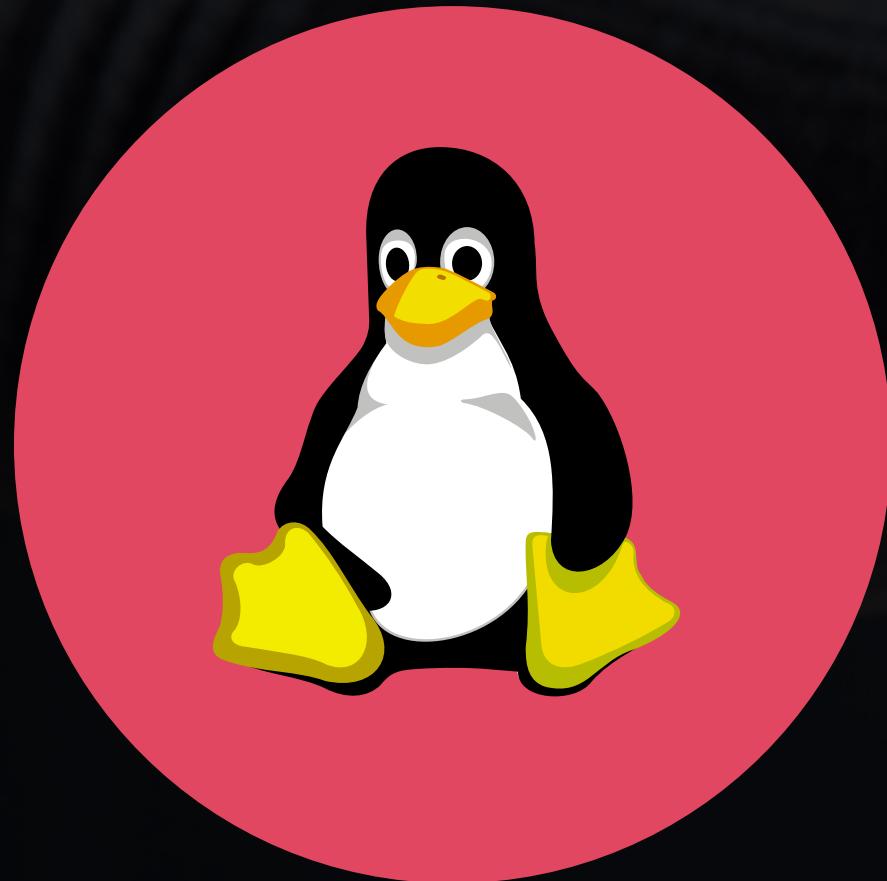


MPRASHANT

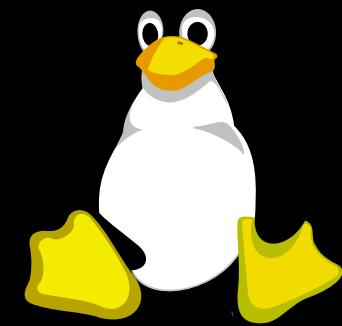


LINUX 100+ COMMANDS

A screenshot of a terminal window on a dark background. The window shows a code editor with a file named `spec/spec_helper.rb`. The code is written in Ruby and includes require statements for `File.expand_path`, `# Prevent database truncation from happening.`, `abort("The Rails environment is running in production mode!"),` `require 'spec_helper'`, `require 'rspec/rails'`, `require 'capybara/rspec'`, and `require 'capybara/rails'`. It also defines a `Capybara.javascript_driver = :webkit` variable and sets up `Category.delete_all`, `Category.create`, `Shoulda::Matchers.configure`, `config.integrate`, `with_test_framework :rspec`, and `with_library :rails`. The code ends with `end` and `end` again. A note at the bottom states: `# Add additional requires below this line if you need them.` The terminal window has a blue and green color scheme for syntax highlighting.

Get Ready with your Linux Setup for Practise

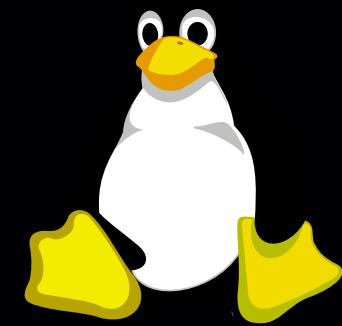




How to check your current location?

#pwd

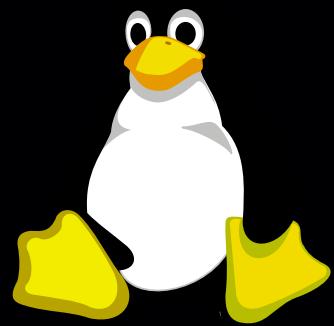
1



How to display name of current logged-in user?

#whoami

2

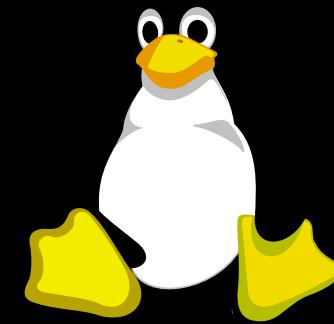


How to check system date or time?

#date

#date %D

3

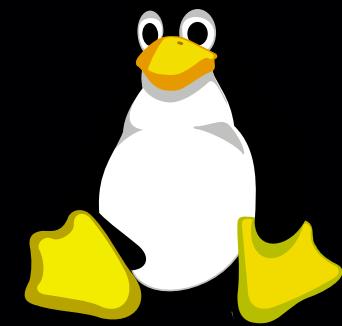


How to display files and directory present in current location?

`#ls`

`#ls -lt`

4



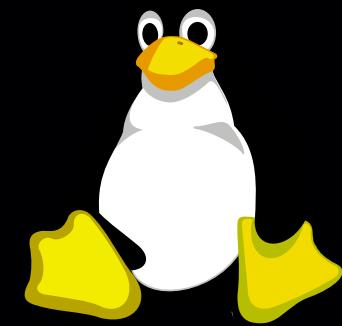
How to clear the linux terminal?

#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>`

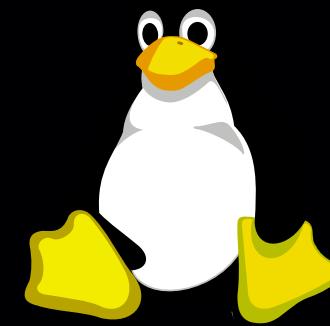
7



How to view content of a file page
by page?

#more <file>

8



How to create a file in Linux?

```
#touch <file_name>
```

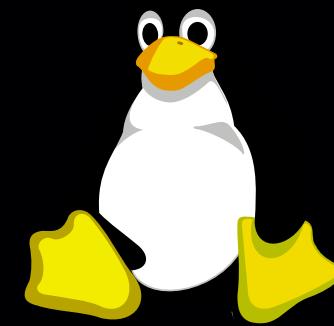
9



How to delete a file in Linux?

```
#rm <file_name>
```

10

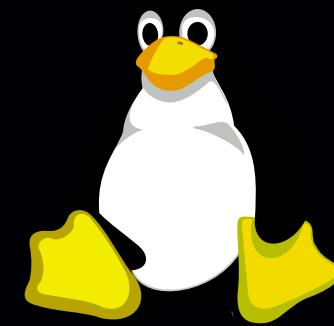


How to edit a file in Linux?

