LINUX COMMANDS DOCUMENTATION

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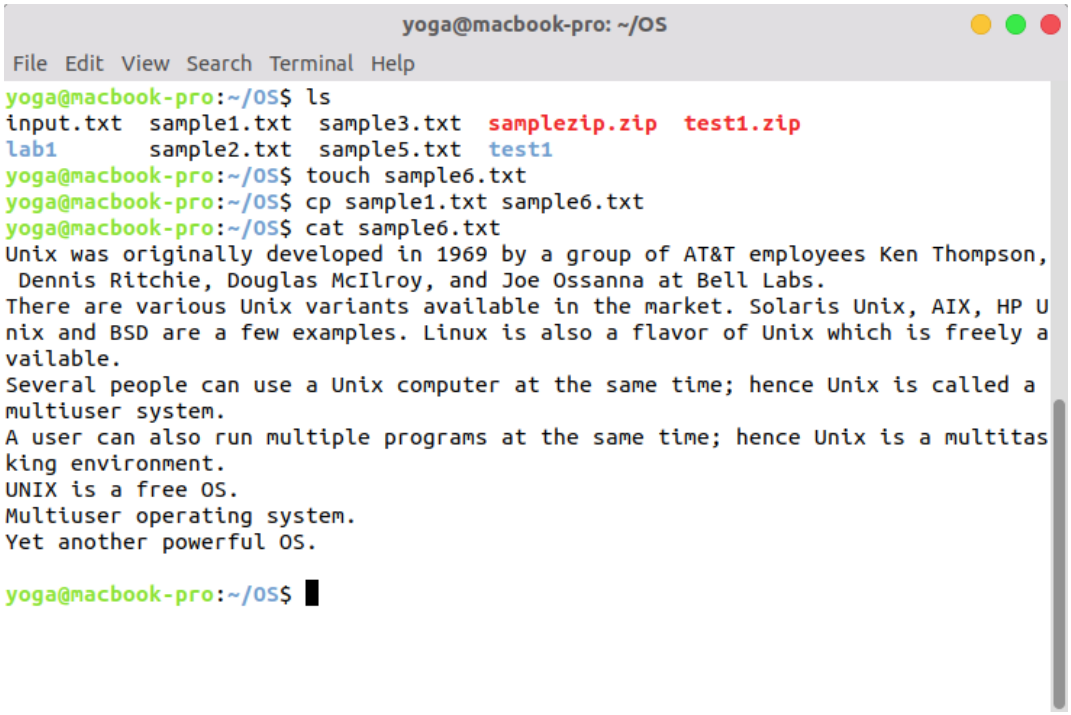
1. Test drive and understand the usage of all the commands given in the 50 Most Frequently Used UNIX / Linux Commands and linuxcommands.pdf

1)cp -copy command
Description:
Copy Command is used to copy files or group of files or directory
It creates an exact image of a file on a disk with different file name
Syntax:

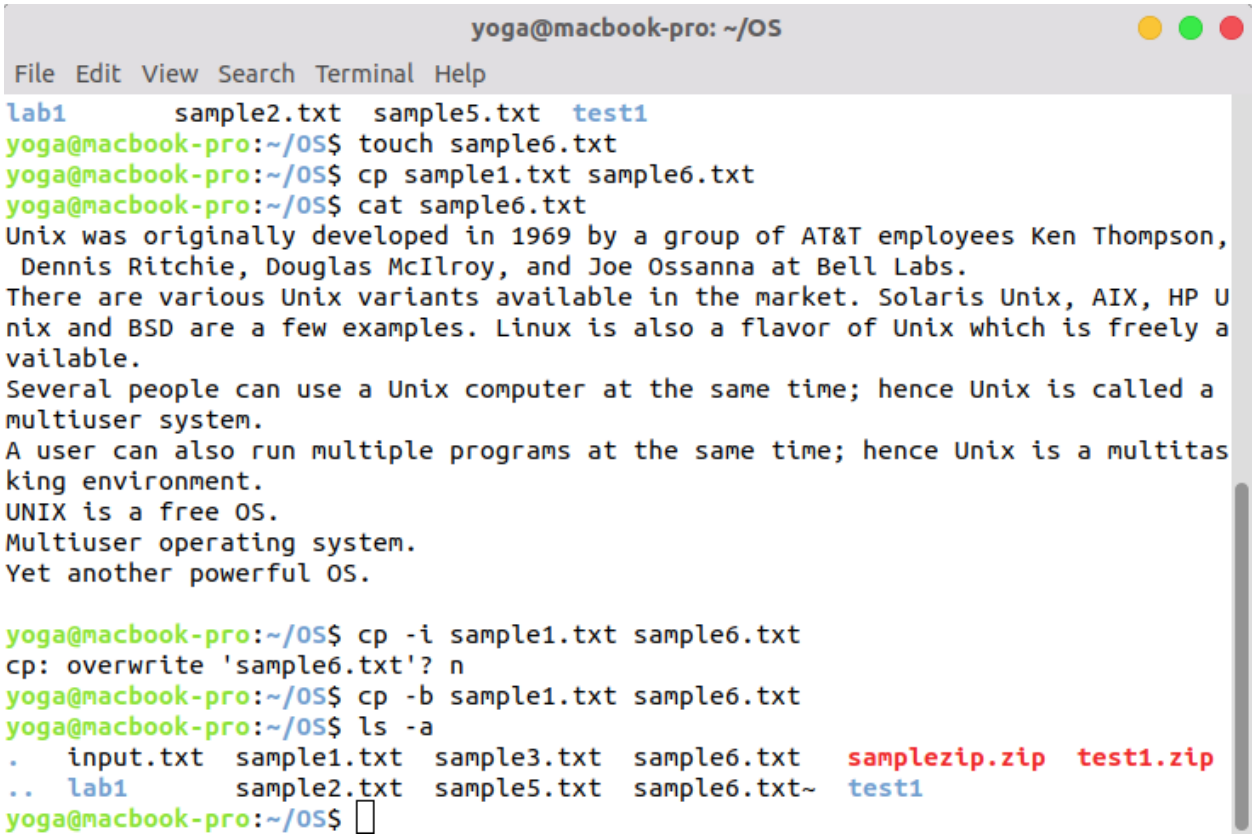
- cp [OPTION] Source Destination //to copy source file contents in destination file.If the Destination file does not exist ,it creates the file else overwrites the Destination file content with source content
- cp [OPTION] Source Directory //to copy source file in the directory folder
- cp [OPTION] Source-1 Source-2 Source-3 ...Source-n Directory//to copy multiple files i.e all the files mentioned from Source-1 to Source-n into directory folder
- cp -r Source-Directory Destination-Directory



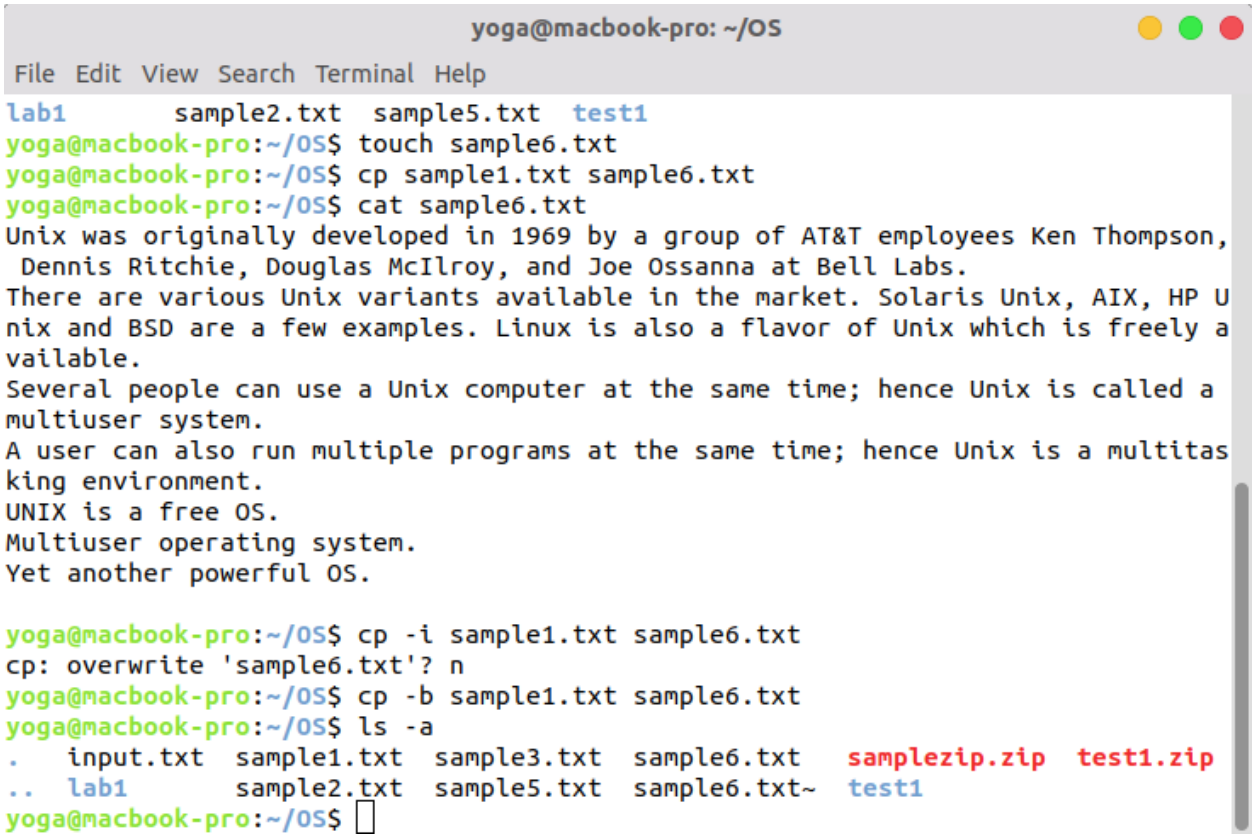
- Note:Requires at least two number of arguments

[OPTIONS]:

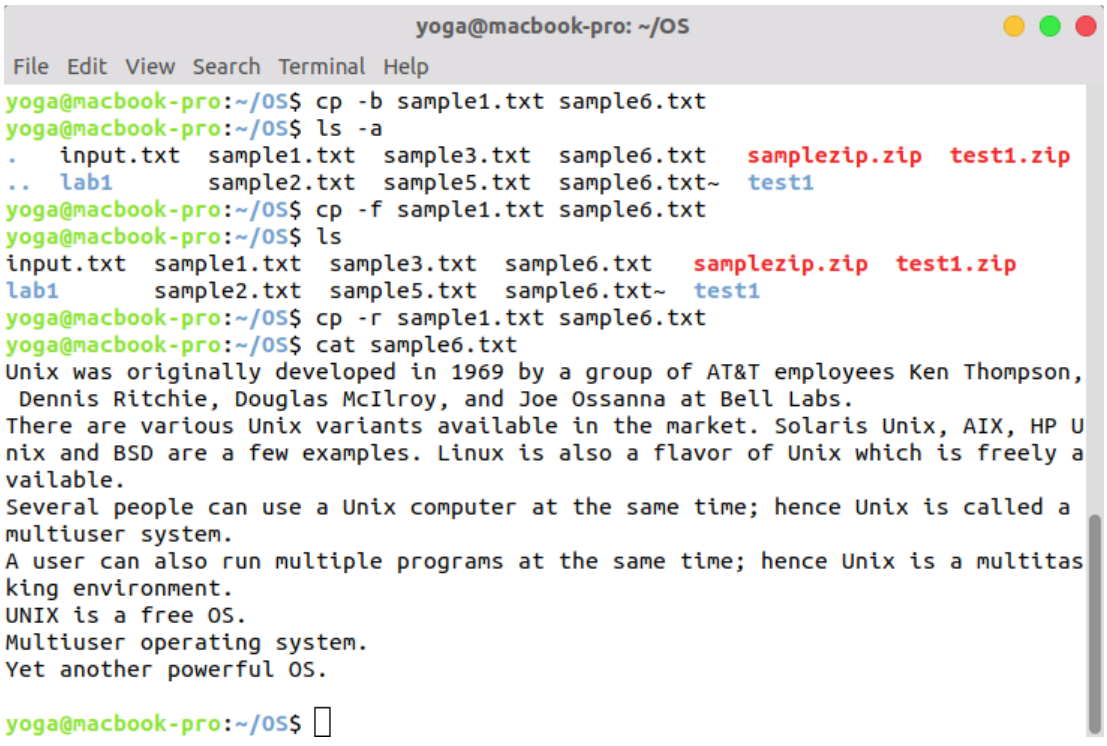
- -i (interactive):With this option enabled ,it warns the user before copying the files and only when ‘y’ is entered the process is executed.



