LINUX
100+ COMMANDS

Get Ready with your Linux Setup for Practise
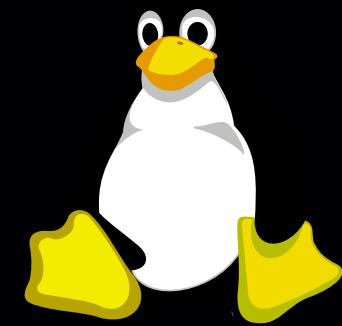
How to check your current location?

#pwd
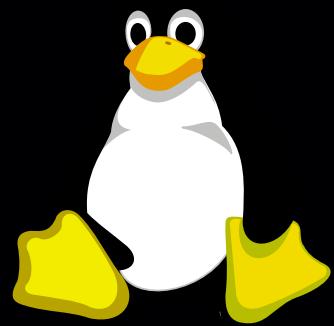
1

How to display name of current logged-in user?

#whoami

2
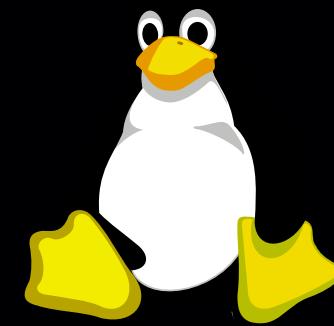
How to check system date or time?

#date

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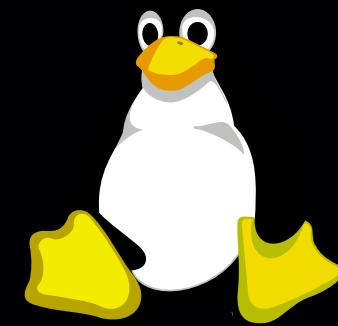
How to display files and directory present in current location?

```
#ls

#ls -lt
```

4
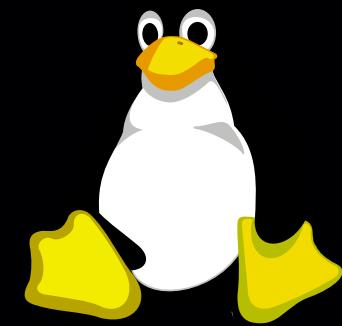
How to clear the linux terminal?

#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>
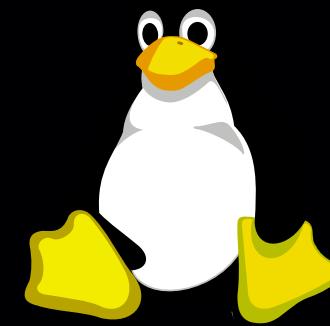
7

How to view content of a file page by page?

`#more <file>`

8

How to create a file in Linux?

#touch <file_name>
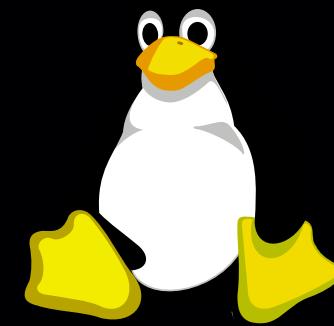
9

How to delete a file in Linux?

```
#rm <file_name>
```

10
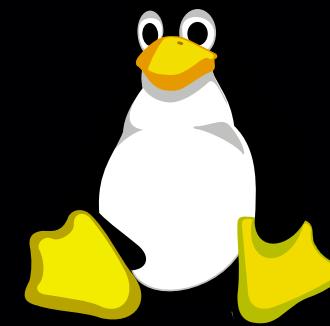
How to edit a file in Linux?

```
#vi <file_name>

#nano <file_name>
```
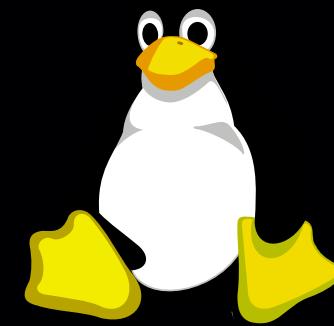
11,12

How to create a directory/folder in Linux?

```
#mkdir <dir_name>
```

13

How to delete a directory/folder in Linux?

```
#rmdir <dir_name>

#rm -rf <dir_name>
```

14,15
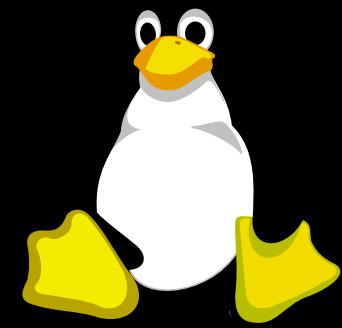
How to change path or move to another folder in Linux?

```
#cd /path/folder

#cd ..
```

16
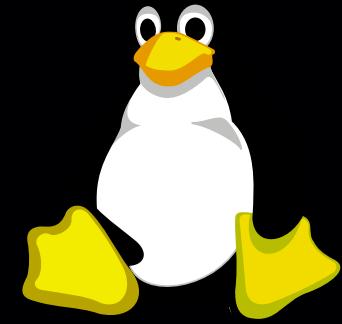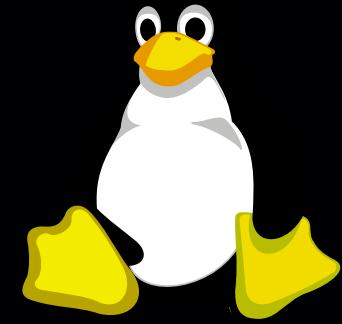
How to copy and paste a file from one folder to another in Linux?

`#cp <file> /dest/path`

17
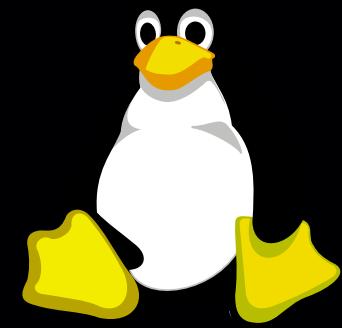
# How to copy content of a file to another file in Linux?

```
#cp fileA fileB
```

18

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

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

19

How to rename a file in Linux?

`#mv fileA fileNewName`

19

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

```
#head -5 file
```

20
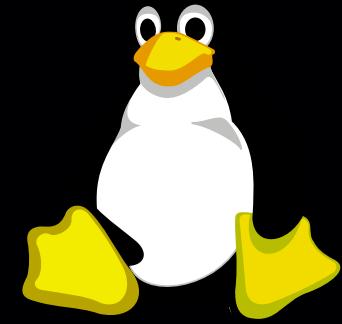
How to read or diplay bottom 5 lines from a file in Linux?

```
#tail -5 file
```

21

How to SORT the content from a file in Linux?

```
#sort file

#sort -r file
```

22

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

```
#sort file | uniq
```

23

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

`#split -l 3 file`

24
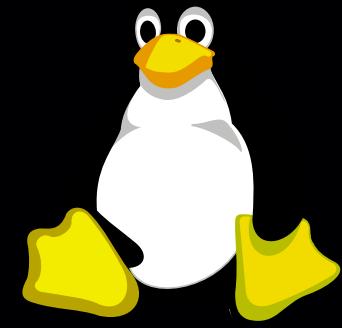
How to search a word and display matching content from a file in Linux?