`#vi <file_name>`

`#nano <file_name>`

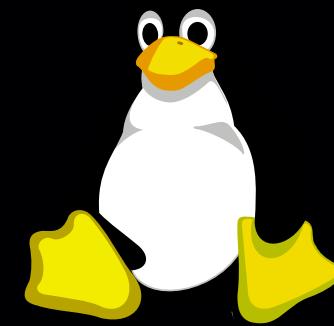
11,12



How to create a directory/folder in Linux?

#mkdir <dir_name>

13

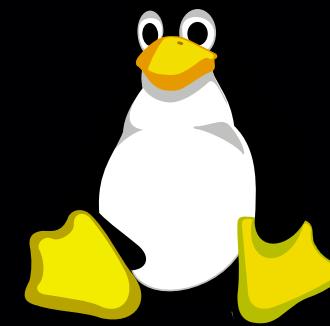


How to delete a directory/folder in Linux?

#rmdir <dir_name>

#rm -rf <dir_name>

14,15

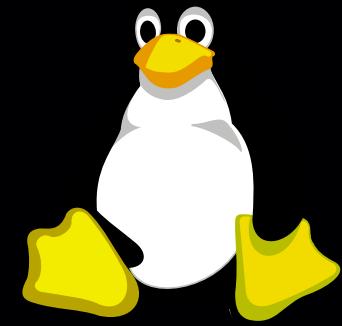


How to change path or move to another folder in Linux?

#cd /path/folder

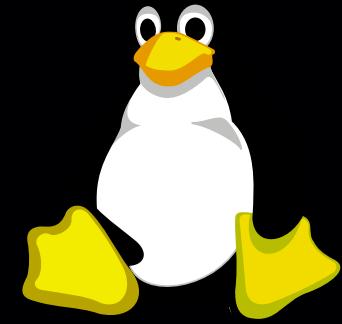
16

#cd ..



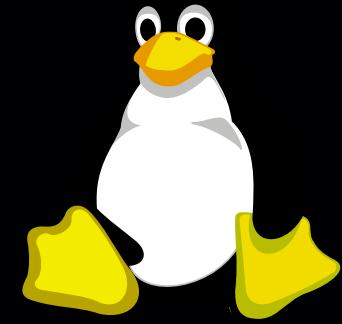
How to copy and paste a file from one folder to another in Linux?

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



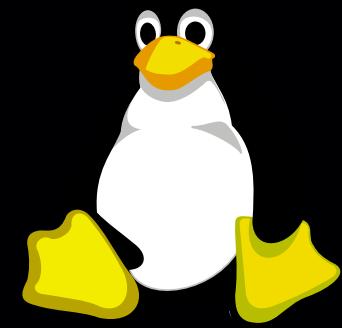
How to copy content of a file to another file in Linux?

```
#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

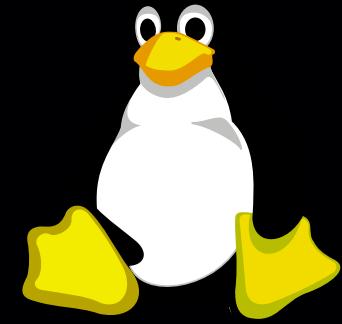
20



How to read or display 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



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`



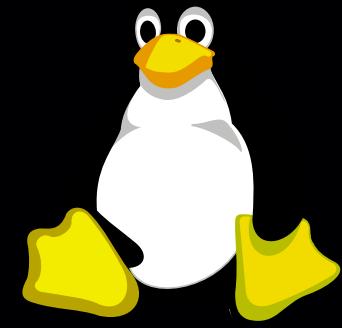
How to search a word and display matching content from a file in Linux?

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



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

`#egrep "word1|word2" file`

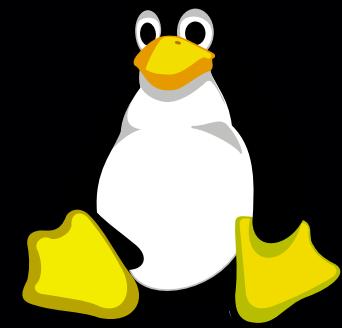


How to use WILDCARDS in Linux?

* [] { }

`#ls file*`

`#touch file{1..5}`



How to SHUFFLE content of file in Linux?

#shuf file

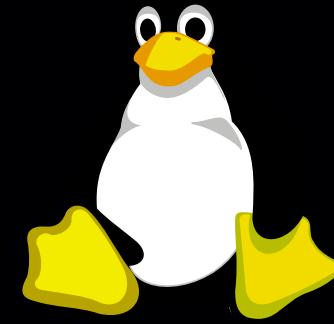
28



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?

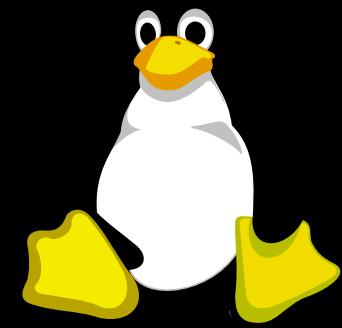
```
#cmp fileA fileB
```

30



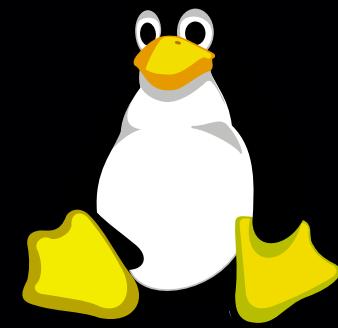
How to compare and display difference between two files in Linux?

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



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

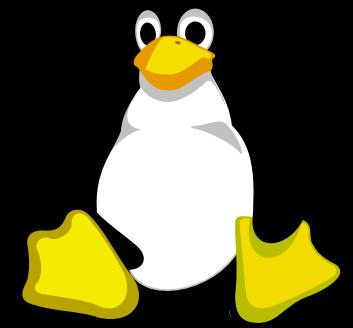
35



How to check syntax and options
available for a command?

#help

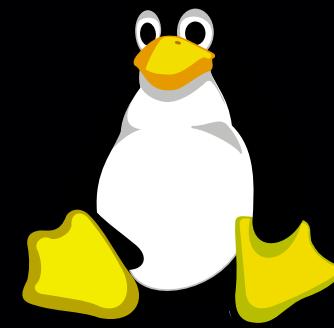
36



How to read or get mor info about a command?

#man

37



How to check which executable is
using for a command?

#which

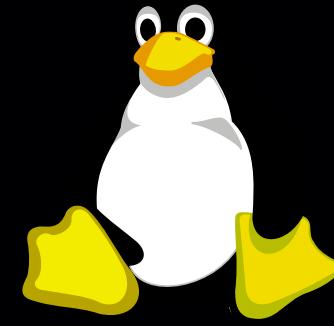
38



How to use calculator in Linux?

#bc

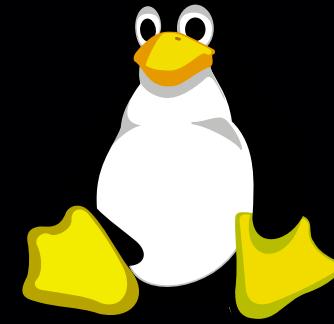
39



How to check CALENDAR of last year in Linux?

#cal

40

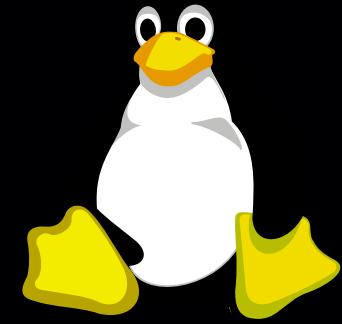


How to check How Long server has been running in Linux?

#uptime

41

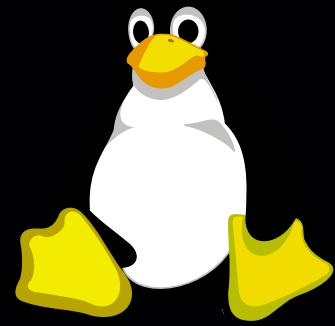




How to record your activity on terminal in a file?

#script

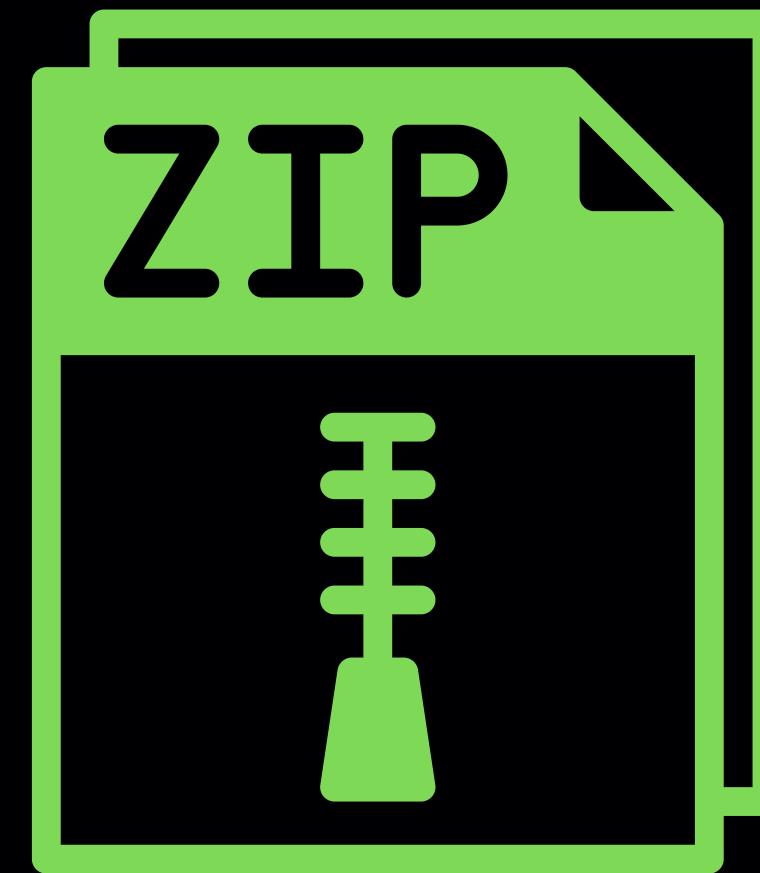
42

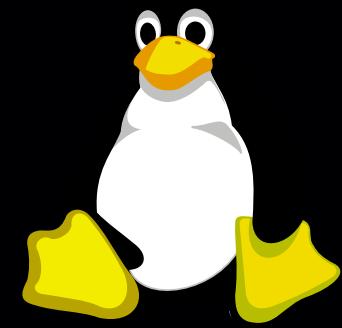


How to create a short-cut of a long command in Linux?

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

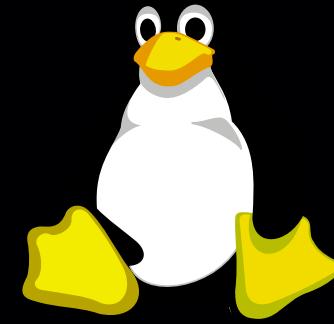
Zip and Unzip of Files and Folders





How to compress a file in Linux?