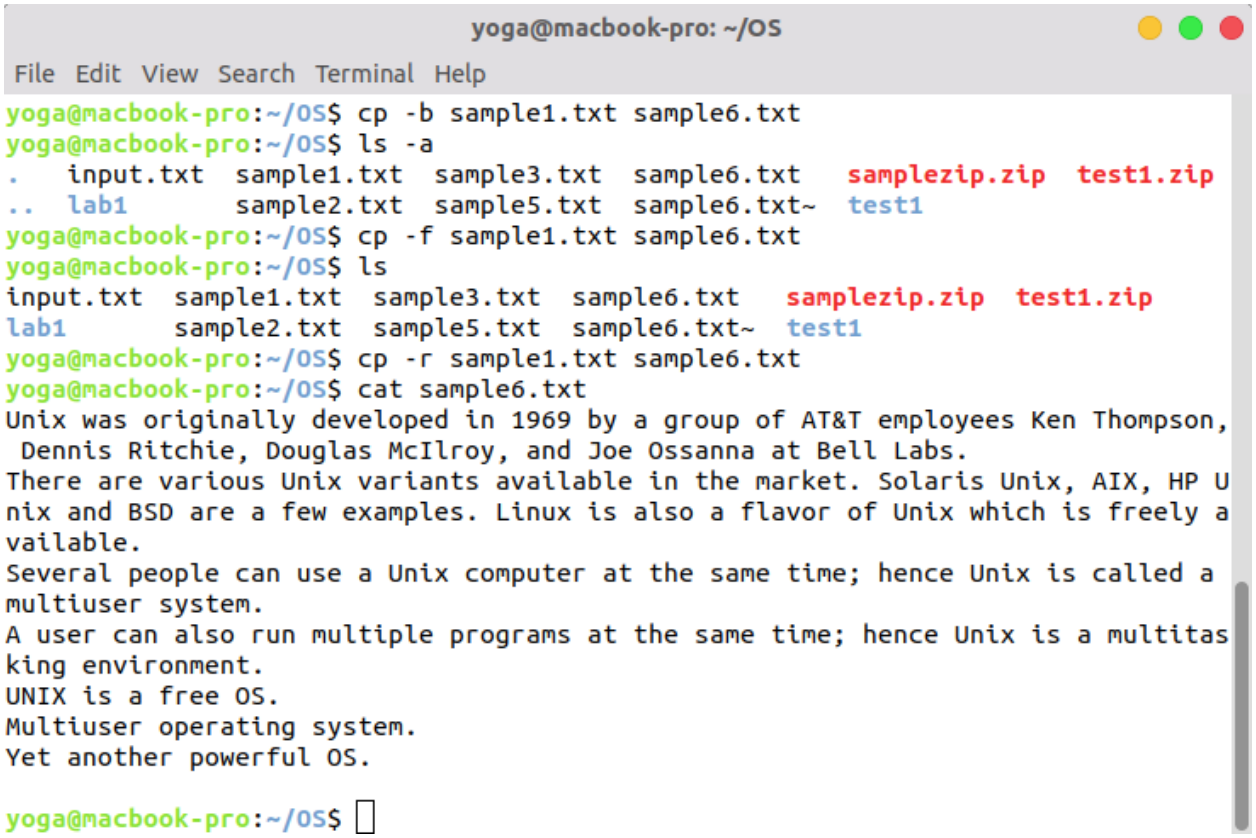
- -b(backup):With this option enabled ,it creates a backup file of the destination file in the same folder with different format



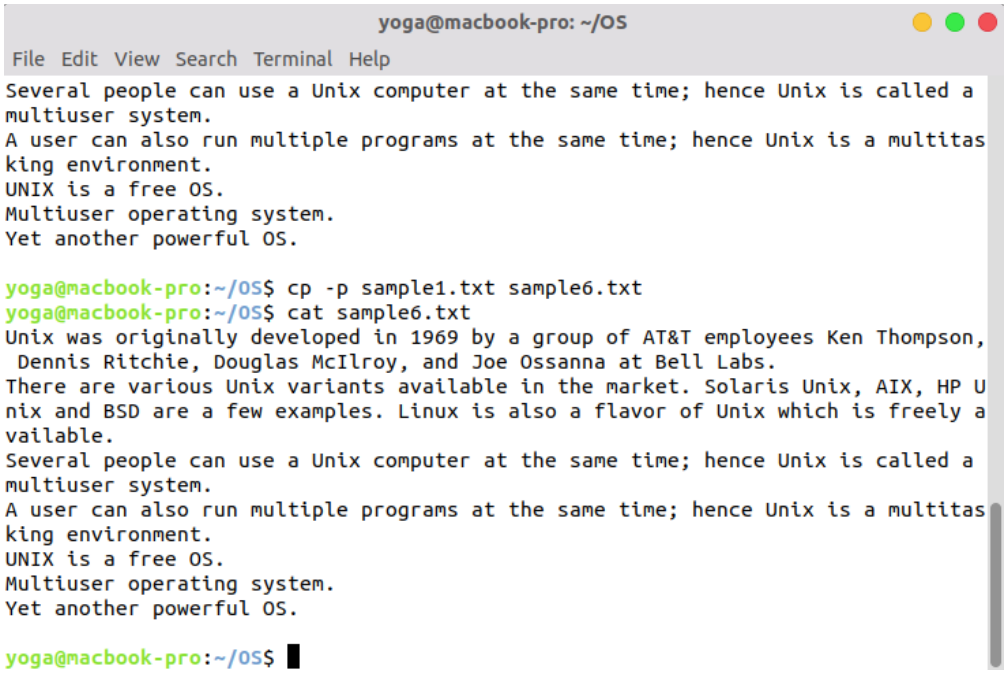
- -f(force):This option has to be enabled if the user does not have read/write permissions for the destination file .Thereby when enabled ,the destination file is deleted first and a new file is created and the data is copied into it



- -r or R(recursive):This option has to be enabled if the user has to copy contents of a directory itself to another directory.



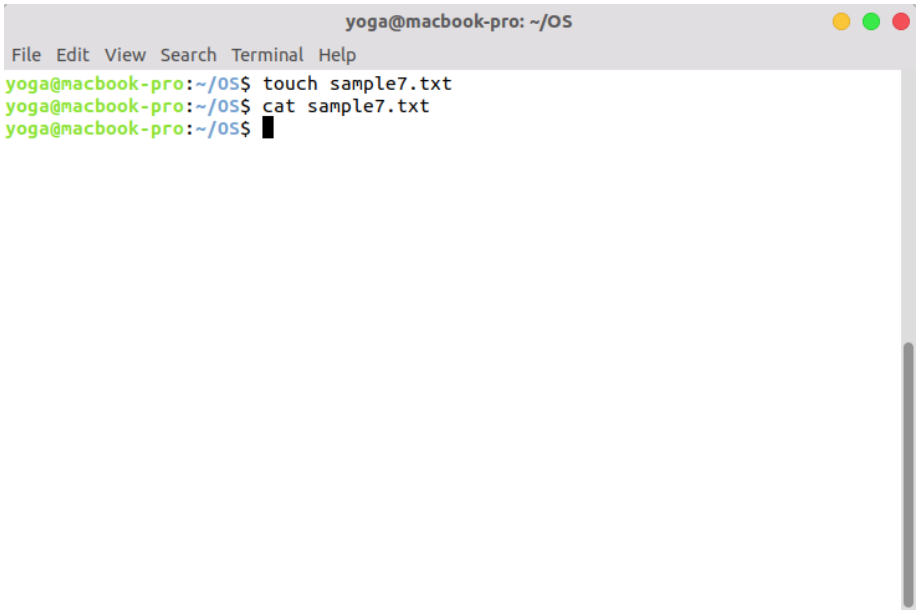
- -p(preserve): With this option enabled ,the destination file is also entitled with the properties of source file like read /write permissions ,last date modified ,etc



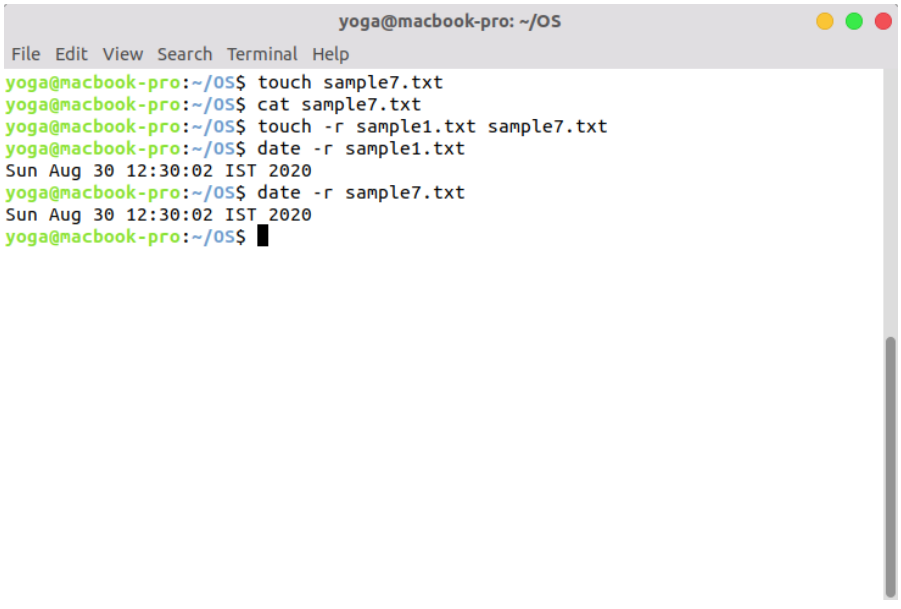
2)touch :
Description:
Touch command is used to create ,change and modify timestamps of a file.
It is also used to create a file without any content(empty file)