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

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

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

26
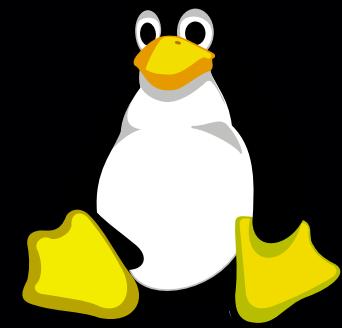
# How to use WILDCARDS in Linux? * [] {}

```
#ls file*

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

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How to SHUFFLE content of file in Linux?

```
#shuf file
```
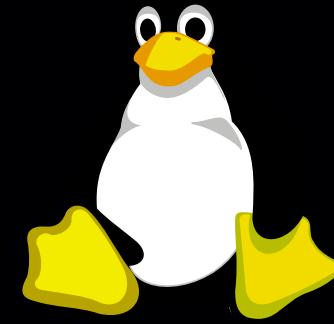
28

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

```
#wc -l file
```

29

How to check if two files are identical or not in Linux?
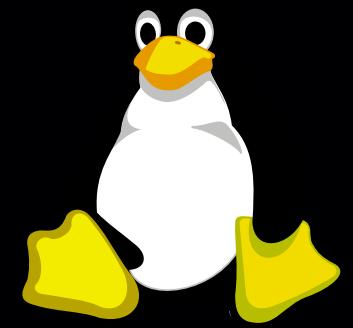
```
#cmp fileA fileB
```

30
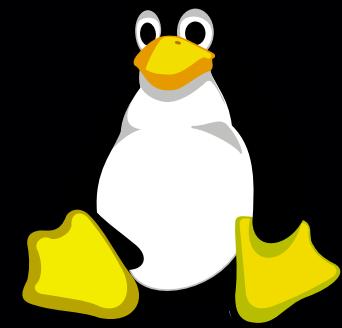
How to compare and display difference between two files in Linux?

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

31

# How to find a file in Linux?

```
#find /path/ -name <file>
```

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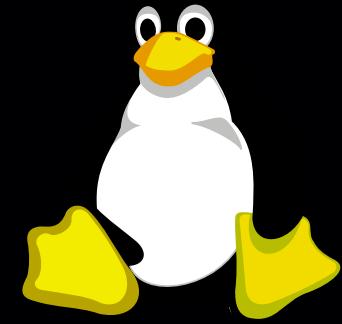
# How to find a file in Linux?

```
#updatedb

#locate <file>
```

33,34

Utility Commands

How to display previously used commands in past?

#history
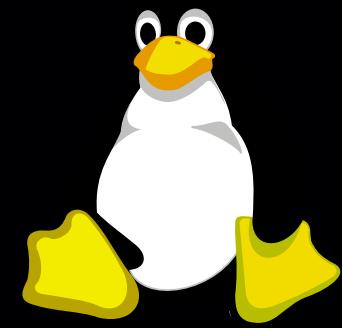
35

How to check syntax and options available for a command?

#help
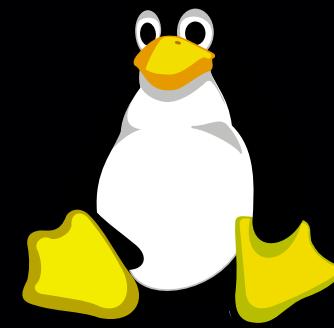
36

How to read or get mor info about a command?

#man

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

`#which`

38

How to use calculator in Linux?

#bc
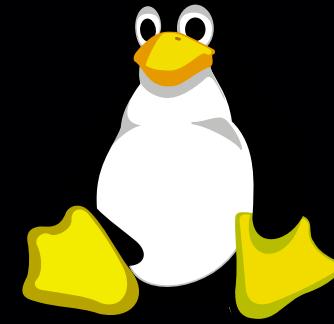
39

# How to check CALENDAR of last year in Linux?

#cal

40
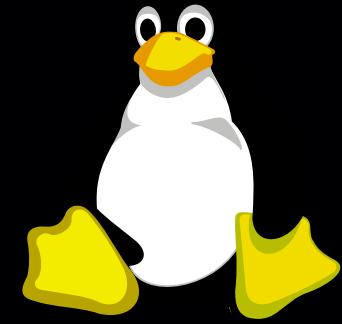
# How to check How Long server has been running in Linux?

`#uptime`

41
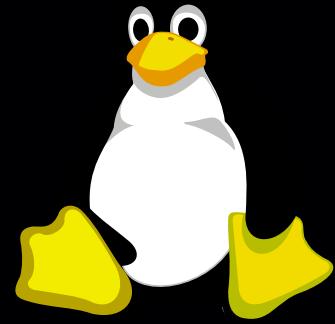
How to record your activity on termial in a file?

#script
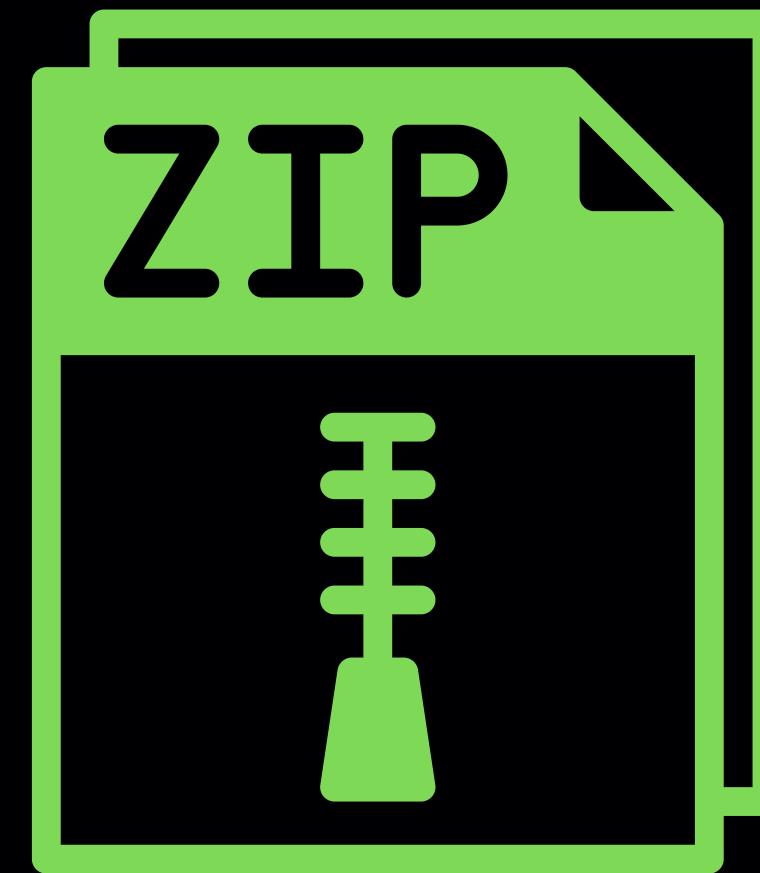
42
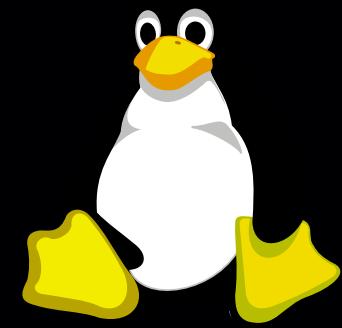
How to create a short-cut of a long command in Linux?