```
#gzip -k file
```

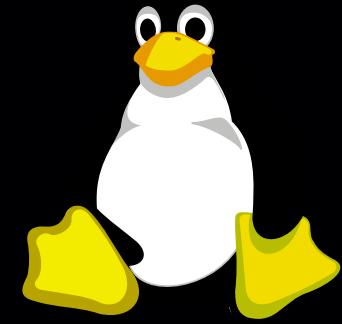


How to decompress a file in Linux?

`#gzip -d file`

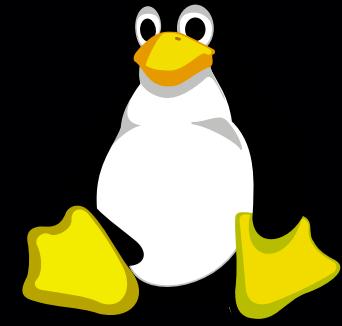
`#gunzip file`

45,46



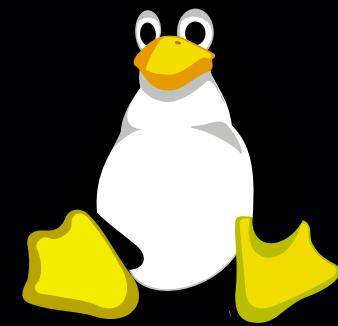
How to compress a folder in Linux?

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



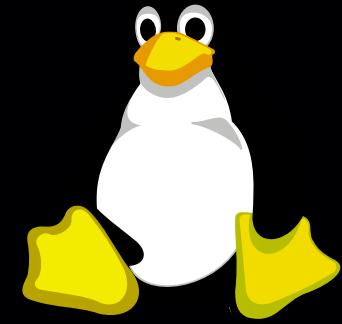
How to decompress a folder in Linux?

```
#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

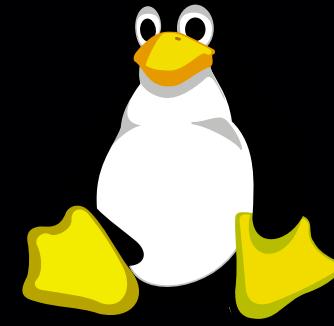




How to download a file from internet?

```
#wget URL_of_file
```

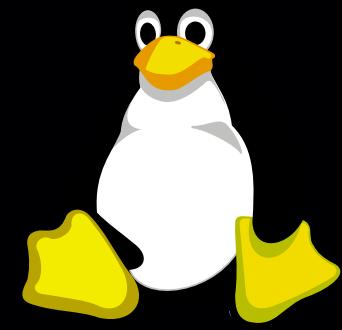
```
#wget -O opt_file.txt URL_of_file
```



How to call an API on Linux?

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

50



How to install an application on Linux?

#apt or yum/dnf

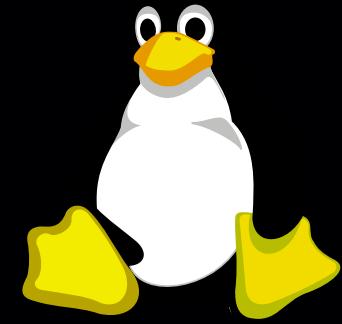
51



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

```
#rpm -qa | grep app
```

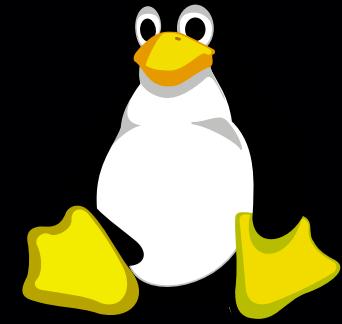
```
#dnf list installed
```



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?

