

OS LAB 1: UNIX COMMANDS

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man <name of command> – Gives name, synopsis, description, author, reporting bugs, copyright of the used command

clear - clears the screen

history - shows the previous commands that were executed on the system.

1988 git clone http://github.com/cords/samples

1989 git clone http://github.com/corda/samples

1990 ls

1991 cd samples/

1992 ls

Date - Mon Jan 6 09:08:19 IST 2020

sleep <number of seconds> - Wait for n sec

uptime - Outputs the difference between current time and the time when the system was started

09:09:28 up 9 min, 1 user, load average: 1.73, 3.20, 2.19

whoami - Student

id - uid=1000(student) gid=1000(student)

groups=1000(student),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),116(lpadmin),126(sambashare)

groups - student adm cdrom sudo dip plugdev lpadmin sambashare

Passwd - Change password

who - student :0 2020-01-06 09:02 (:0)

last - wtmp begins Mon Jan 6 09:06:03 2020

ls - List out the names of directories or files present in the current directory

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a.out new

cp [options][source][destination]– copies source file to destination

rm [options][file] – removes the file

mv [options][source][destination] – rename or move files from source to destination

chmod[options][permissions][filename] – change file access permissions

Eg. `chmod u=rw example.txt` - Here u is user. We are changing the permissions of user to read and write to the file `example.txt`. Similarly g(groups) and o(others) can be used in place of user

chown[options][owner][:group][file name]– change the file ownership

Eg. `sudo chown usr1:group1 myfile.txt` - You own **myfile.txt**, but you want to give it to another user on the system named **usr1**. You also want to change the owning group to that user's group, **group1**.

cat[options][filename][filename]... -- Concatenates the contents of files and displays it.

Eg. `cat test.txt test1.txt`

Hi

Hello

more [-options] [-num] [+pattern] [+linenum] [file name] --- view the text files in the terminal, displaying one screen at a time in case the file is large.

[-num]: type the number of lines that you want to display per screen.

[+pattern]: replace the pattern with any string that you want to find in the text file.

[+linenum]: use the line number from where you want to start displaying the text content.

less[filename] - view contents of text file one page(one screen) per time. It has faster access because if file is large, it don't access complete file, but access it page by page.

head[options][number of lines][filename] - Output the given number of lines of textfile starting from top. The default value of number of lines is 10.

tail[options][number of lines][filename] - Output the given number of lines of textfile startin from bottom. The default value of number of lines is 10.

grep[options][pattern][filename] - searches the file for the given pattern of characters, and displays all lines that contain that pattern.

cd [directory name] - Changes the current directory.

pwd - Outputs the current directory path.

ln[options][target][directory] - Creates a link between target and directory

mkdir[options][directory name] - Makes a new directory

rmdir[options][directory names]... - Deletes single or multiple directories.

hostname [options] [new_host_name] - Sets the new Server host name. If run without the parameters, the command gives the current hostname

w[options][user] - Gives information about logged in users and the processes which are currently running. the current time, how long the system has been running, how many users are currently logged on, and the system load averages for the past 1, 5, and 15 minutes.

uname [options] - Gives basic information about the system like name, version number of kernel, etc.

ifconfig - Used to view and set the Internet Protocol Addresses

ip - Used to view and set the Internet Protocol Addresses

ping[options][IP Address or URL] - used to check the network connectivity between host and server

netstat - displays the information about network connections, routing tables, interface statistics, etc.

ps[options] - used to list the currently running processes and their PIDs(process IDs).

top[options] - shows the summary information of the system and the list of processes or threads which are currently managed by the Linux Kernel.

kill - Used to terminate processes manually

alias name='command' - Creates an alias name for the command. The command can now be executed using the alias name.

touch[file name] - Create/make a new file

Shutdown - shuts down the system

Reboot -Reboots the system

find[options][file name] - Finds all instances of a file or a directory in the system.

locate[options][filename] - Finds all instances of a file or a directory. The locate utility works better and faster than find command because instead of searching the file system when a file search is initiated, it would look through a database.