Syntax:

- touch [OPTION] filename //use to create a file

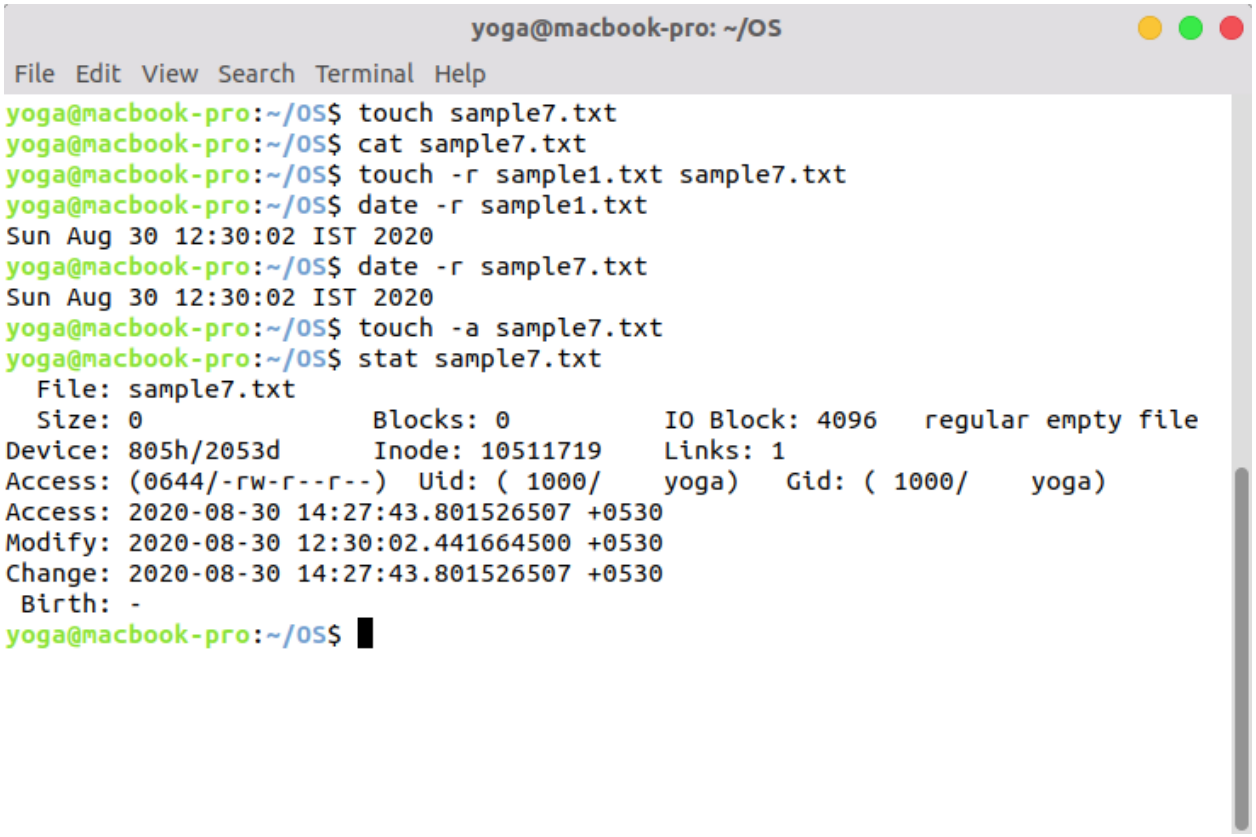


- touch -r file1 file2//to update timestamp of file2 with that of file1

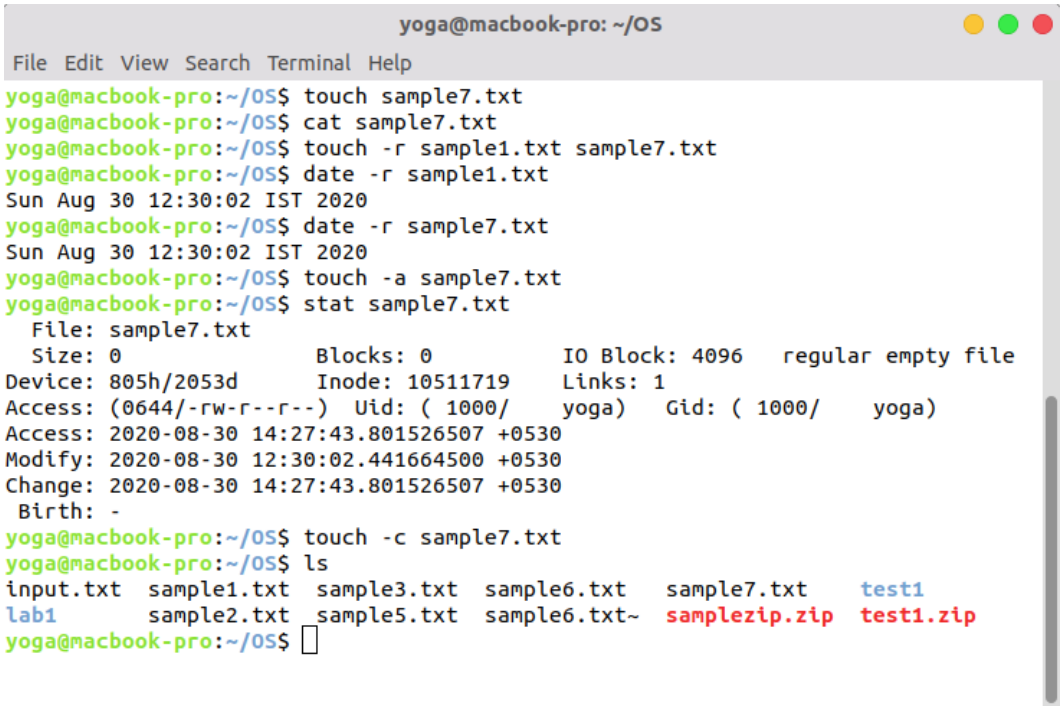


[OPTIONS]:

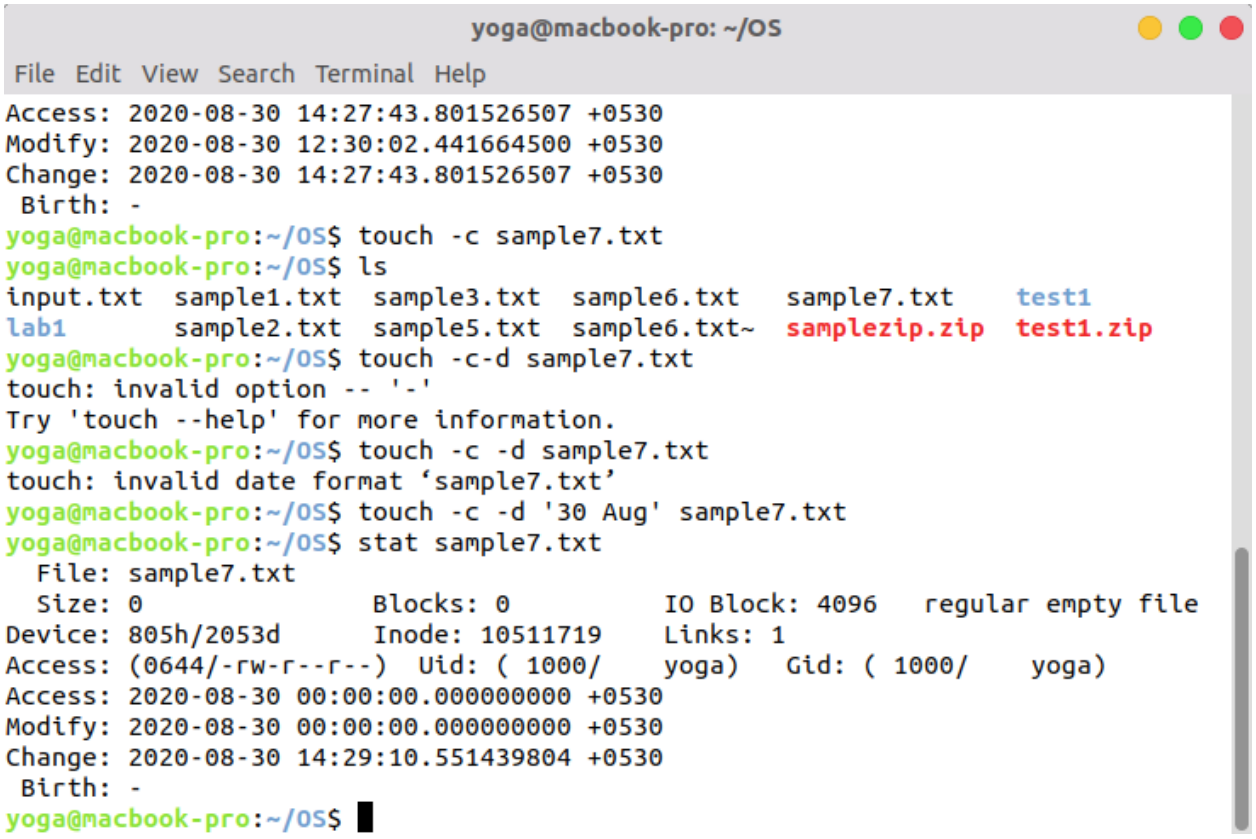
- -a:This command is used only to change/update modification time or last accessed time of a file