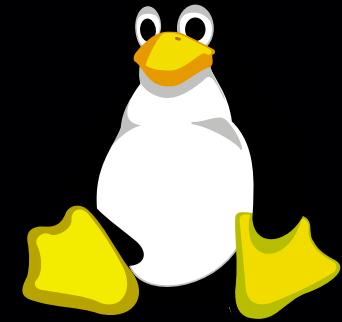
```
#systemctl list-units --type=service --all
```



How to list all existing Environment Variables on Linux?

#printenv

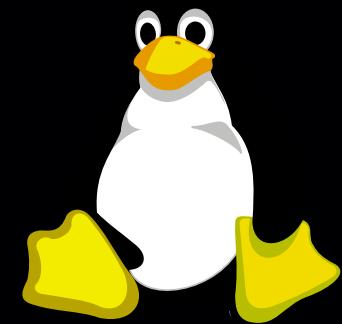
56



How to ADD a new Environment Variables on Linux?

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

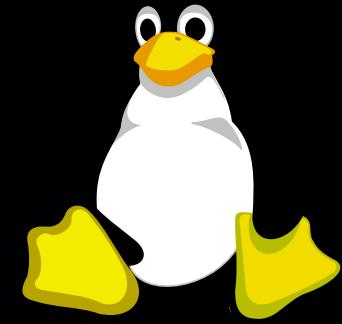
```
#export PATH=$JAVA_HOME/bin:$PATH
```



How to ADD a new Environment Variables permanently on Linux?

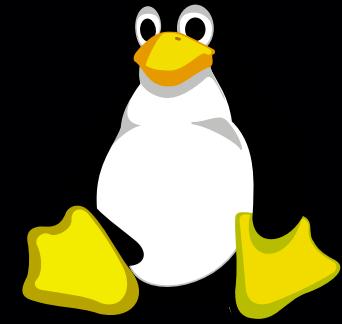
Add env variable in ./bashrc file

```
#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
```

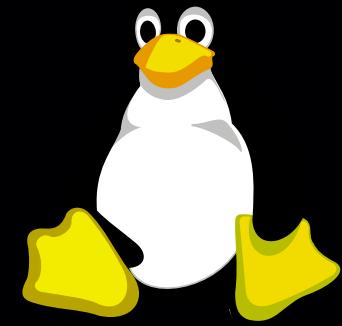
60



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

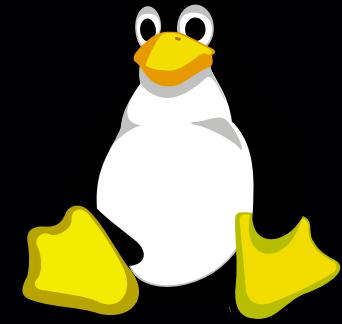


How to convert the content to Uppercase or Lowercase within a file?

```
#tr [:lower:] [:upper:] <file.txt
```

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

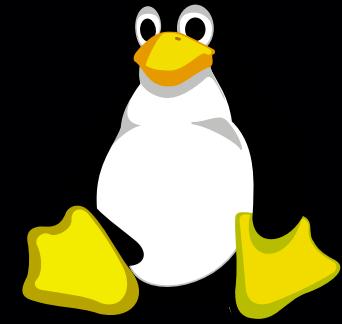
```
#tr [:digit:] z <file.txt
```



How to extend or shrink size of a file?

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

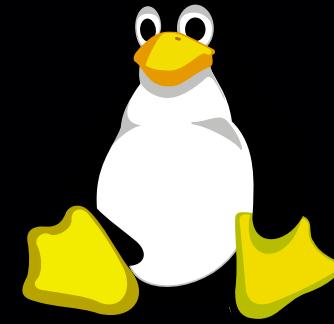
63



How to display following line in
vertical line? ABCDE

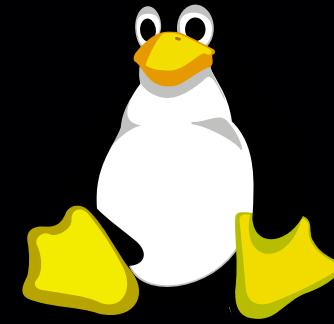
```
#echo "ABCDE" | fold -w1
```

64



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

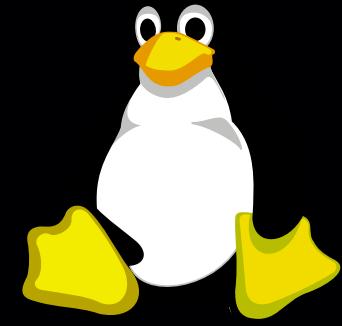


If you are not root user, how to execute admin commands like installing new apps?

```
#sudo yum install httpd
```

Access Remote Servers

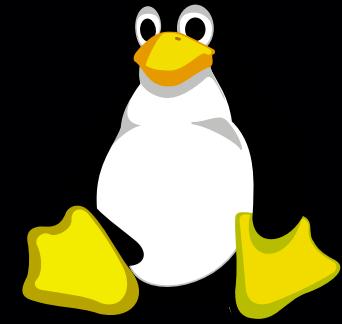




How to access remote Linux server?

`#ssh user@hostname`

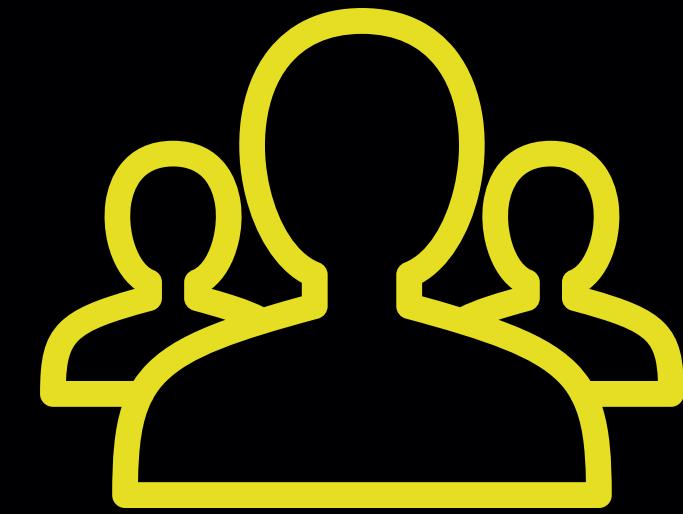
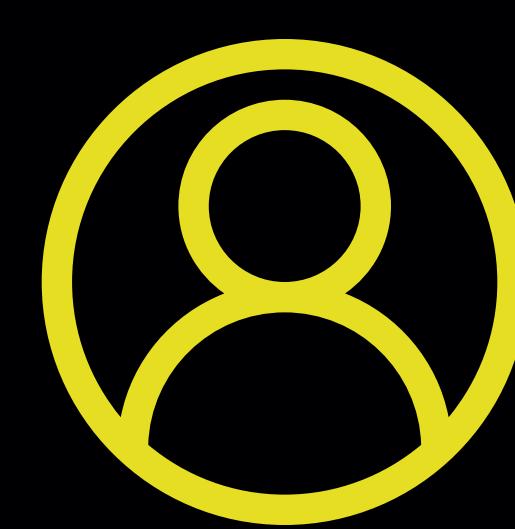
68



How to copy a file to a remote Linux server?

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

Working with Permissions





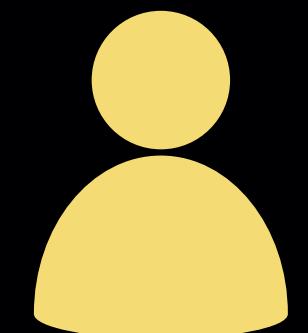
How to check permissions of a file?

