19 Directories & Basic Commands

Basic Commands

1. **pwd** - print/present working directory
2. **ls(list in series)** - list a file &directory
3. **ls -a** to see hidden(.) files
4. **ll(long list) ls - ltr** shows in detail
5. **date** -current date ,time, year, seonds
6. **date -s** used for date set
7. **cal** used to view current month calender

cal -s Displays sunday as the first day of the week

cal -m Displays monday

cal -J Displays Julian dates

cal -y Displays a calender for the year

cal -3 to view 3 months calender (previous,current,next)

8. **lsusb** -usb related information
9. **lspci** - pheripheral connected device information
10. **clear** - to clear /clean the screen
11. **history** - to see the previous command history
12. **tty** - terminal command information
13. **man** - to get detailed information of a command it is well structured
14. **free** -storage is visible

free -h the storage is shown in human readable format

15. **whoami** - to see user
16. **uname** - name of the operating system i.e kernel information

uname -v to known the version of the kernel

uname -a all information about the kernel

17. **passwd** -to change the passwd
18. **w** - which user is logged in
19. **dmidecode** - complete information about system

dmidecode| less basically less is used to read the file

20. **who** - user & its time
21. **whatis** it provides one line information
22. **echo** - prints message on terminal & also used for file creation
23. **rm - -help** to known the rm related information

rm -rf r means recursive which first deletes the last file & then deletes last file and then delete one by one .

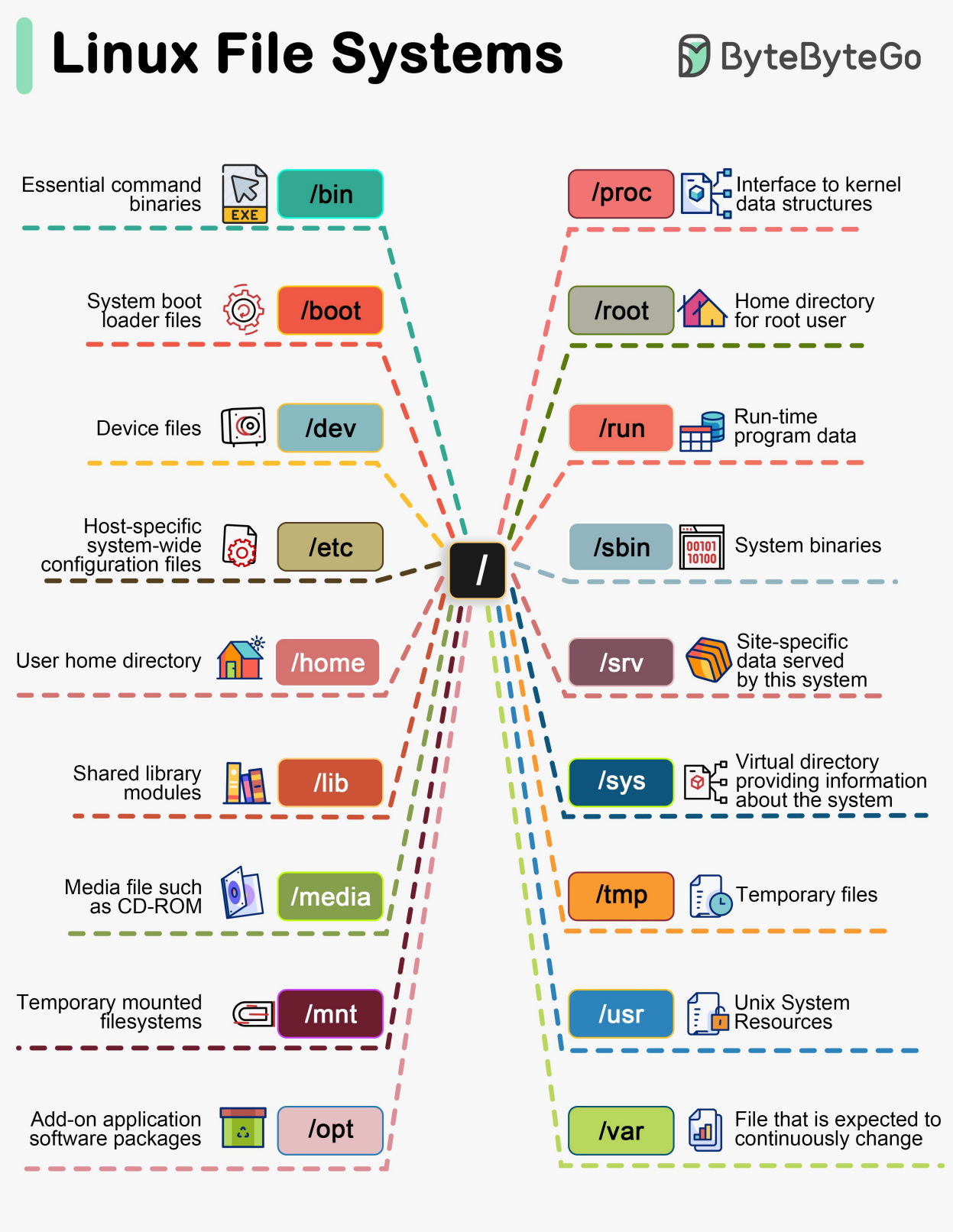
f means forcefully

v verbose → which shows the process of the recursive deletion

rm -rvf

ex : dir1/dir2/dir3/dir4/file1 → it will first delete the file1 →dir4 →dir3 →dir2 →dir1

24. **du** - displays the folder size
25. **df -hT** - displays storage related information
26. **info** - in a descriptive way(very much in detail)
27. **top -** used to see current running process
28. **diff filename** - used to find out the difference between two files
29. **tac filename** - used to reverse the content of the file


Linux File Systems
ByteByteGo
Essential command binaries
/bin
System boot loader files
/boot
Device files
/dev
Host-specific system-wide configuration files
/etc
User home directory
/home
Shared library modules
/lib
Media file such as CD-ROM
/media
Temporary mounted filesystems
/mnt
Add-on application software packages
/opt
/
/proc
Interface to kernel data structures
/root
Home directory for root user
/run
Run-time program data
/sbin
System binaries
/srv
Site-specific data served by this system
/sys
Virtual directory providing information about the system
/tmp
Temporary files
/usr
Unix System Resources
/var
File that is expected to continuously change

Directories (Filesystem hierarchy)

/root - it is the top level directory in linux hierarchy. All other directories are subdirectory of root.

/bin - it contains essential binary executable , basically used for basic system functionality. They are used to change the system booting and functionality.

/boot - this contains files needed for systems boot process such as kernel and boot loader.

/dev - it contains devices files & provides interface for interaction .

/etc - this contains configuration file that consist of various aspect of system, application and services .

/home - it contains local users home directory .

/lib - it contains 34 bit library files.

/lib64 - 64 bit shared library files.

/media - it is used as a mounting point for removable are such as usb devices.

/mnt - it is used as a temporary mounting point.

/opt - it is the most installed third party software.

/proc - this provides information about currently running software

/sbin - it contains system admin binary executable typically used by root user.

/temp - it is used for temporary used file ,which may be deleted at power off .

/usr - it contains user related files like libraries, binary file etc

/var - variable data file

/srv - service contains service related data

/run - temporary file system , holding data for process since last boot.

/sys - virtual file system which provides information about device , drives & kernel parameters.