```
#alias l="ls -ltr"
```

43
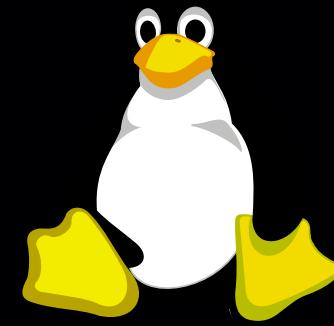
Zip and Unzip of Files and Folders

# How to compress a file in Linux?

```
#gzip -k file
```

44
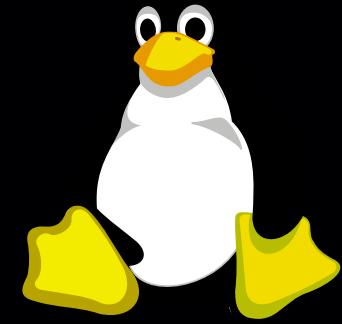
How to decompress a file in Linux?

```
#gzip -d file

#gunzip file
```

45,46
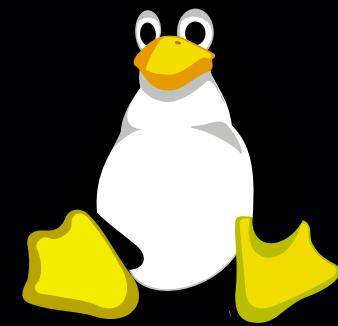
How to compress a folder in Linux?

```
#tar -czf myfiles.tar.gz myfiles/
```

47
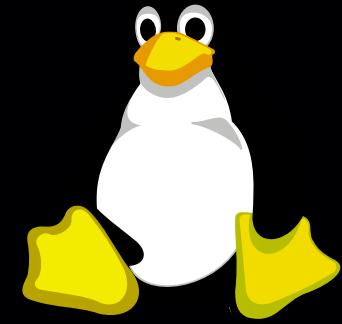
How to decompress a folder in Linux?

```
#tar -xzf myfiles.tar.gz
```

47

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

```
#zip myfiles.zip file1 file2
```

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How to list files in zipped file?

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

48

Downloading Files from Internet
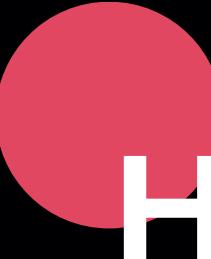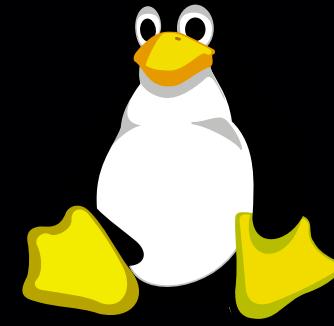
# How to download a file from internet?
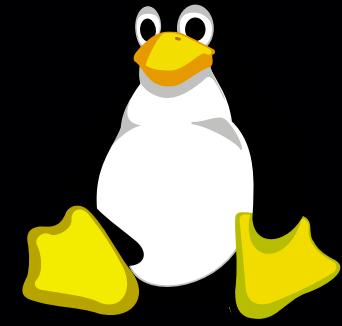
```
#wget URL_of_file

#wget -O opt_file.txt URL_Of_file
```

49

How to call an API on Linux?

```
#curl http://numbersapi.com/random
```

50

# How to install an application on Linux?

```
#apt or yum/dnf
```

51

How to check if an application is installed or not on Linux?
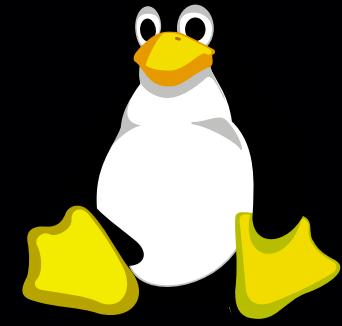
```
#rpm -qa | grep app

#dnf list installed
```

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How to list available packages to install on Linux?

```
#apt search <package_name>

#yum/dnf list available
```

53
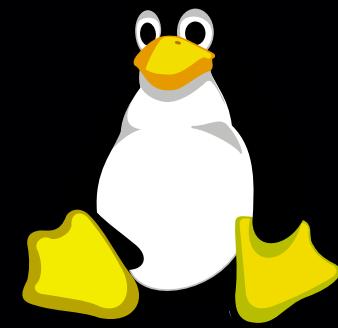
How to start/stop a service on Linux?

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

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How to list all services on Linux?

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

55
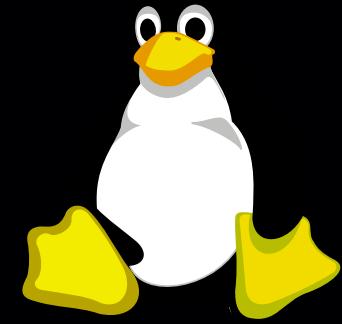
How to list all existing Environment Variables on Linux?

#printenv

56

# How to ADD a new Environment Variables on Linux?

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

#export PATH=$JAVA_HOME/bin:$PATH
```
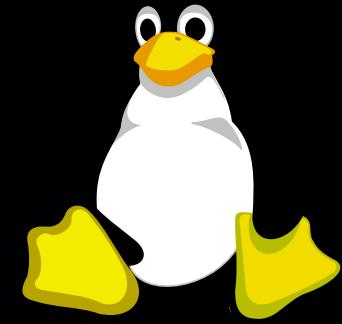
57

How to ADD a new Environment Variables permanently on Linux?
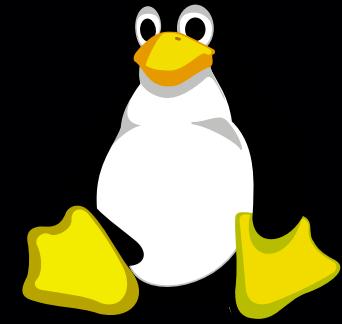
Add env variable in ./bashrc file

#source ~/.bash_profile

58

How to print a specific column from a CSV file?

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

59

# How to display starting two characters of all line?

```
#cut -c1-2 file.txt
```
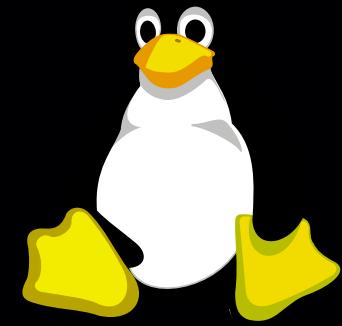
60

How to display a specific line from a file?

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

61

How to replace a specific word within a file?