`#ls -ltr`

rwx

rw-

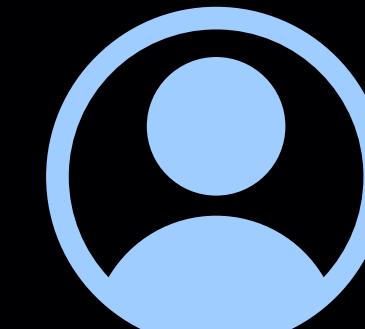
r--



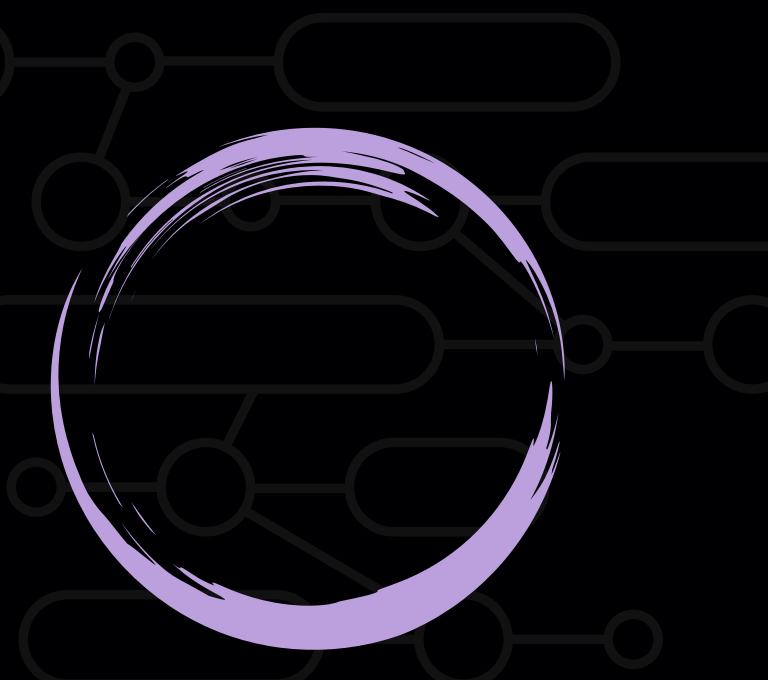
user

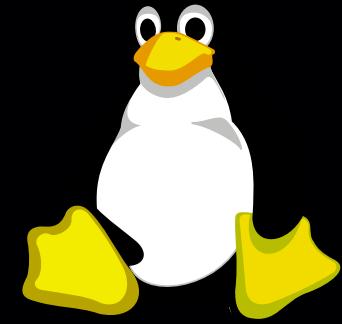


group



other





How to modify permissions of a file?

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

u - user, g - group, o - other

a - all

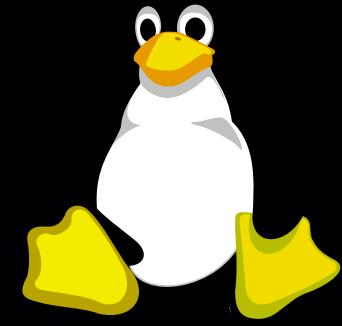
70



How to change ownership of a file?

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

71



How to change group ownership of a file?

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

Memory Info

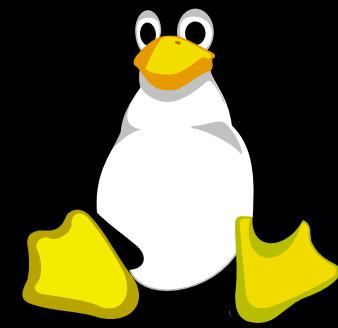




How to check free RAM space?

#free

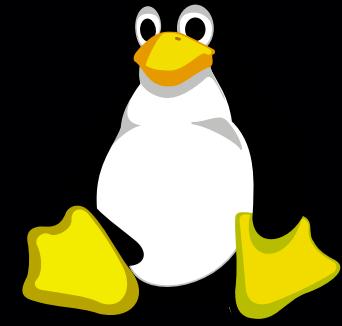




How to check % Memory and CPU Utilization?

#top

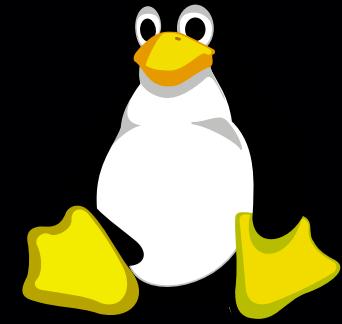
74



How to check disk Utilization?

