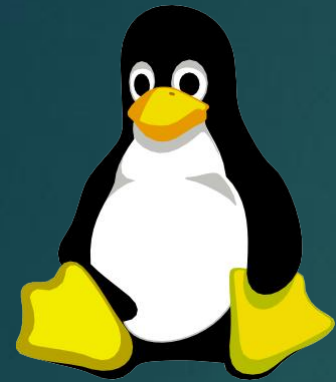


# How to search multiple words and display matching content from a file in Linux?

```
#egrep "word1|word2" file
```







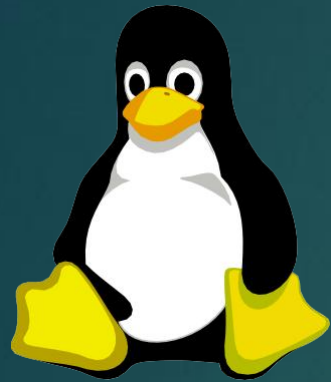
# How to use WILDCARDS in Linux?

\*[]{}

```
#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?

```
#wc -l file
```



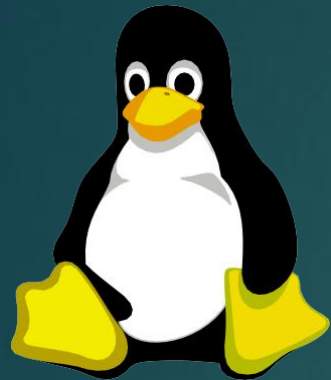


# How to check if two files are identical or not in Linux?

```
#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?

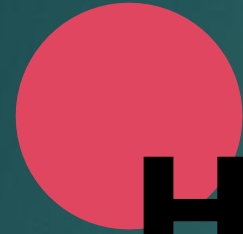
```
#updatedb
```

```
#locate <file>
```

33,34

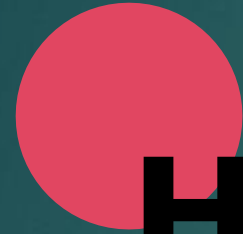
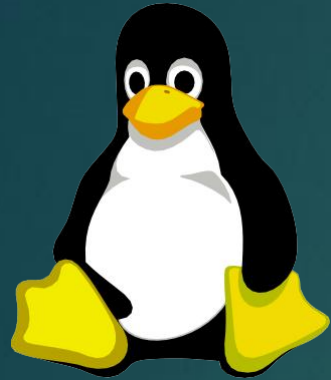
# Utility Commands