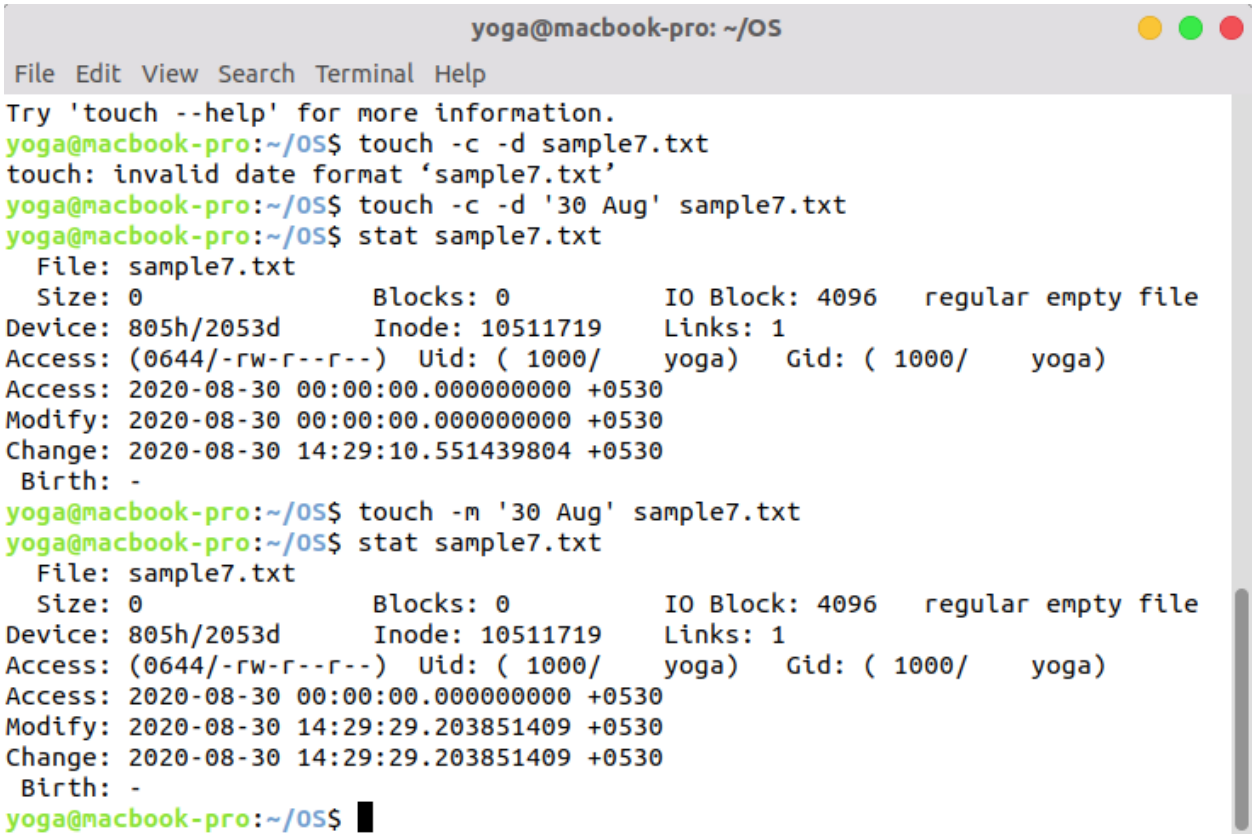
- -c:This command is used to check whether a file is created or not and if not created then it does not create a file.



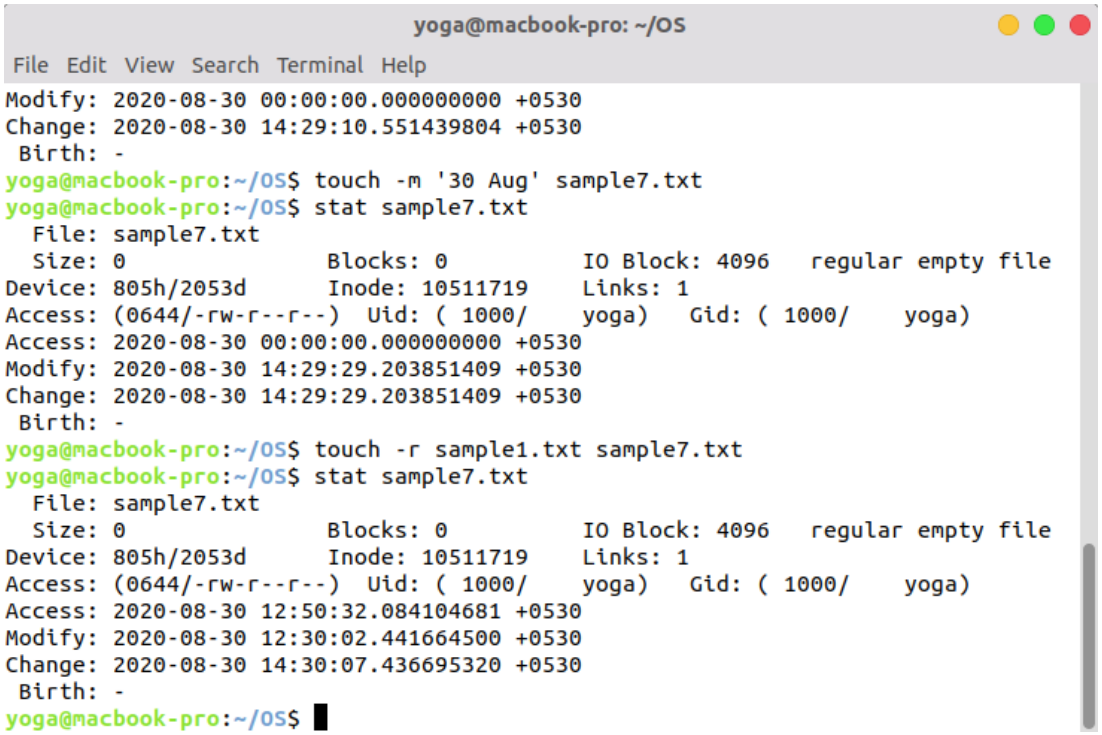
- -c-d ‘Date’:This command is used to update access and modification time.(Date Format:DD Month)



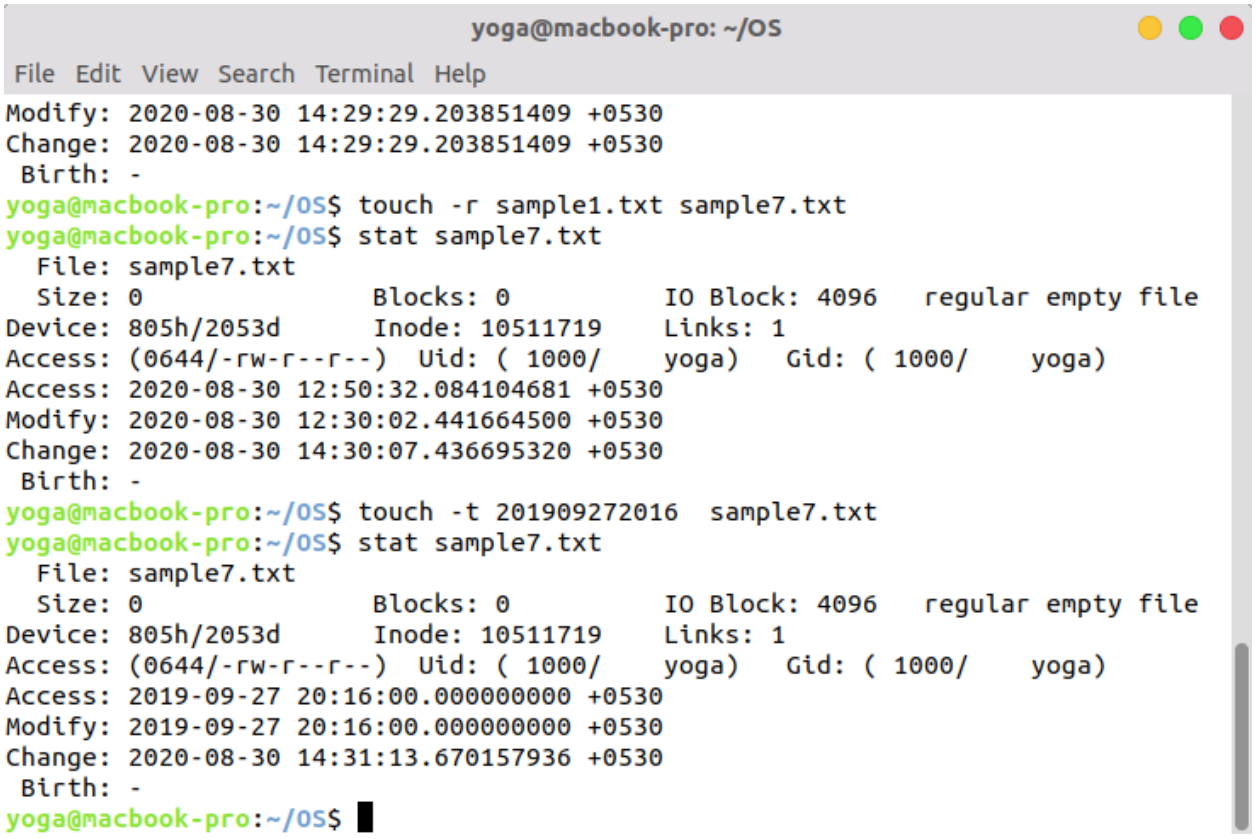
- -m:This command is used to change only the modification time.



- -r:This command is used to update timestamp of file2 with that of file1



- -t:This option enables to create a file using a specified time format(YYYYMMDDHHMM)



3)cat :

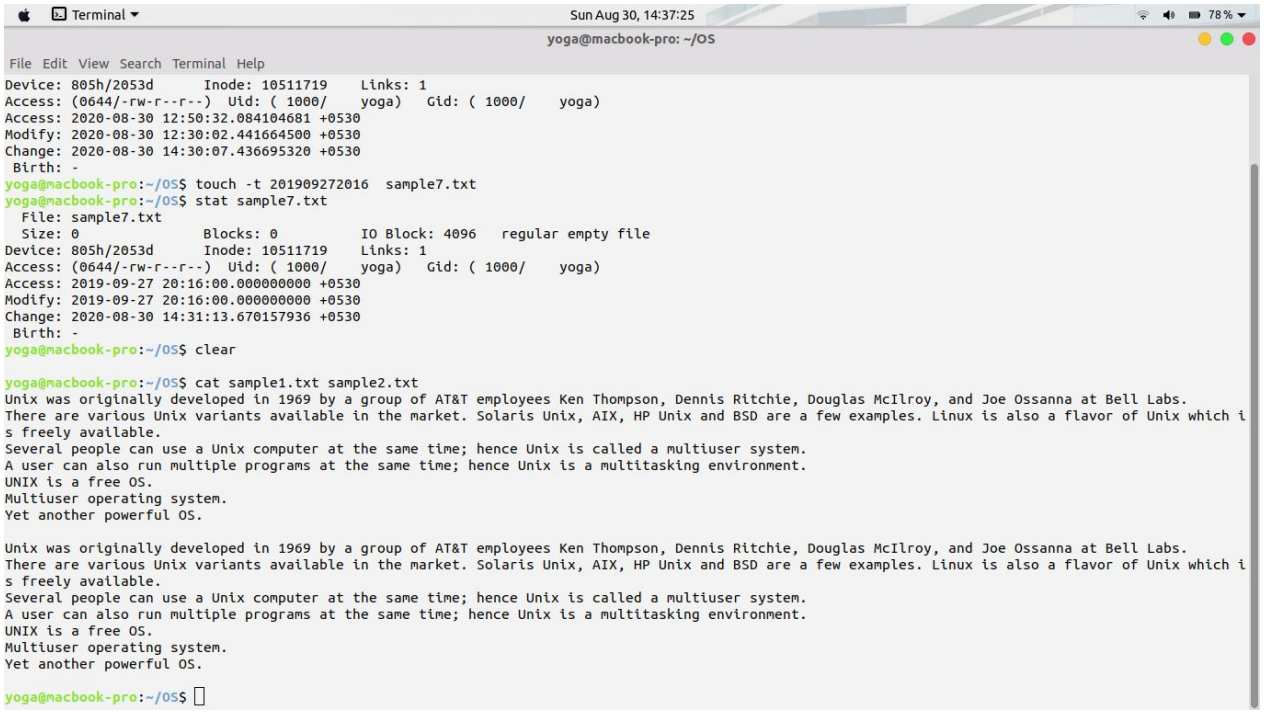
Description:

It is used to read and display the file content as output

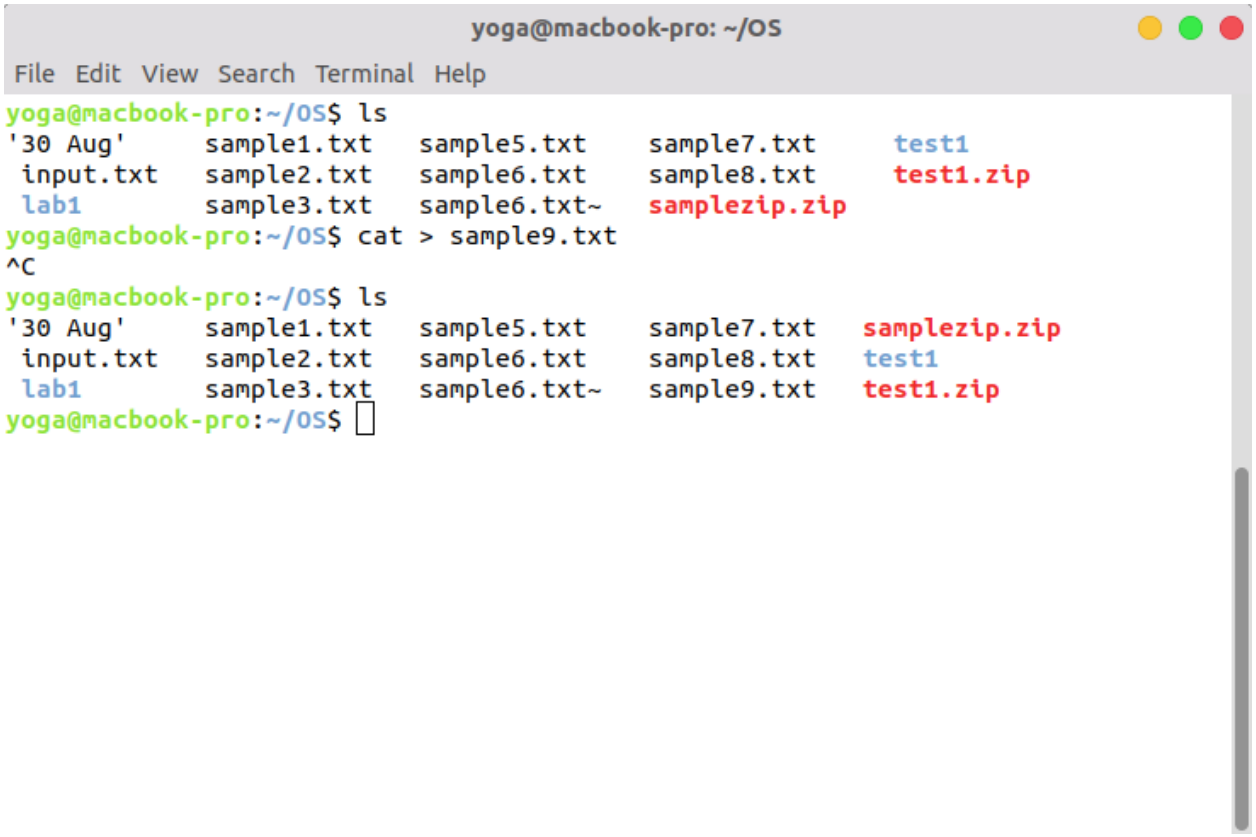
It is also used to create a file and concatenate files

Syntax:

- cat [OPTION1] file1 file2...file n [OPTION2] //to display file data



- cat >newfile //to create a new file



- cat sourcefile > newfile //overwrites newfile with sourcefile content if file already exists ,else creates a new file and copies the data into newfile

```
yoga@macbook-pro: ~/OS
File  Edit  View  Search  Terminal  Help
 input.txt   sample2.txt   sample6.txt    sample8.txt     test1.zip
 lab1        sample3.txt   sample6.txt~   samplezip.zip
yoga@macbook-pro:~/OS$ cat > sample9.txt
^C
yoga@macbook-pro:~/OS$ ls
'30 Aug'     sample1.txt   sample5.txt    sample7.txt   samplezip.zip
 input.txt   sample2.txt   sample6.txt    sample8.txt   test1
 lab1        sample3.txt   sample6.txt~   sample9.txt   test1.zip
yoga@macbook-pro:~/OS$ cat sample1.txt > sample9.txt
yoga@macbook-pro:~/OS$ cat sample9.txt
Unix was originally developed in 1969 by a group of AT&T employees Ken Thompson,
 Dennis Ritchie, Douglas McIlroy, and Joe Ossanna at Bell Labs.
There are various Unix variants available in the market. Solaris Unix, AIX, HP U
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Several people can use a Unix computer at the same time; hence Unix is called a
multiuser system.
A user can also run multiple programs at the same time; hence Unix is a multitas
king environment.
UNIX is a free OS.
Multiuser operating system.
Yet another powerful OS.

yoga@macbook-pro:~/OS$
```