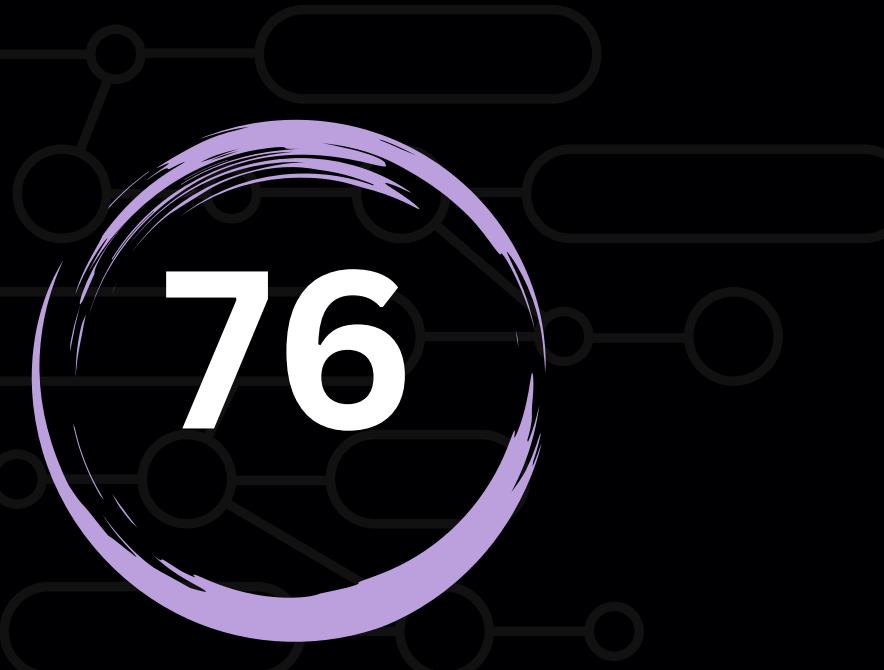
#du



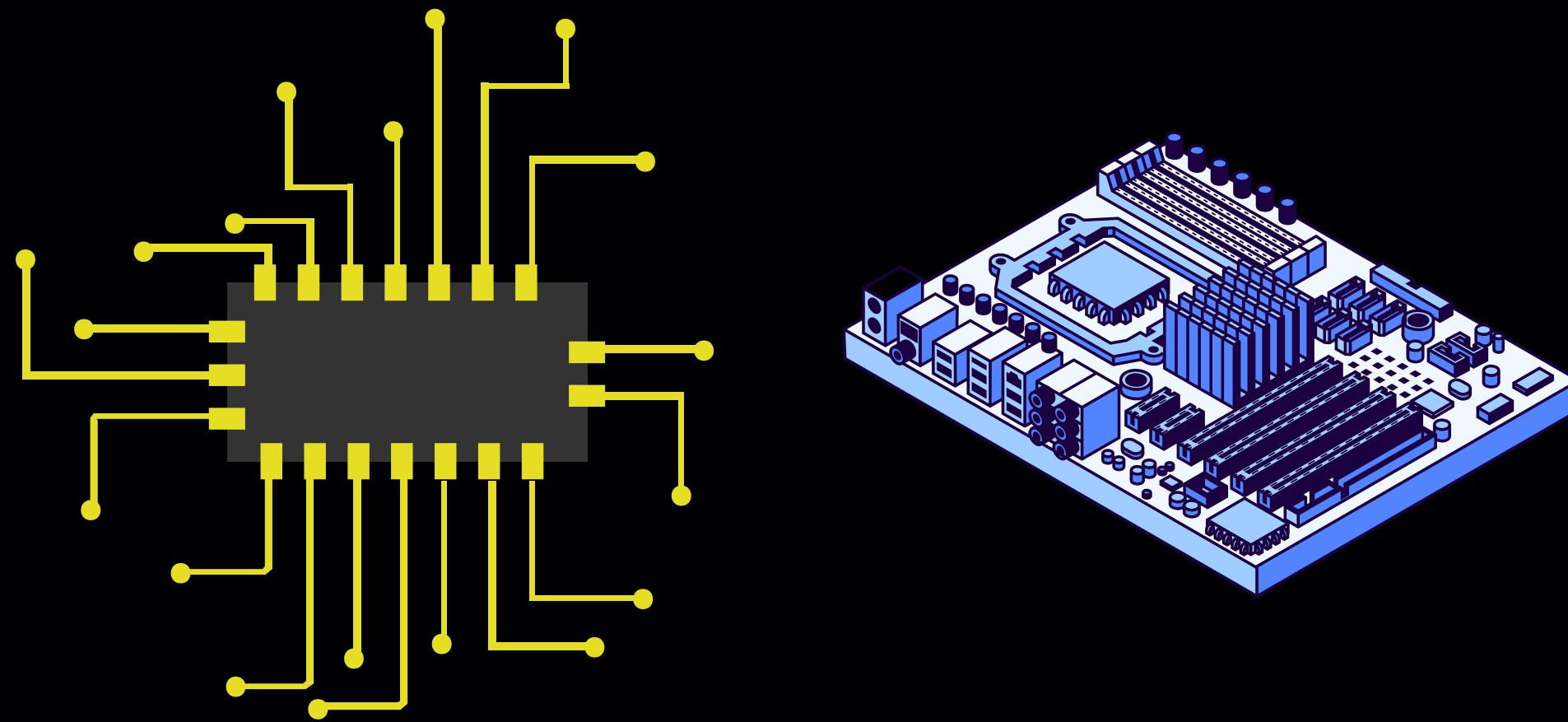


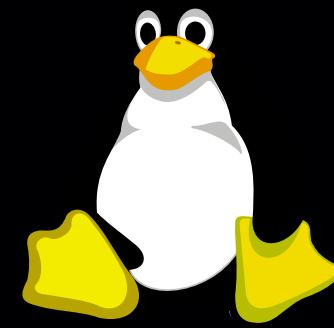
How to check filesystem available and disk space allocated?

#df



System INFO

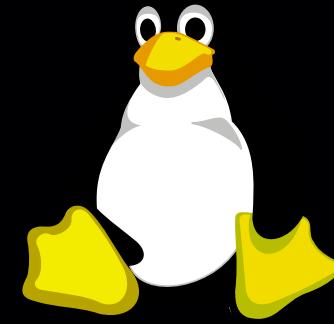




How to check hostname of your linux server?

#hostname

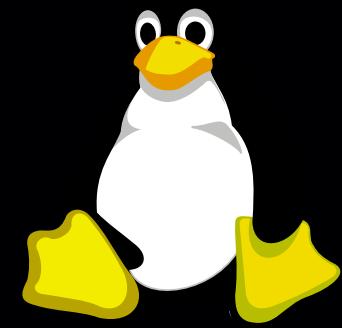
77



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

#lscpu

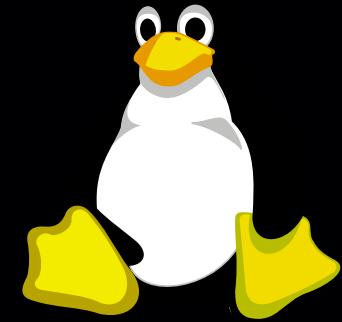
78



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

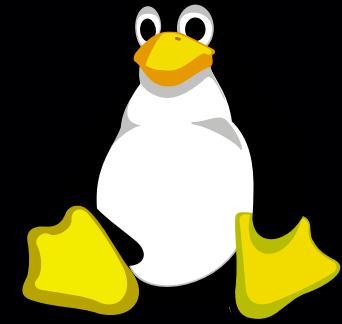


How to see OS name of linux server?

#uname -a

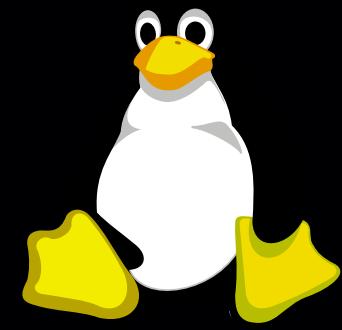
81

Process Management



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

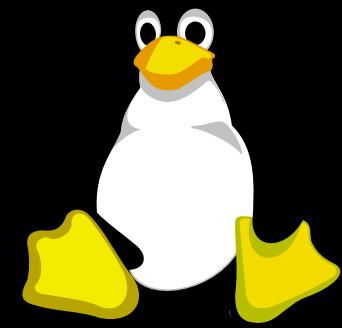
```
#ps -ef | grep java
```



How to get PID of a process?

```
#pgrep chron
```

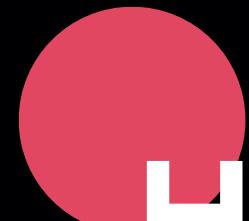
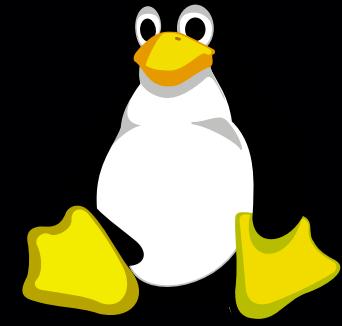
83



How to stop a process by PID?

`#kill -9 PID`

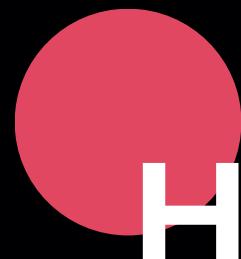
84



How to stop a process by its name?

```
#pkill httpd
```

85

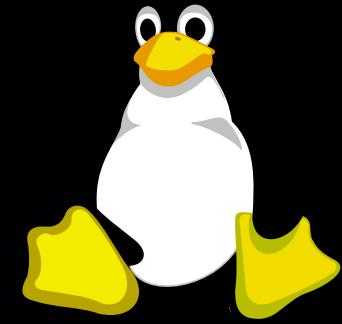


How to see all the active jobs?

#jobs

86

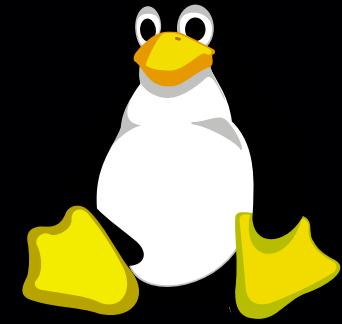




How to resume a job in background?