# How to display previously used commands in past?

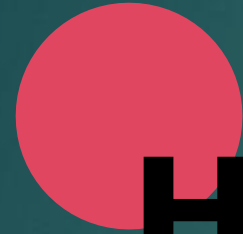
```
#history
```



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

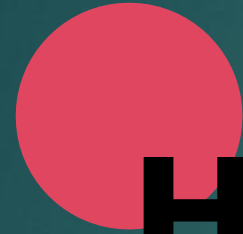
#help

36



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

#man



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

`#which`

38

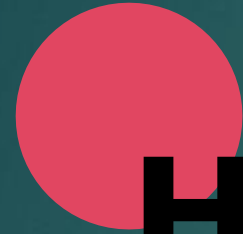




# How to use calculator in Linux?

#bc

39



# How to check CALENDAR of last year in Linux?

```
#cal
```

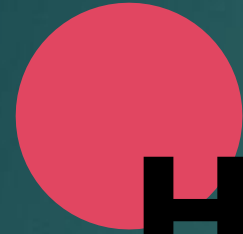
40



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

```
#uptime
```

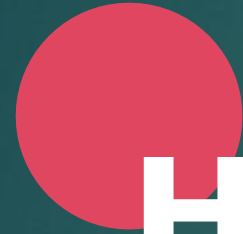
41



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

```
#script
```

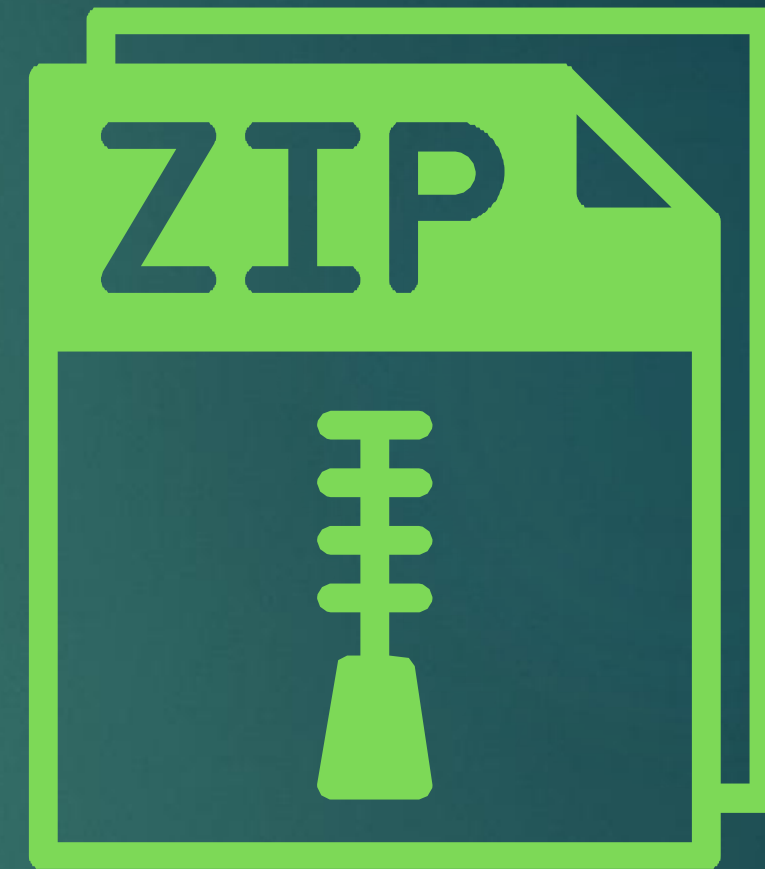




# How to create a short-cut of a long command in Linux?

```
#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
```

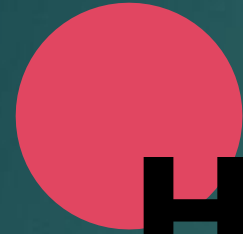
45,46





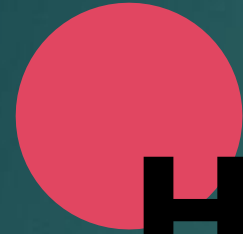
# How to compress a folder in Linux?

```
#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
```