- cat sourcefile >> newfile // appends new file data with source file

```
yoga@macbook-pro: ~/OS
File  Edit  View  Search  Terminal  Help
yoga@macbook-pro:~/OS$ cat sample1.txt >> sample9.txt
yoga@macbook-pro:~/OS$ cat sample9.txt
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```
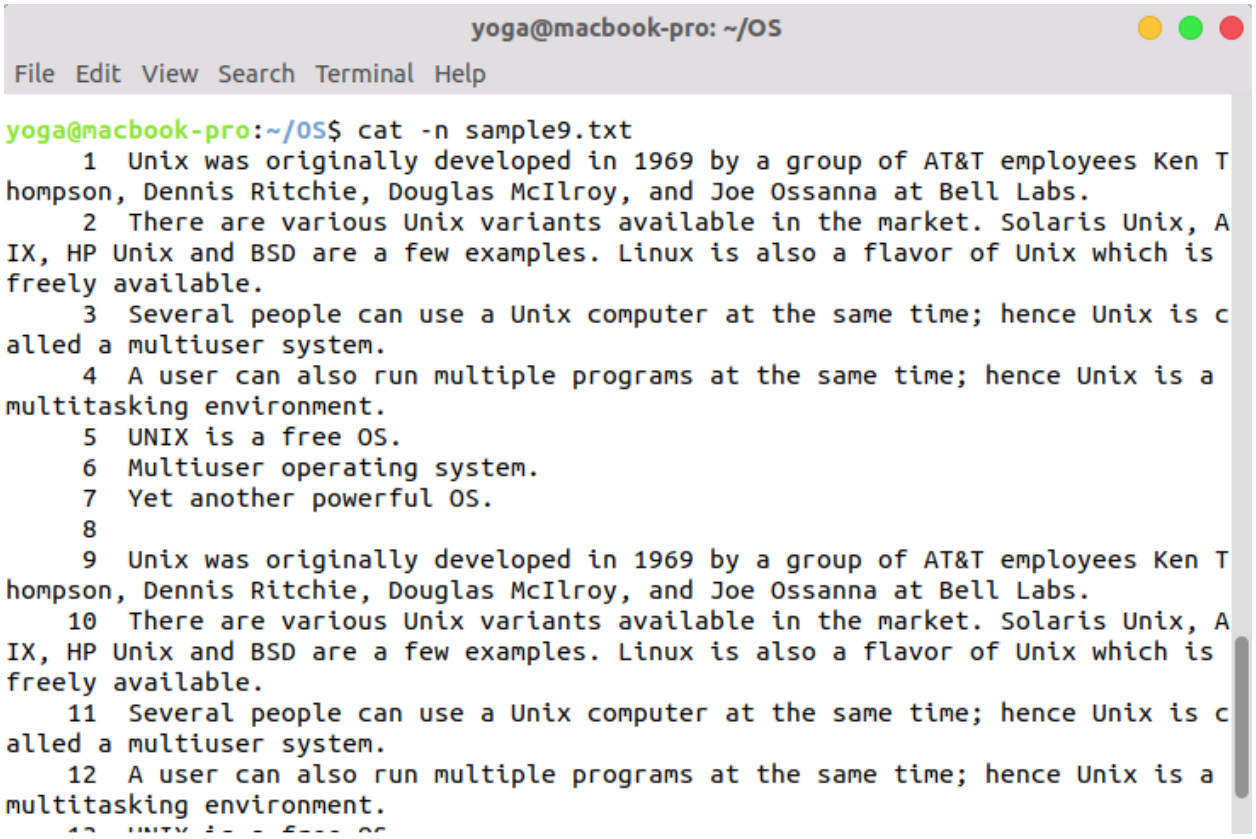
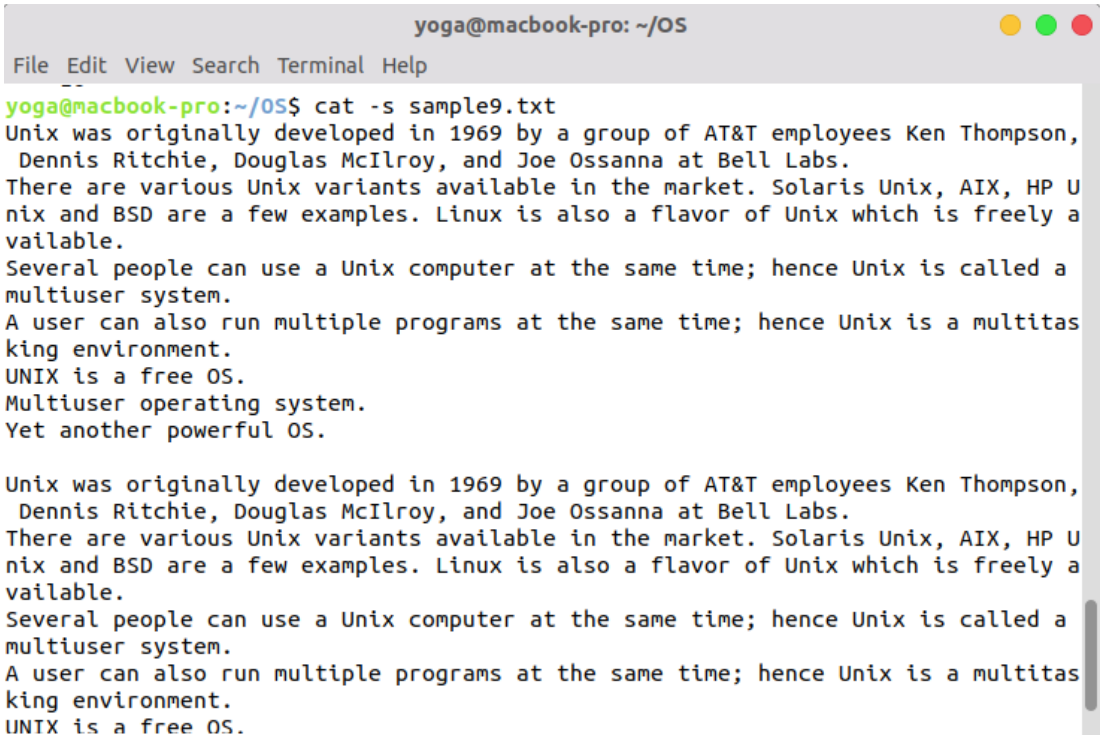

- cat “source-1” “source-2”...”source-n” >/>> “newfile”//use ‘>’ to overwrite new file with source-1 to souce-n file contents one by one and to append the new file with these file contents use “>>”

[OPTION1]:

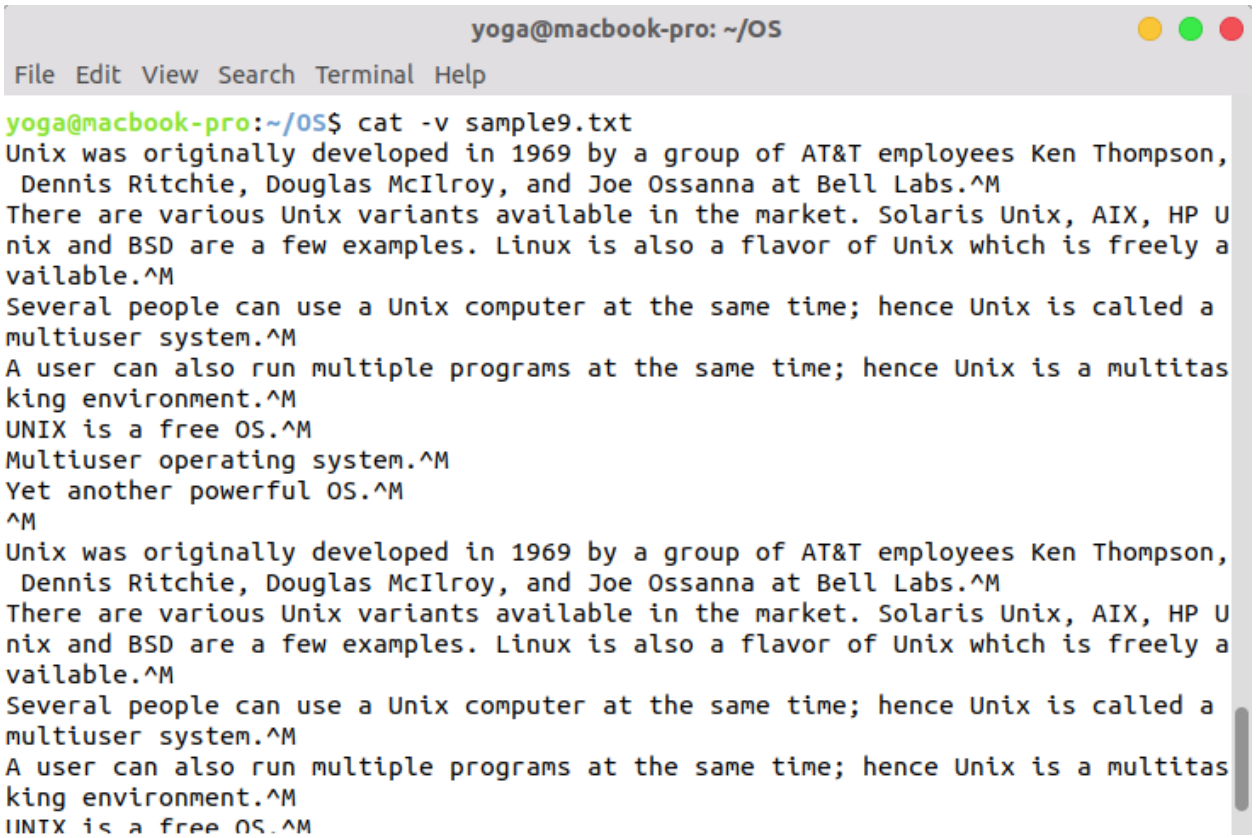
- -n:This command is used to display output with line numbers



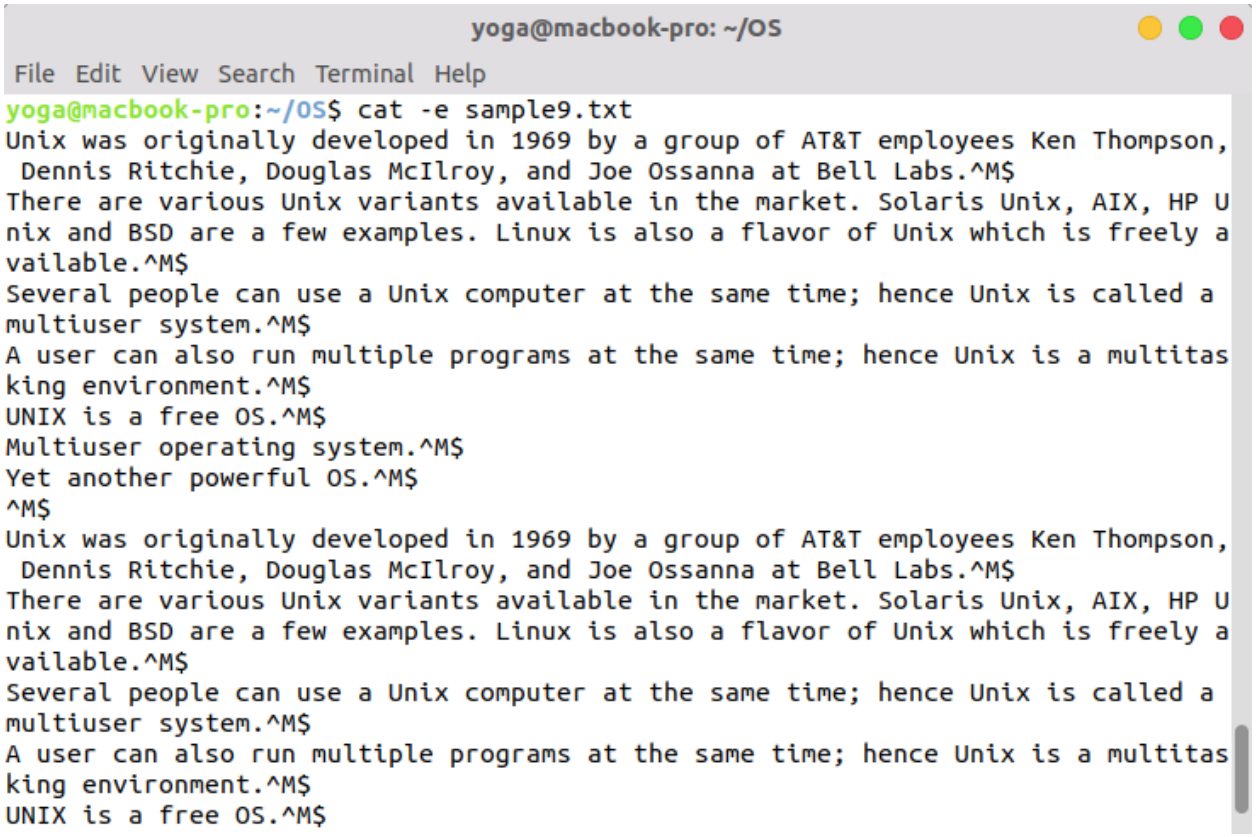
- -s:To suppress error in accessing file /to suppress empty lines in the output



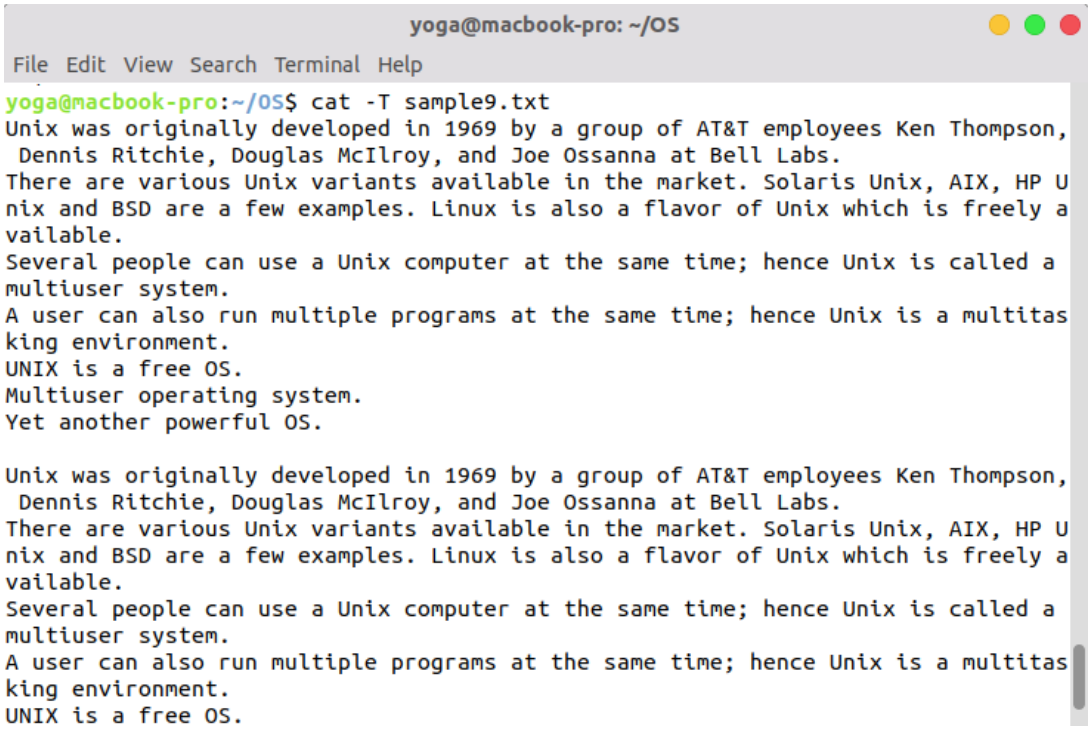
- -v:This command is used to show non-printable characters