#bg

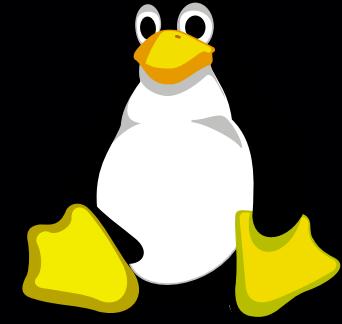
87



How to resume a job in foreground?

#fg

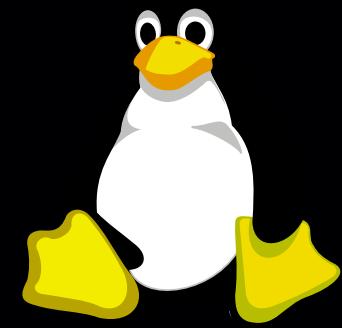
88



How to run a script in background?

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

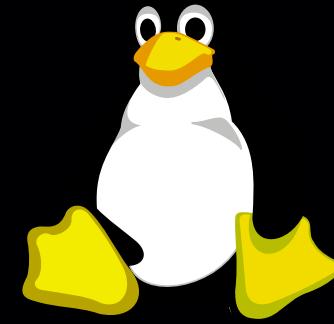
Networking Info



How to check IP of your machine?

#ifconfig

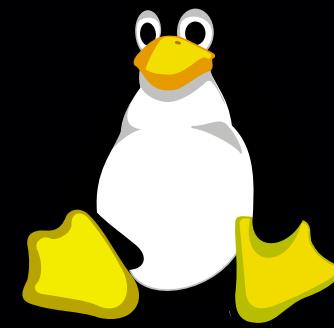
90



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

#ping www.google.com

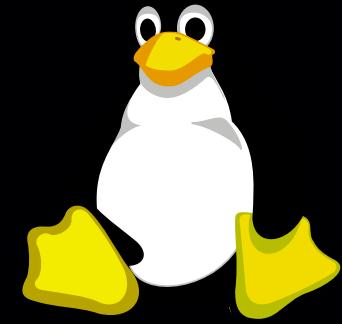
91



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?

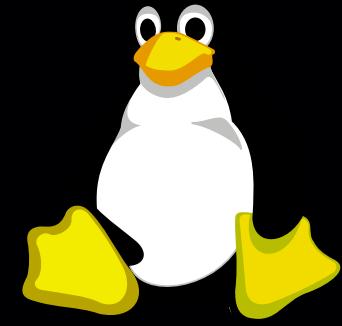
```
#netstat -putan | grep 80
```



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

#traceroute

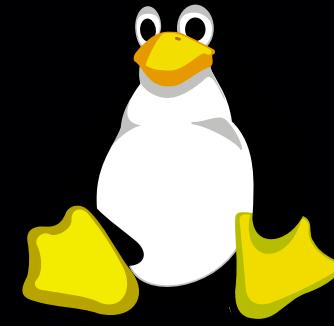
94



How to restart our linux server?

#reboot

95

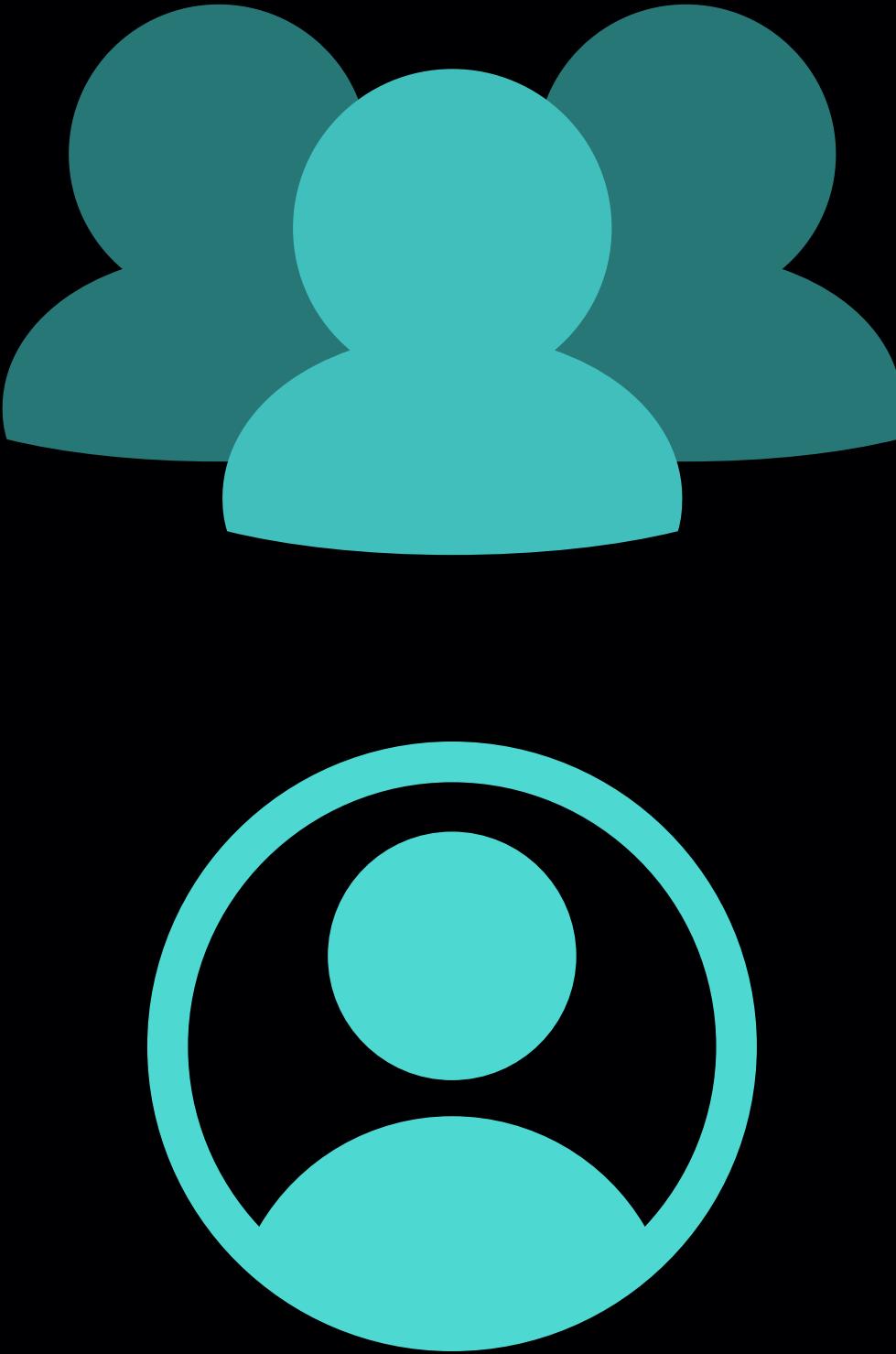


How to shutdown our linux server?

#shutdown

96

User Creation





How to create a new user on our linux server?