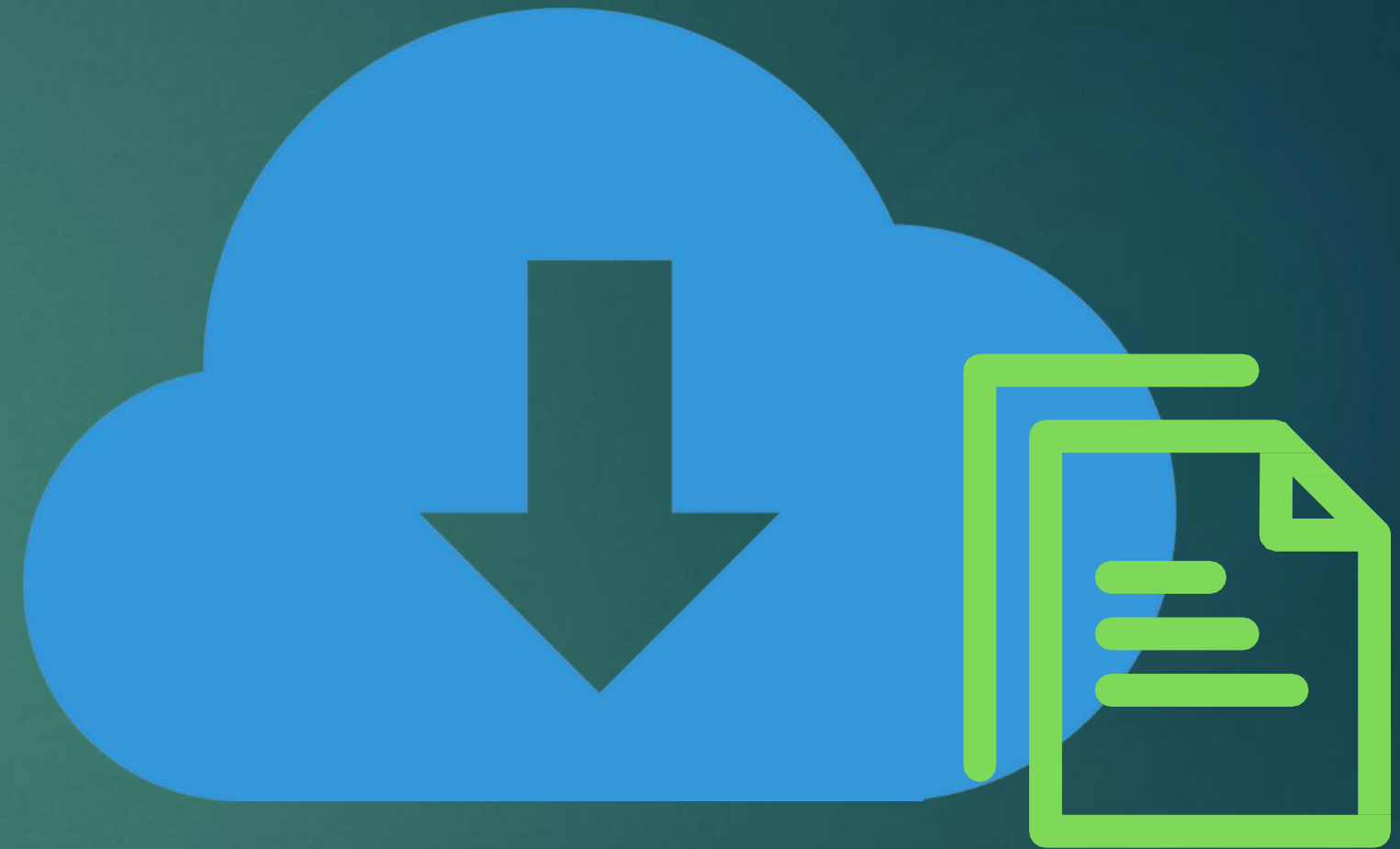


# How to list files in zipped file?

```
#unzip -l myfiles.zip
```



# Downloading Files from Internet





# Howto 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
```

50



# 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`

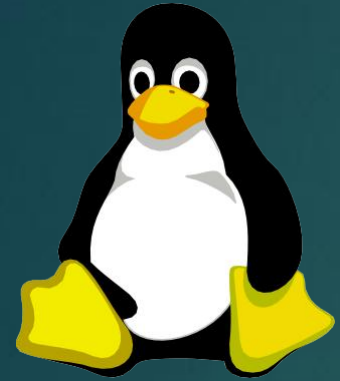
`<package_name> #yum/dnf`

`list available`



# How to start/stop a service on Linux?

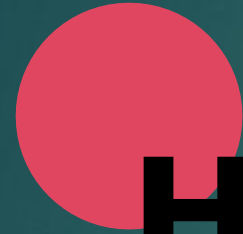
```
#systemctl start/stop service_name
```



# How to list all services on Linux?

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





# How to list all existing Environment Variables on Linux?

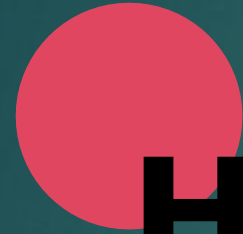
```
#printenv
```



# How to ADD a new Environment Variables on Linux?