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

61

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
```

62
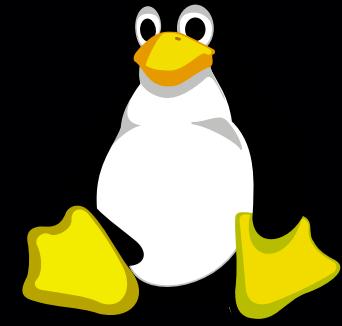
How to extend or shrink size of a file?

`#truncate -s 100M file.txt`
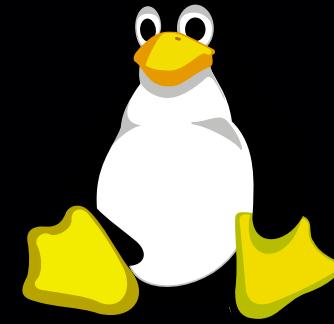
63

How to display following line in vertical line? ABCDE
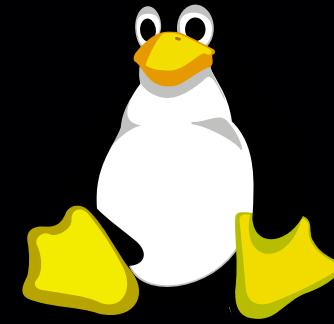
```
#echo "ABCDE" | fold -w1
```

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

```
#su <user_name>
```

65

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

#exit

66
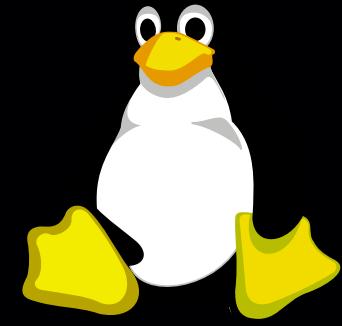
If you are not root user, how to execute admin commands like installing new apps?

```
#sudo yum install httpd
```

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Access
Remote
Servers
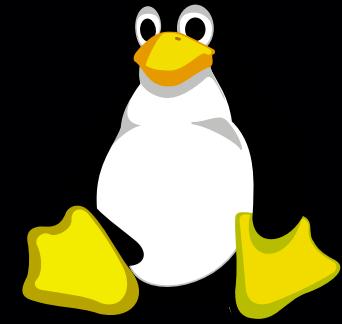
How to access remote Linux server?

`#ssh user@hostname`
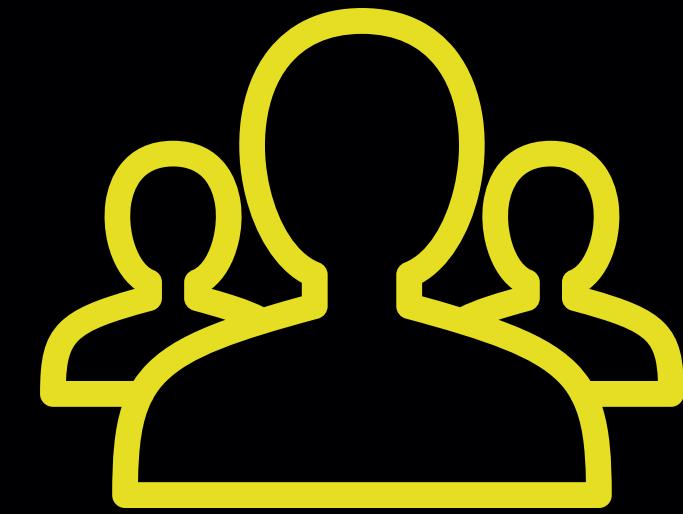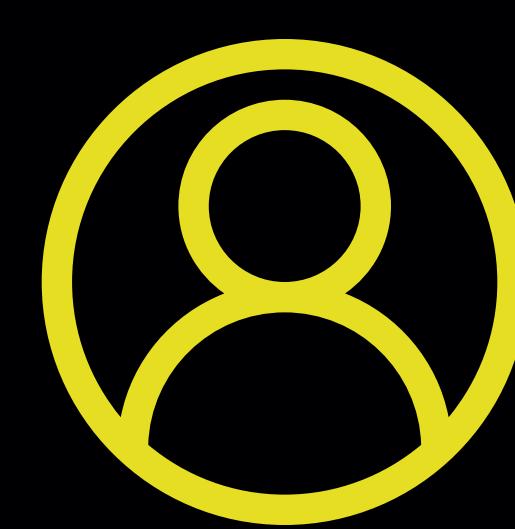
68

How to copy a file to a remote Linux server?

```
#scp file user@hostname:/tmp/
```

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Working with Permissions
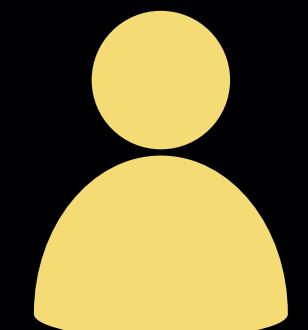
How to check permissions of a file?

`#ls -ltr`
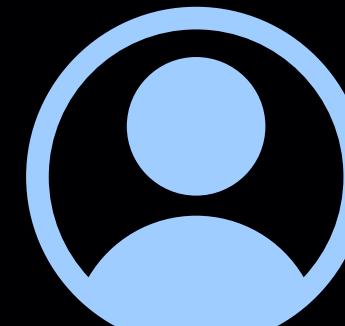
`rwx` `rw-` `r--`
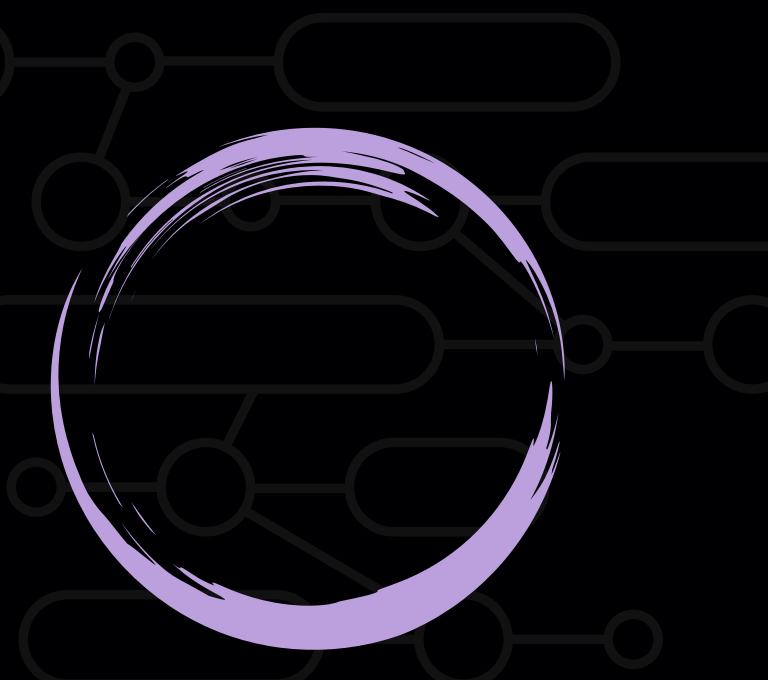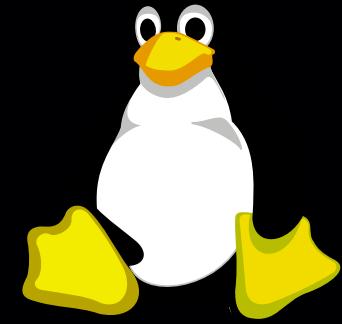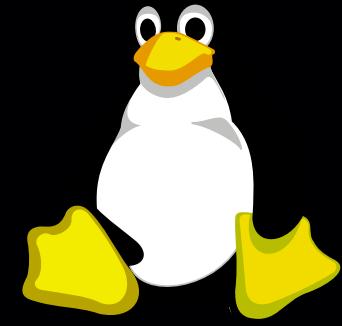
user   group   other

How to modify permissions of a file?