#useradd

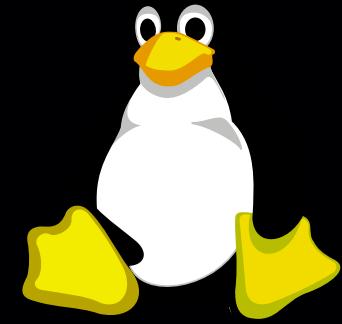
97



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



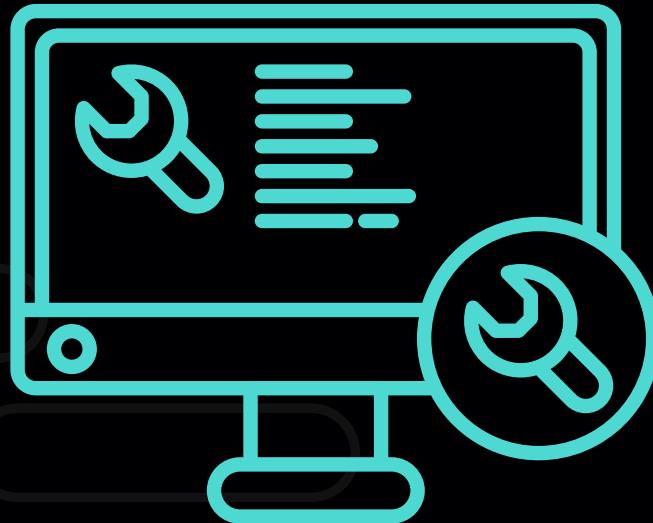
- **ifconfig**
- **ping**
- **netstat**
- **traceroute**
- **telnet**

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

- **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**



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

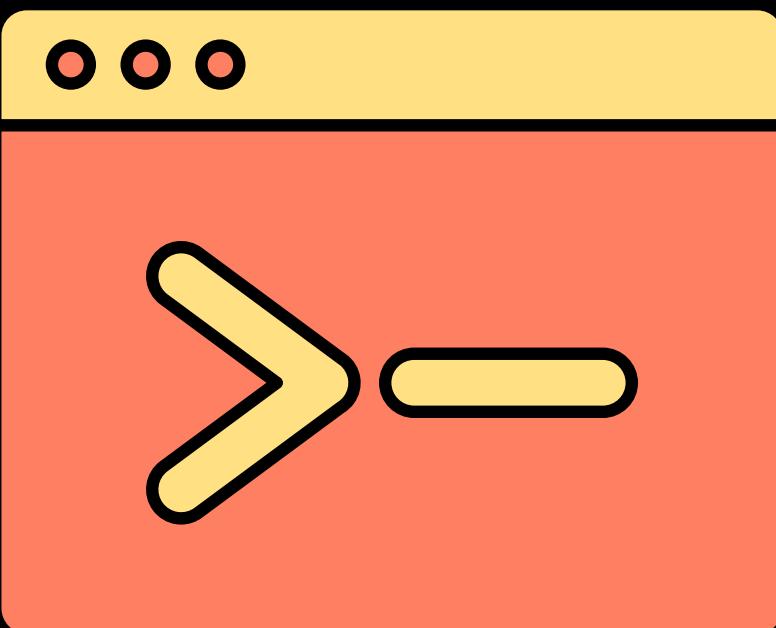
- **cat**
- **less**
- **more**
- **touch**
- **rm**
- **vi**
- **nano**
- **mkdir**
- **rmdir**

FIRST TIME ON TERMINAL

- **pwd**
- **whoami**
- **date**
- **ls**
- **clear**



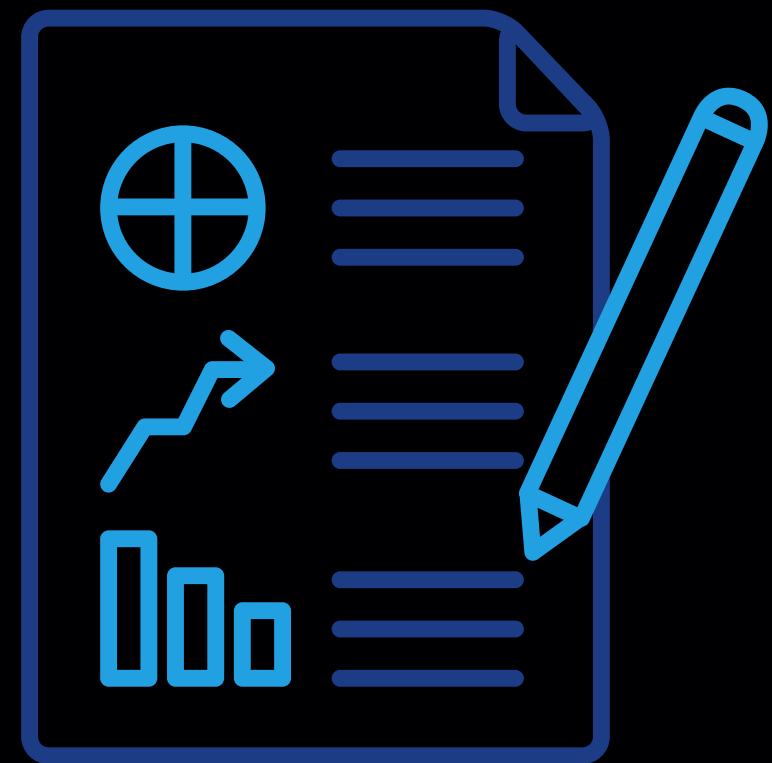
Some Useful Utility Commands



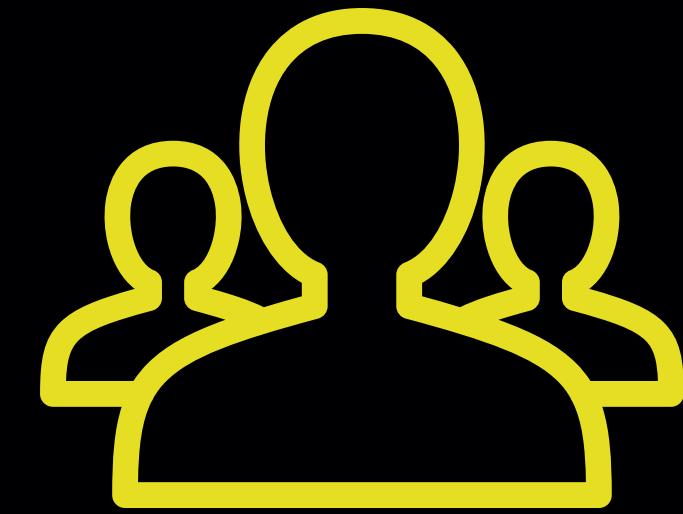
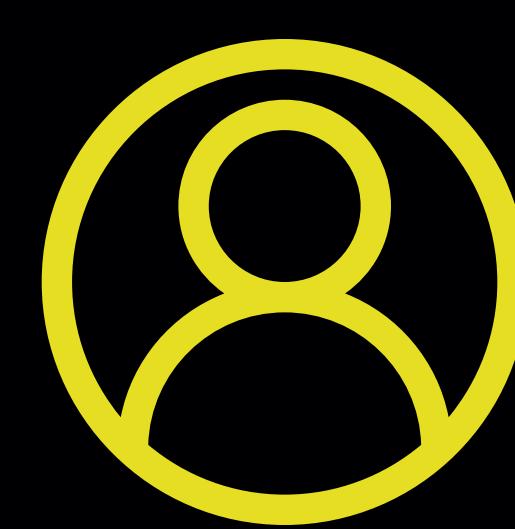
Installing Applications

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**