```
#export JAVA_HOME="/usr/lib/jvm/java_v"
```

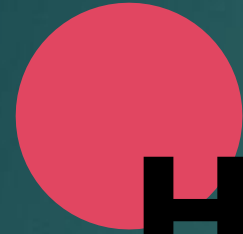
```
#export PATH=$JAVA_HOME/bin:$PATH
```



# Howto ADD a new Environment Variables permanently on Linux?

Add env variable in `./bashrc` file

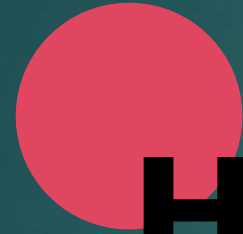
```
#source ~/.bash_profile
```



# 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?

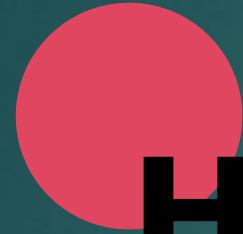
```
#cut -c1-2 file.txt
```

60



# 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
```

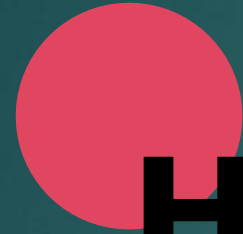
```
#tr [:punct:] Z <file.txt
```

```
#tr [:digit:] Z <file.txt
```

6

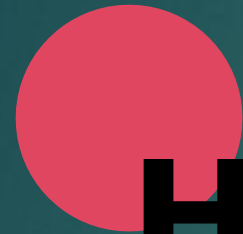
2





# 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>
```

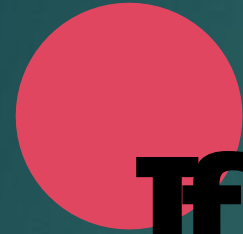


# How to exit as current user or close terminal in linux?

`#exit`

66





**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/
```