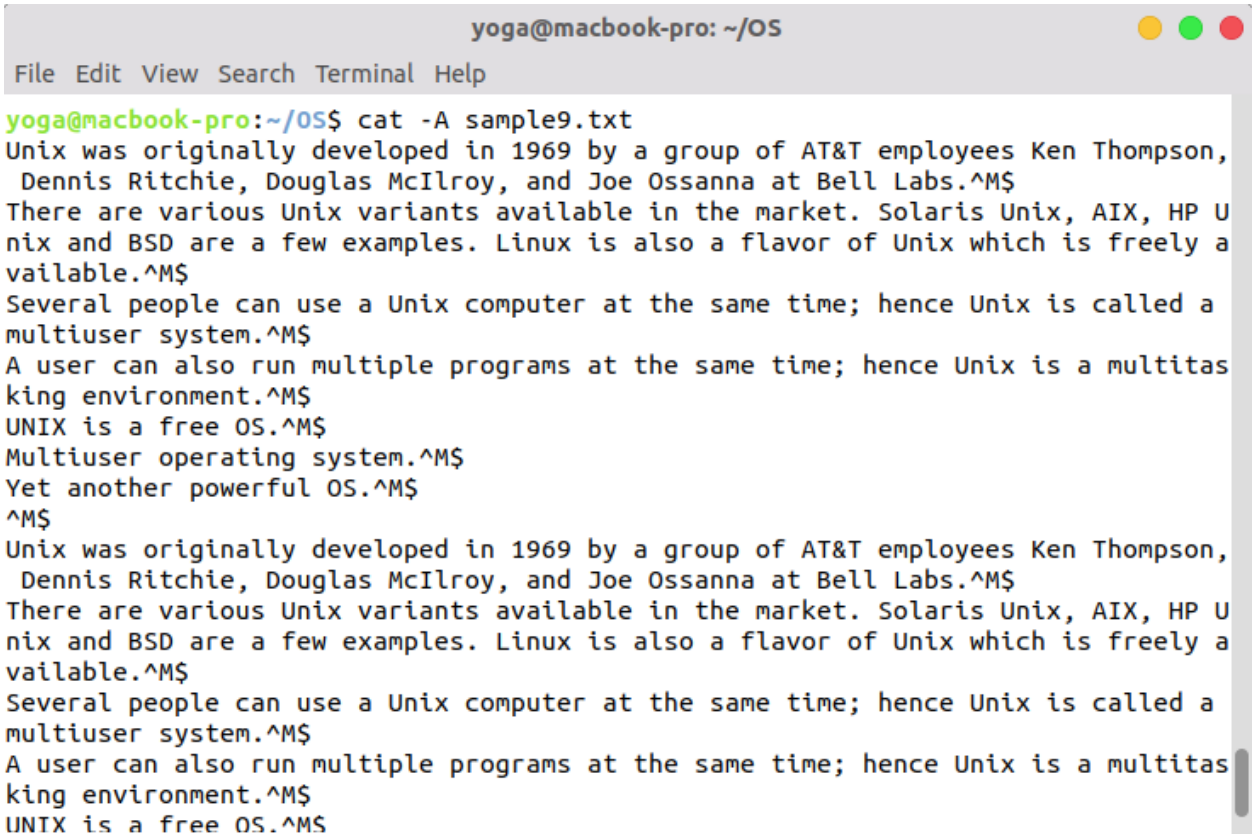
- -e:This command is used to character that ends a line.Displayed as ‘$’



- -T:This command is used to display tab spaces as '^I' to distinguish between tab and spaces



- -A:It features all the functionalities of v,e,T i.e,to show all possible features



4)seq :

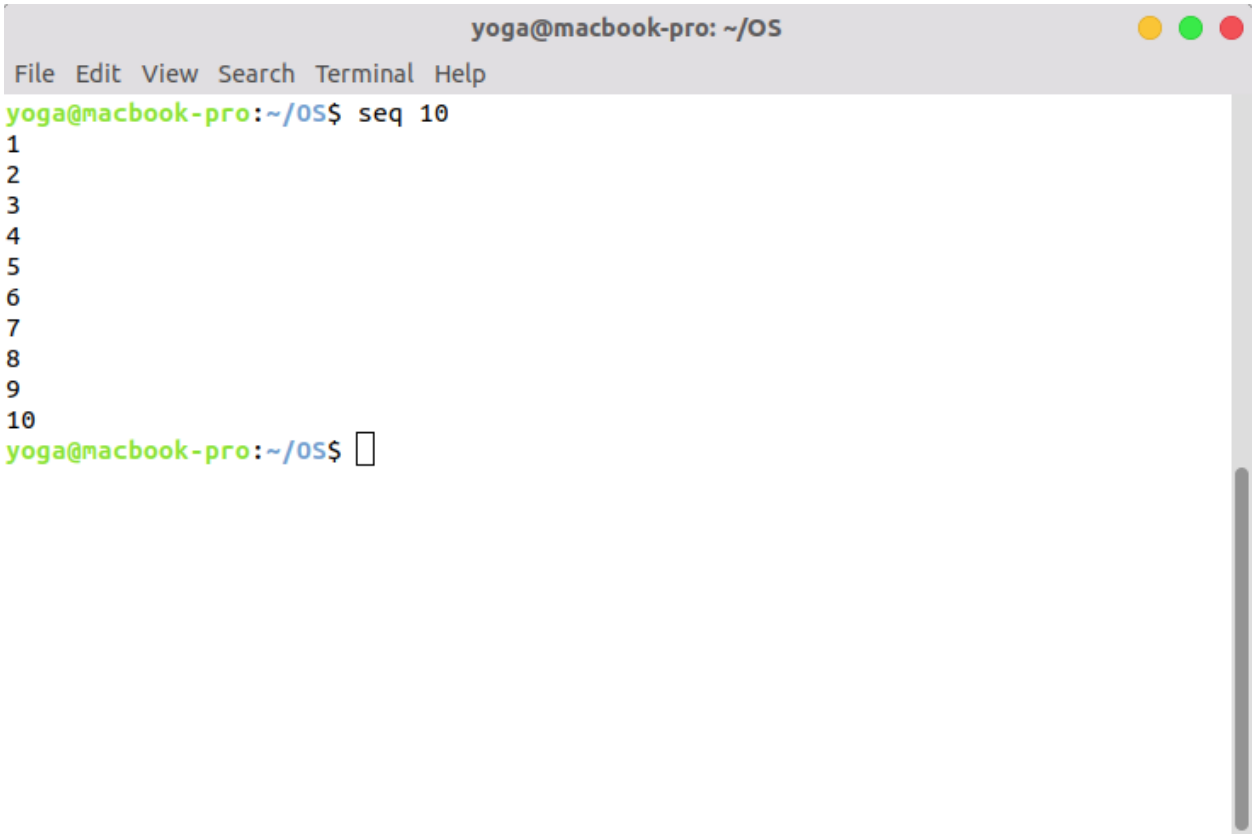
Description:

->It is used to generate numbers from FIRST to LAST in steps of INCREMENT.

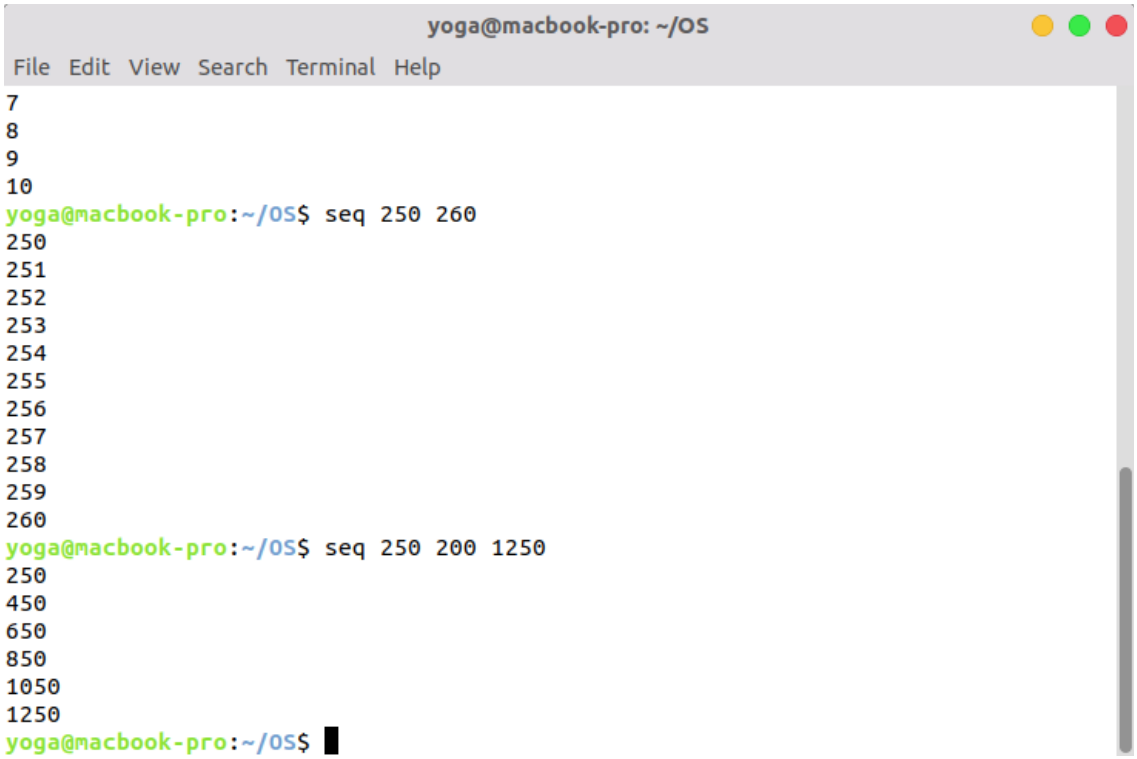
->It is a very useful command where we had to generate list of numbers in while, for, until loop.

Syntax:

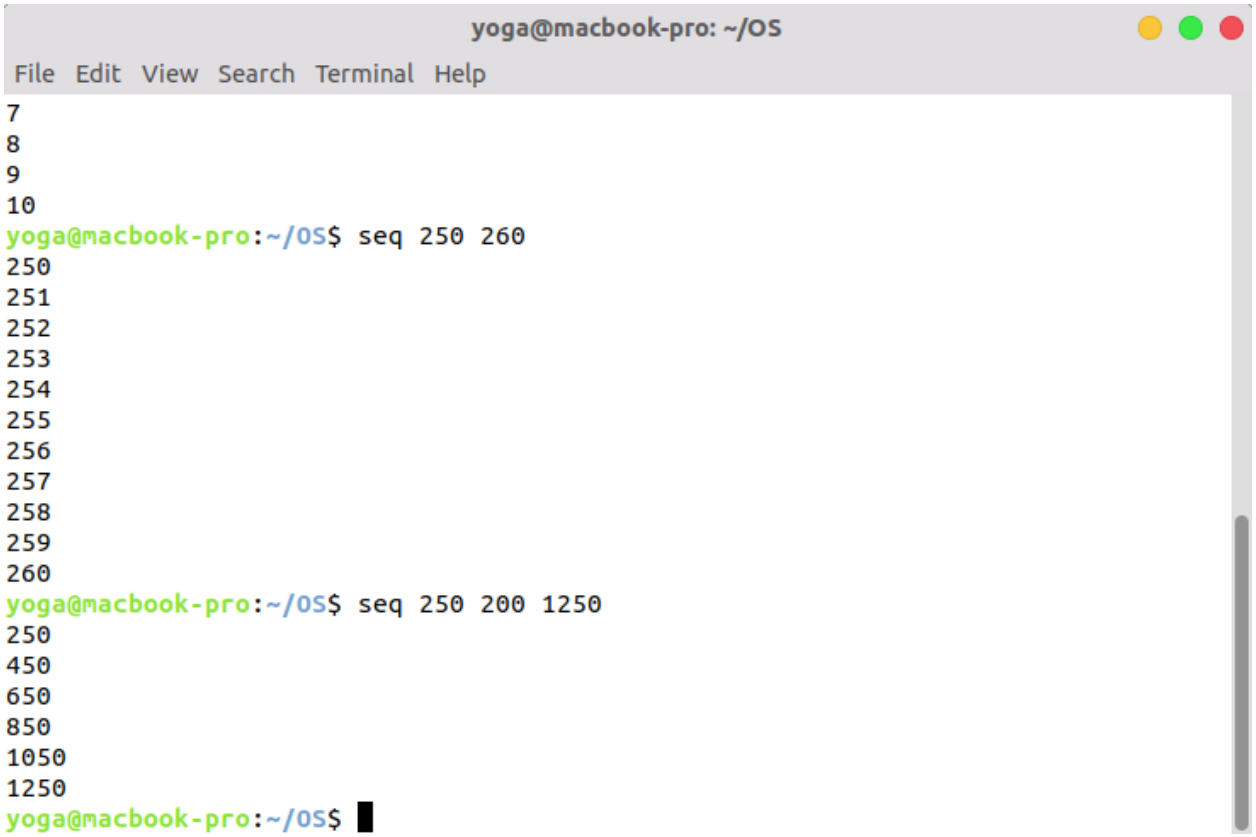
- seq [OPTION] [FORMAT] [STRING] [FIRST] [INCREMENT][LAST]
- seq [LAST]//prints sequence of numbers from 1 till LAST;INCREMENT=1



- seq [FIRST][LAST] //prints sequence of numbers from start till LAST;INCREMENT=1;



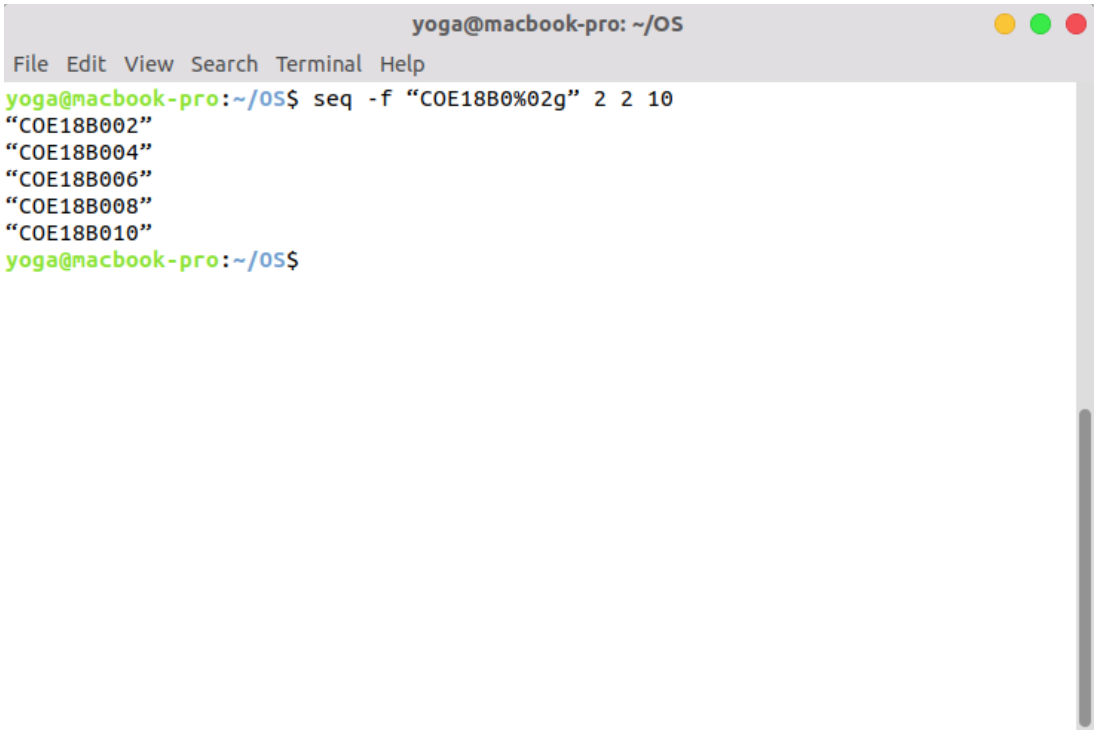