```
#chmod a+rwx file.txt

u - user, g - group, o - other

a - all
```
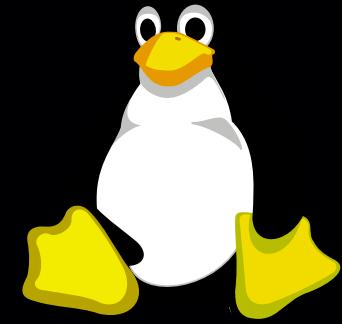
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How to change ownership of a file?

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

71
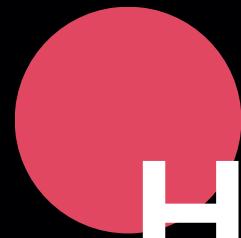
How to change group ownership of a file?

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

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Memory Info
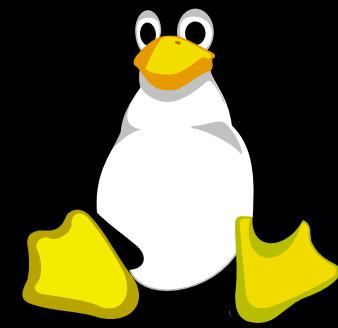
How to check free RAM space?

#free

73
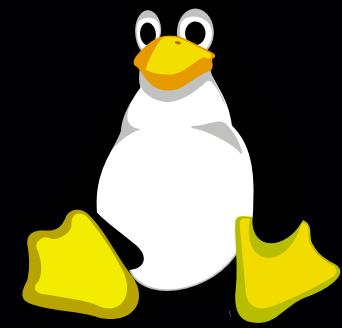
How to check % Memory and CPU Utilization?
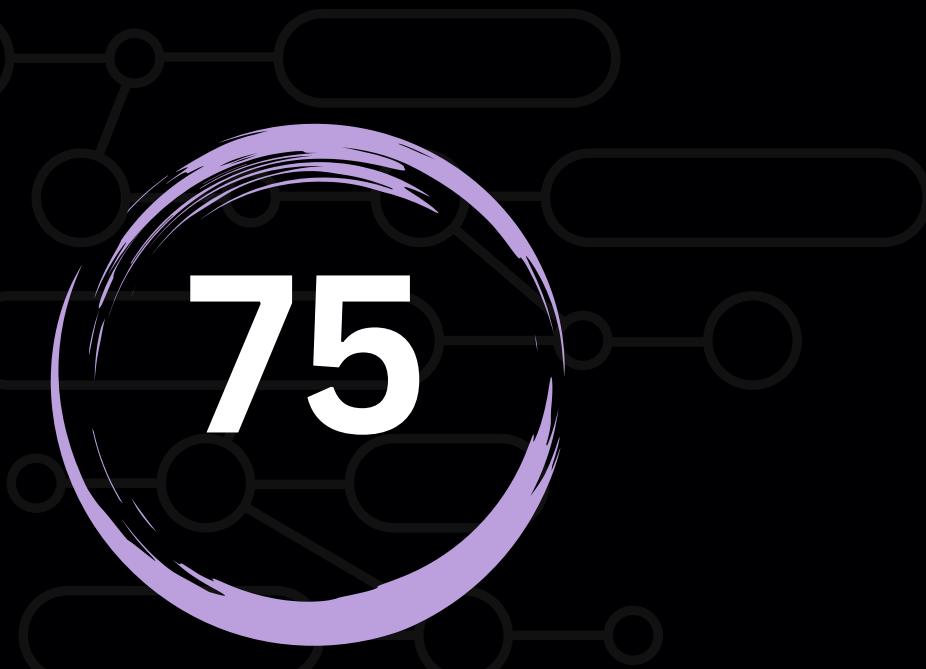
#top

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How to check disk Utilization?

#du

75
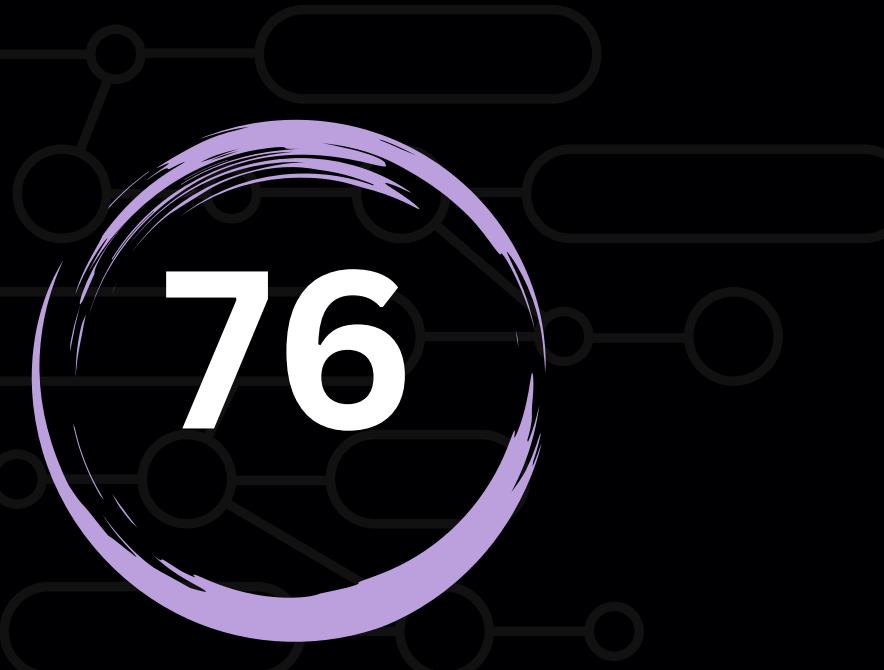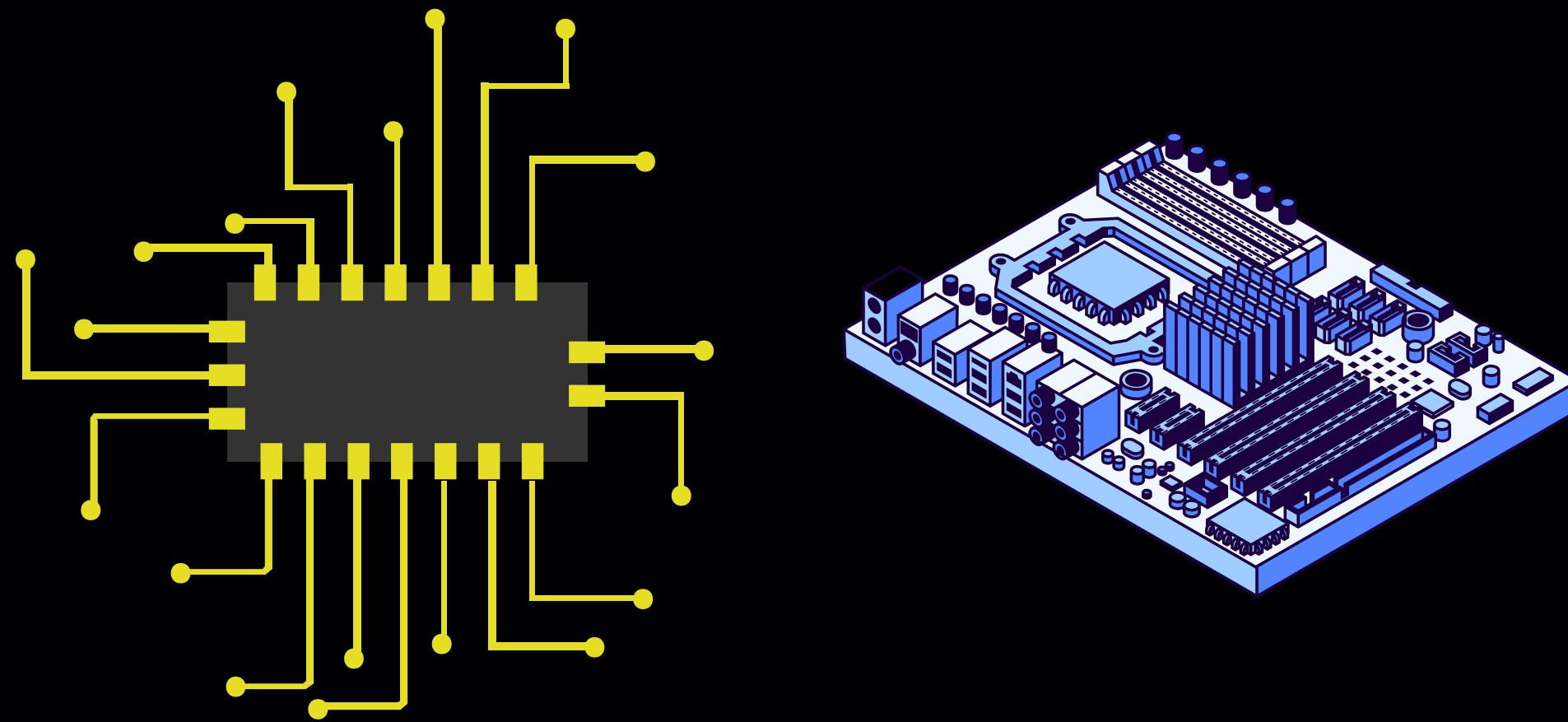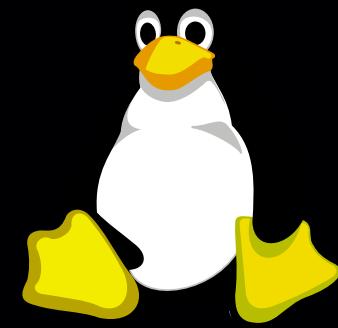
How to check filesystem available and disk space allocated?

#df

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System INFO
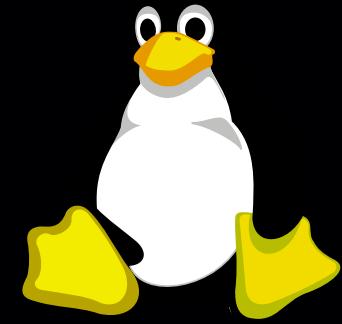
How to check hostname of your linux server?

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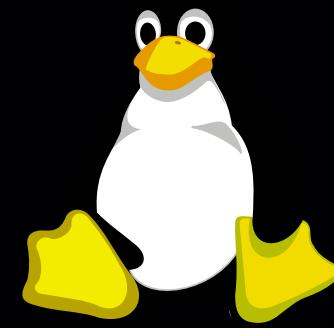
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How to check cpu/core/thread info of your linux server?

#lscpu

78

How to check type of architecture of your linux server?

#arch

79

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

#lsblk

80
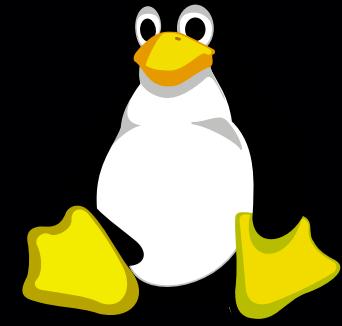
How to see OS name of linux server?

#uname -a
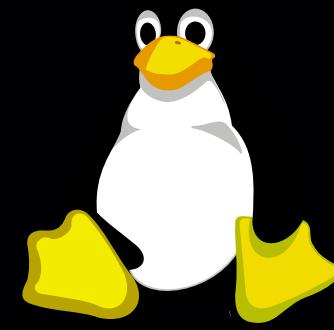
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Process Management

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

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

82
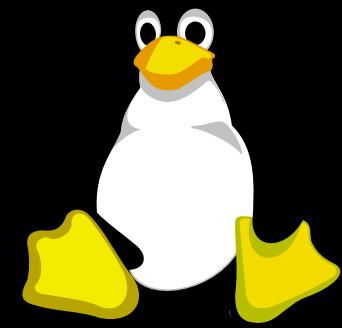
How to get PID of a process?