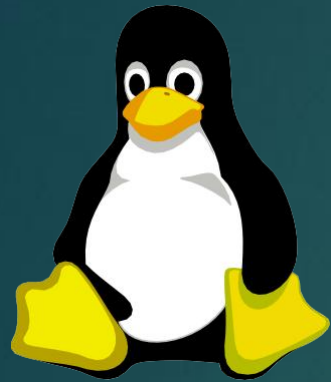


# Working with Permissions



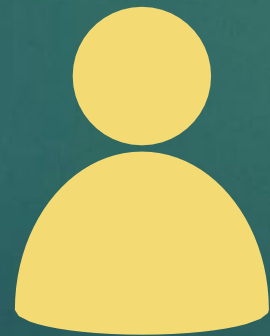
Ashish

# How to check permissions of a file?



```
#ls -ltr
```

```
rw- rw- r--
```



**user**

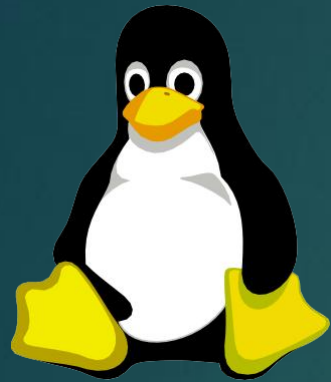


**group**



**other**

# How to modify permissions of a file?



```
#chmod a+rwx file.txt
```

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

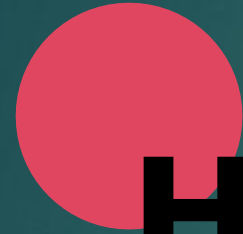
```
a - all
```



# How to change ownership of a file?

```
#chown root file.txt
```





# How to change group ownership of a file?

```
#chgrp paul file.txt
```

# Memory hfo





# How to check free RAM space?

```
#free
```

73



# How to check %Memory and CPU Utilization?

#top

74

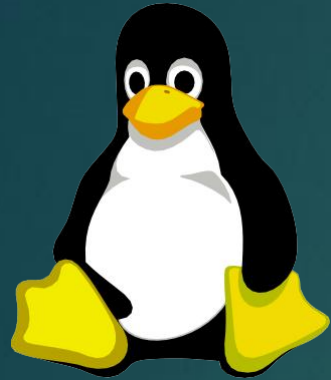




# How to check disk Utilization?

#du

75

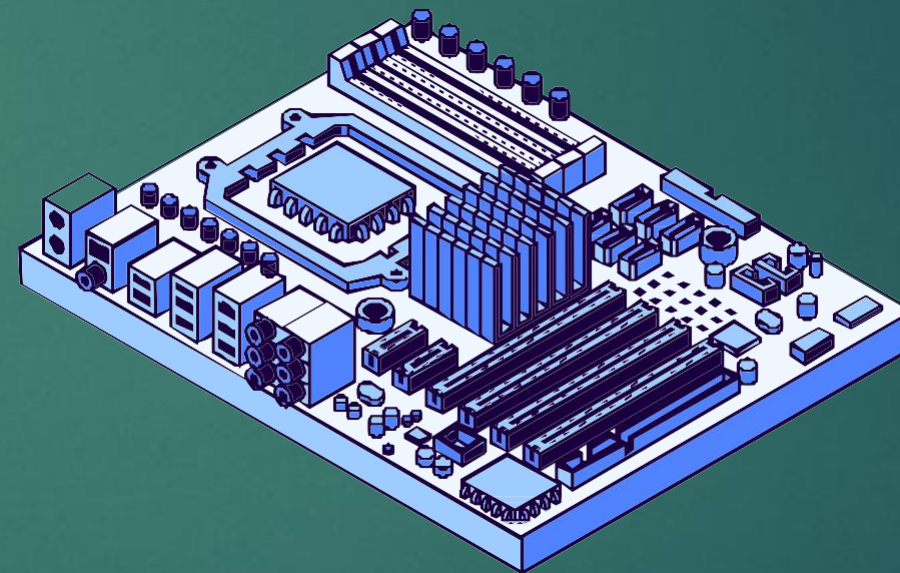
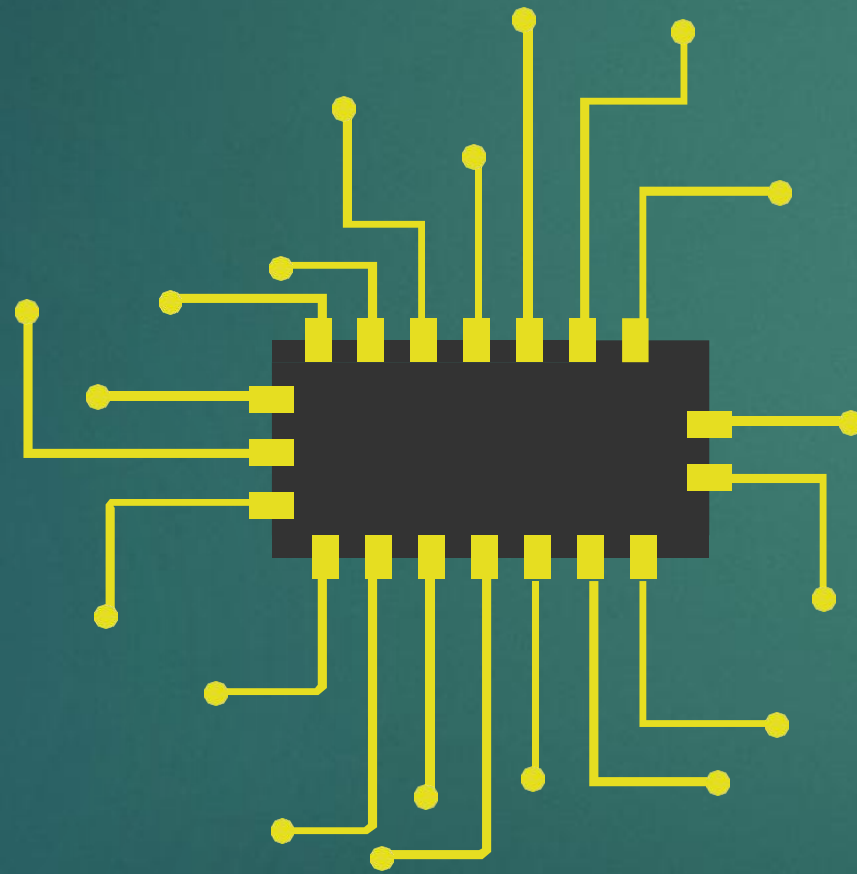