```
#pgrep chron
```
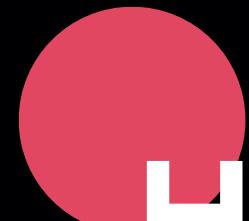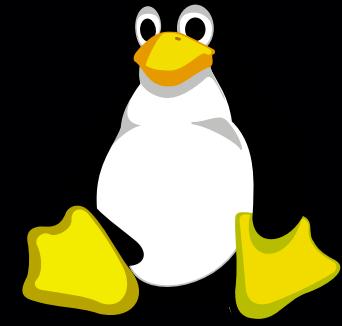
83

How to stop a process by PID?

```
#kill -9 PID
```

84

How to stop a process by its name?

```
#pkill httpd
```

85
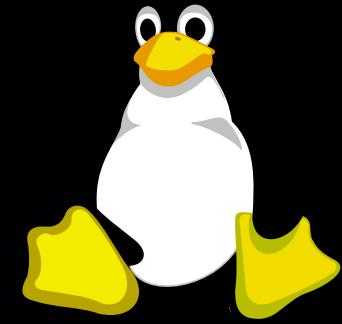
How to see all the active jobs?

#jobs

86
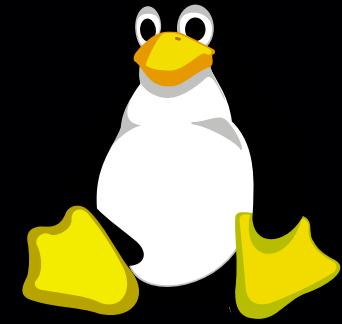
How to resume a job in background?

#bg
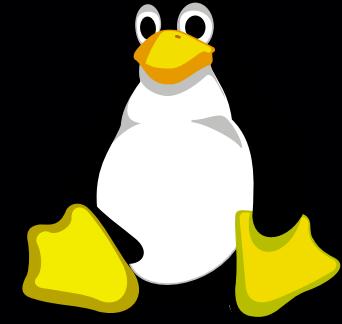
87

How to resume a job in foreground?

#fg
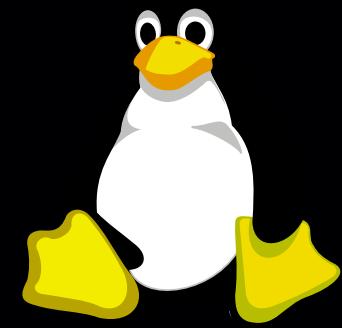
88

How to run a script in background?

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

89
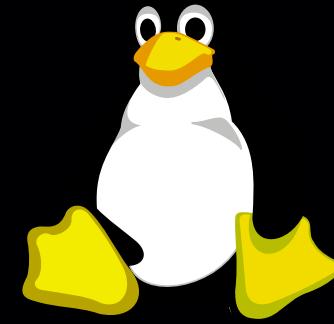
Networking Info

How to check IP of your machine?

#ifconfig
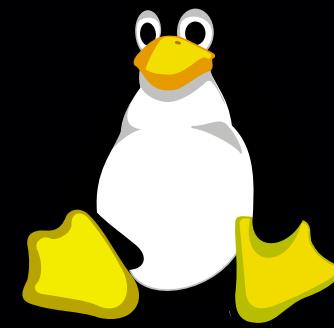
90

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

```
#ping www.google.com
```
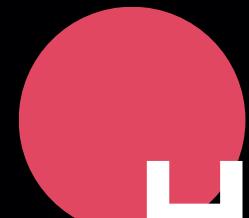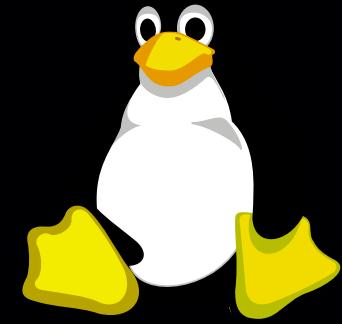
91

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

`#telnet IP Port`

92
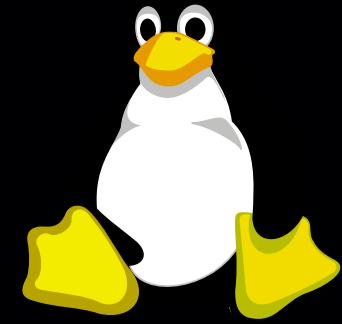
How to check if port is open or not on our server?

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

93
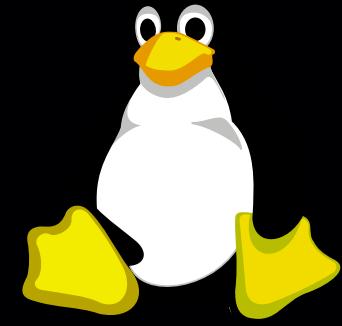
How to check all hubs in network path to reach a website?

#traceroute
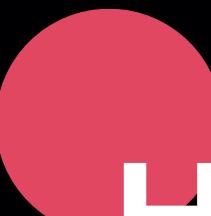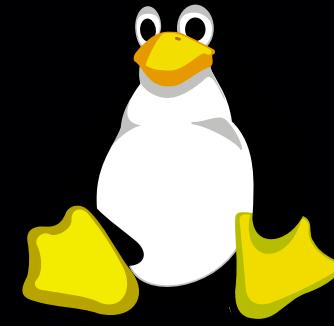
94

How to restart our linux server?

#reboot

95
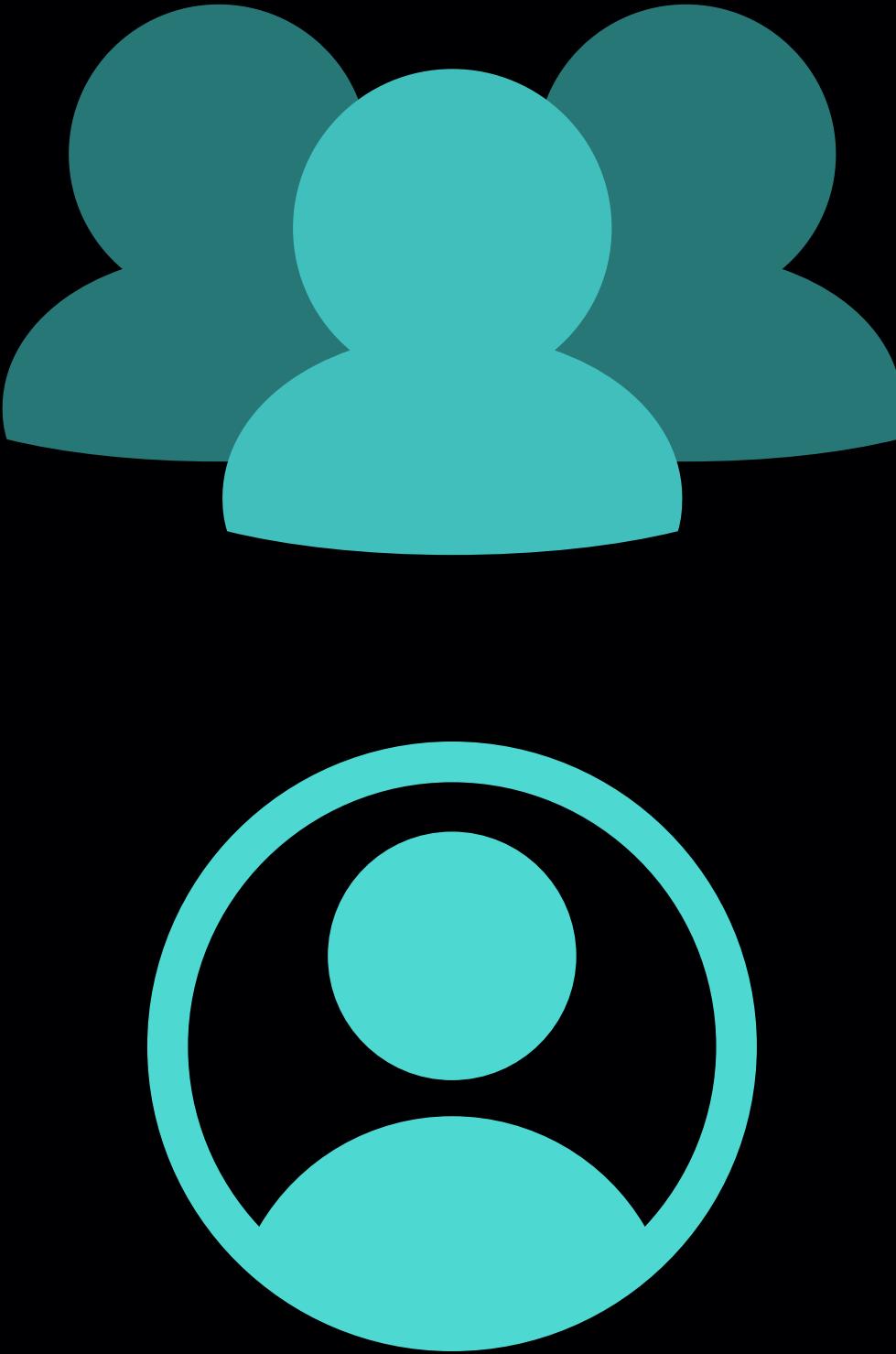
How to shutdown our linux server?

#shutdown

96

User Creation

How to create a new user on our linux server?

#useradd
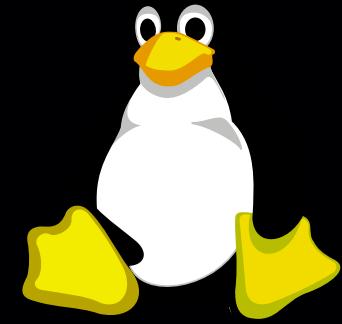
97

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
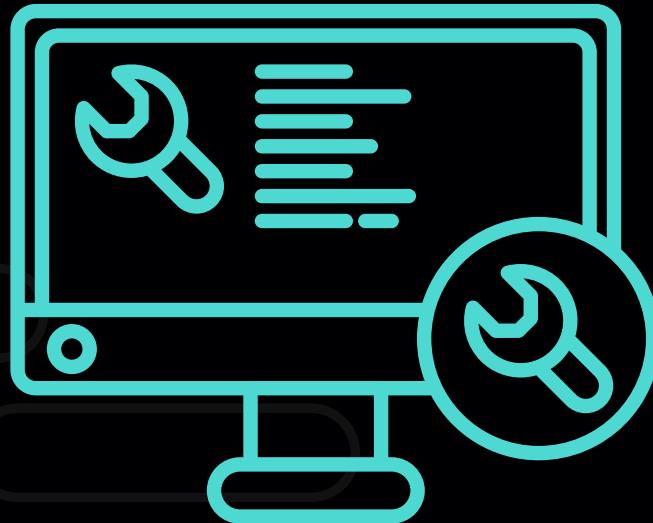
- **ifconfig**
- **ping**