# How to check filesystem available and disk space allocated?

#df

76

# System INFO





# How to check hostname of your linux server?

#hostname

77





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

#1scpu

78



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

`#arch`



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

```
#lsblk
```

80



# How to see OS name of linux server?

```
#uname -a
```

81



# 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
```

83



# 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

86



# How to resume a job in background?

#bg

87



# 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
```

90



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

```
#ping www.google.com
```





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

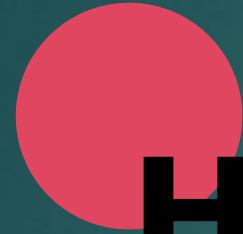
```
#telnet IP Port
```

92



# 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`

96

# User Creation





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

`#useradd`



# How to change password for the user?

#passwd

98





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

`#groupadd`

99



# How to check UserID or GroupID of a user?

```
#id user
```

100



# 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!**

# USER MANAGEMENT

- `useradd`
- `groupadd`
- `usermod`
- `userdel`
- `groupdel`
- `passwd`
- `id`

# NETWORKING

- 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

- top
- free
- du
- df

# CHANGE USER & REMOTE SERVER ACCESS

- `su`
- `sudo`
- `exit`
- `ssh`
- `scp`

# FILE PERMISSIONS

- chmod
- chown
- chgrp



# TEXT PROCESSING

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

# ENV VARIABLES

- `printenv`
- `export`
- `source`

# INSTALL & MANAGE APPLICATIONS

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



Ashish

# DOWNLOAD FILES

- `wget`
- `curl`



# COMPRESS DECOMPRESS

- tar
- gzip
- gunzip
- zip
- unzip

# OTHER USEFUL COMMANDS

- `history`
- `help`
- `man`
- `which`
- `bc`
- `cal`
- `script`
- `uptime`
- `alias`



# FILES & DIRECTORIES MANAGEMENT

- shuf
- wc
- diff
- cmp
- find
- locate



# FILES & DIRECTORIES MANAGEMENT

- cd
- cp
- mv
- grep
- egrep
- head
- tail
- sort
- uniq
- split





# FILES & DIRECTORIES MANAGEMENT

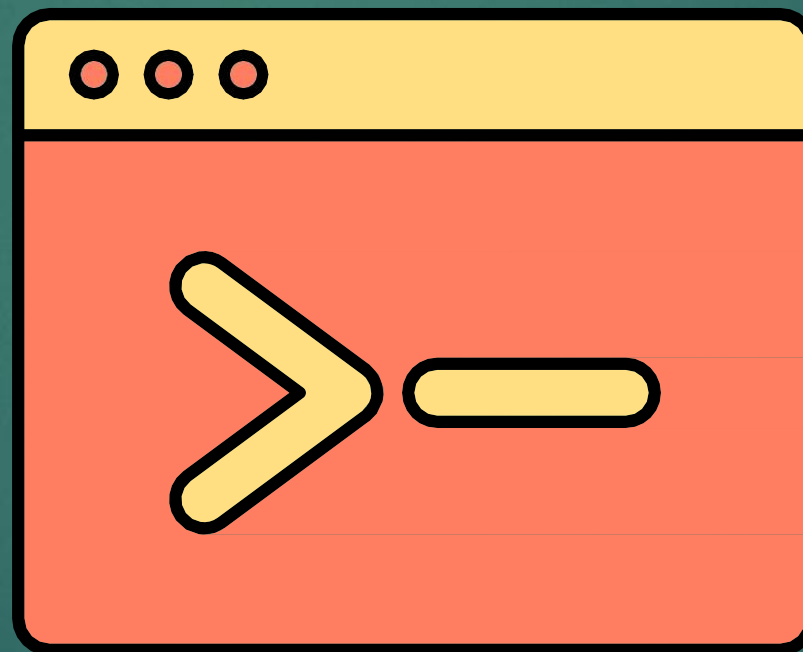
- `cat`
- `less`
- `more`
- `touch`
- `rm`
- `vi`
- `nano`
- `mkdir`
- `rmdir`

# FIRST TIME ON TERMINAL

- `pwd`
- `whoami`
- `date`
- `ls`
- `clear`



# 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

Ashish

# SYSTEM CONTROL

- reboot
- shutdown