- **netstat**
- **traceroute**
- **telnet**

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

- **c**h**mod**
- **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**

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
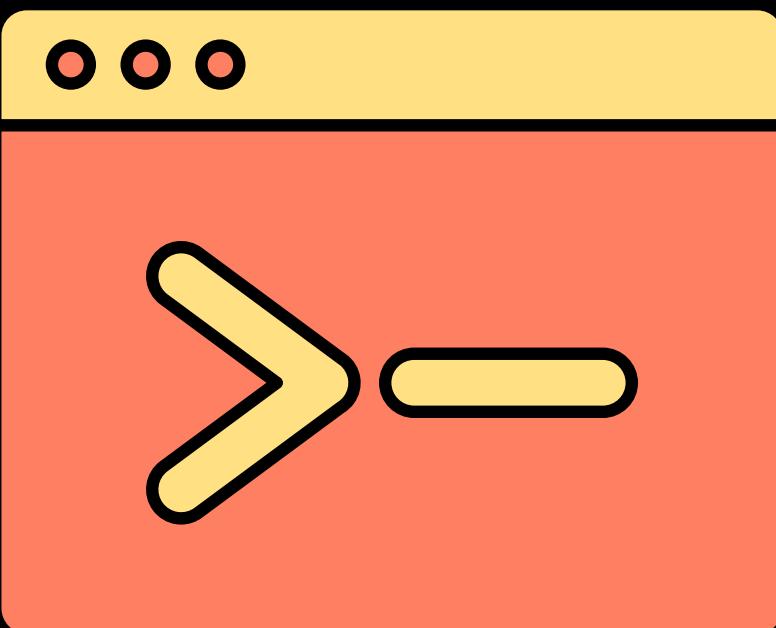
- **cat**
- **less**
- **more**
- **touch**
- **rm**

- **vi**
- **nano**
- **mkdir**
- **rmdir**

**FIRST TIME
ON TERMINAL**

- **pwd**
- **whoami**
- **date**
- **ls**
- **clear**
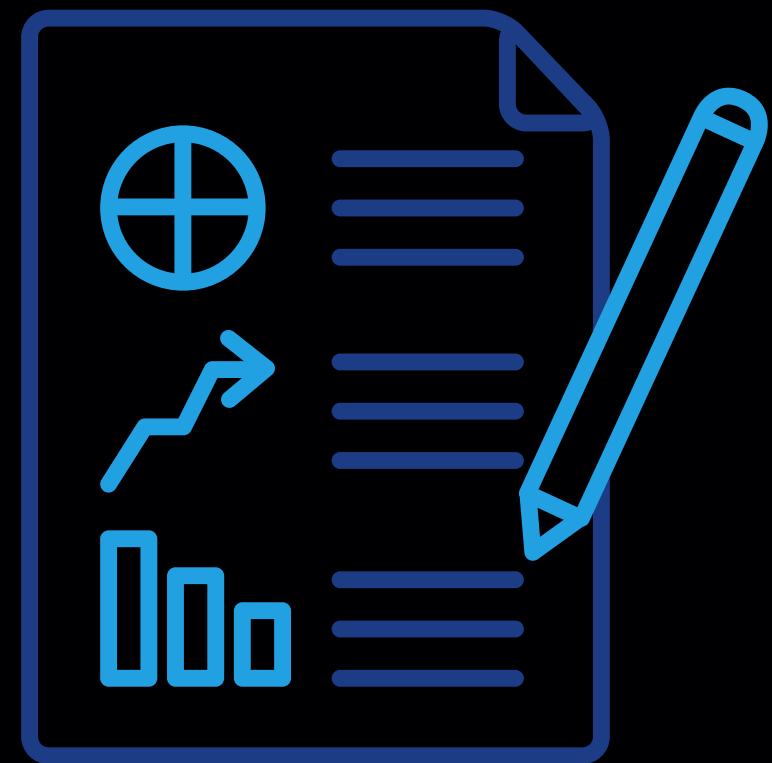
Some Useful Utility Commands
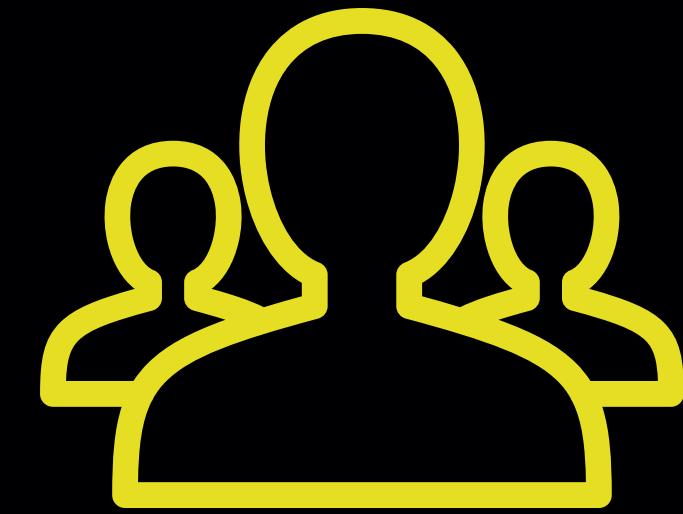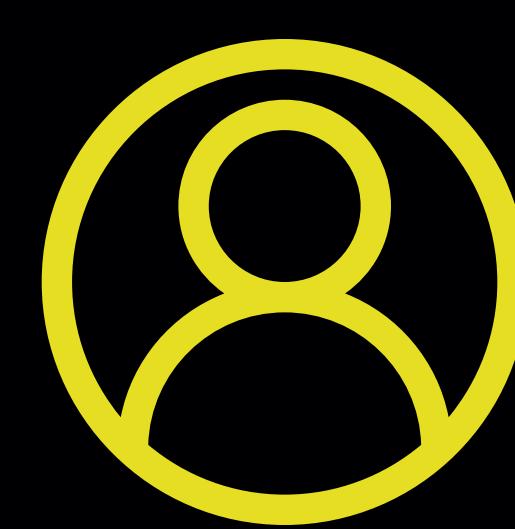
Installing Applications

Environment Variables

String/Text Operations

Working with Permissions

Scripting and Automating task

SCRIPTING & AUTOMATION

- `at`
- `crontab`
- `bash or sh`

SYSTEM CONTROL

- **reboot**
- **shutdown**

FIREWALL SETTINGS

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