- seq [FIRST][INCREMENT][LAST] //prints sequence of numbers from FIRST till LAST incremented by INCREMENT argument



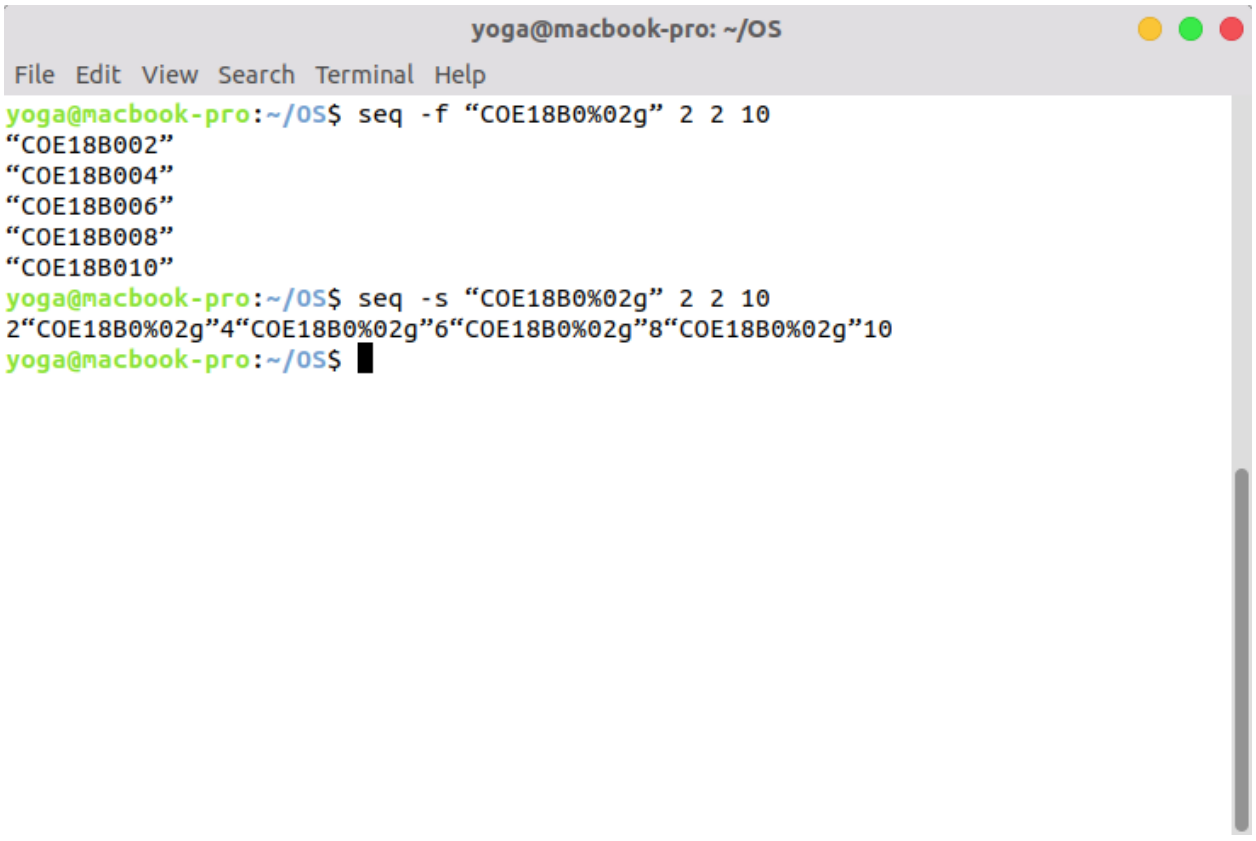
Note:Minimum arguments required last

[OPTION]:

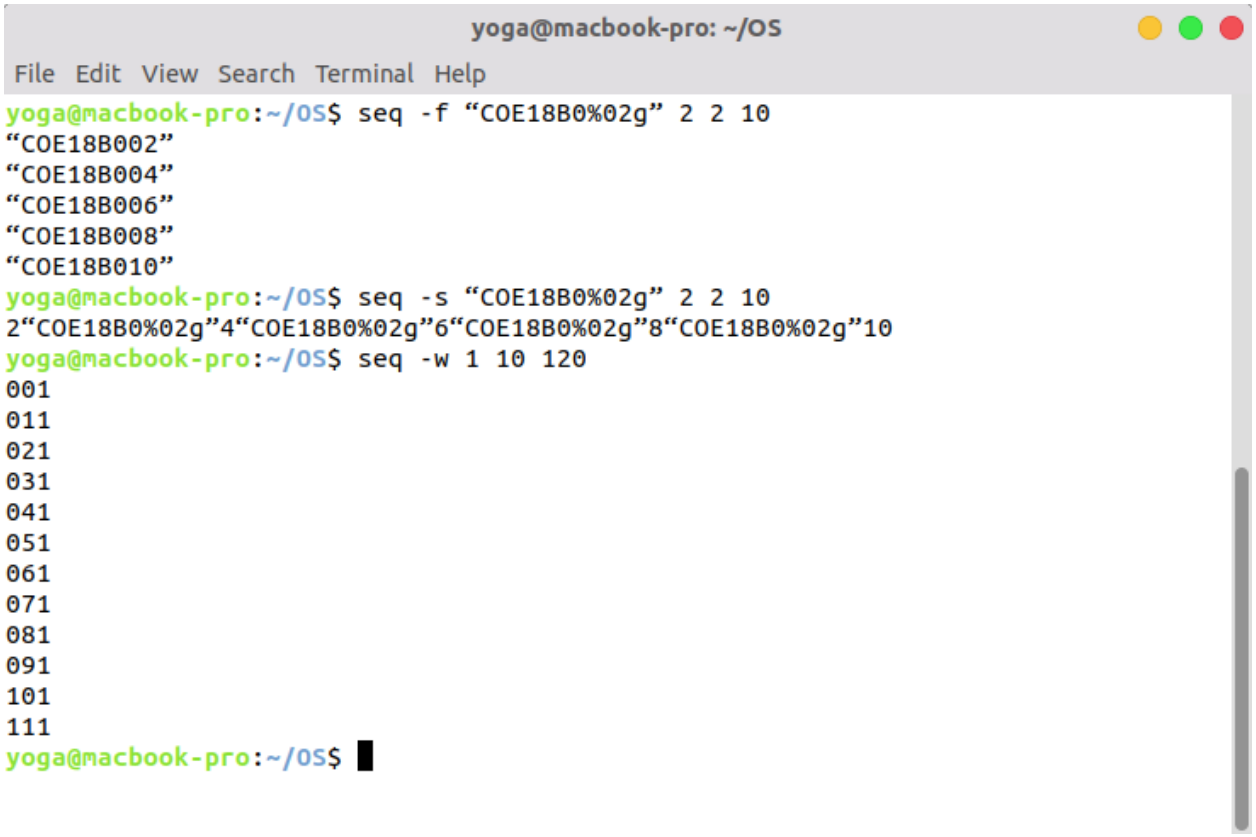
- -f:This Option when enabled requires ‘Format’ argument.So that the output is display as a sequence of ‘Format’s.



- -s:This Option requires “String “ argument such that the output is displayed as sequence of numbers from 1 (start:by default is 1) till ‘LAST’ with “STRING” in between .//“FIRST” and “INCREMENT” are optional arguments.



- -w: This Option enables padding with leading zeroes



5)W command:
Description:
->It is used to show that activity of logged in users and their processes in execution.
->It is used to display the user’s Logged in time and the system load averaged for the past 5,10 ,15 minutes ,etc

Syntax:

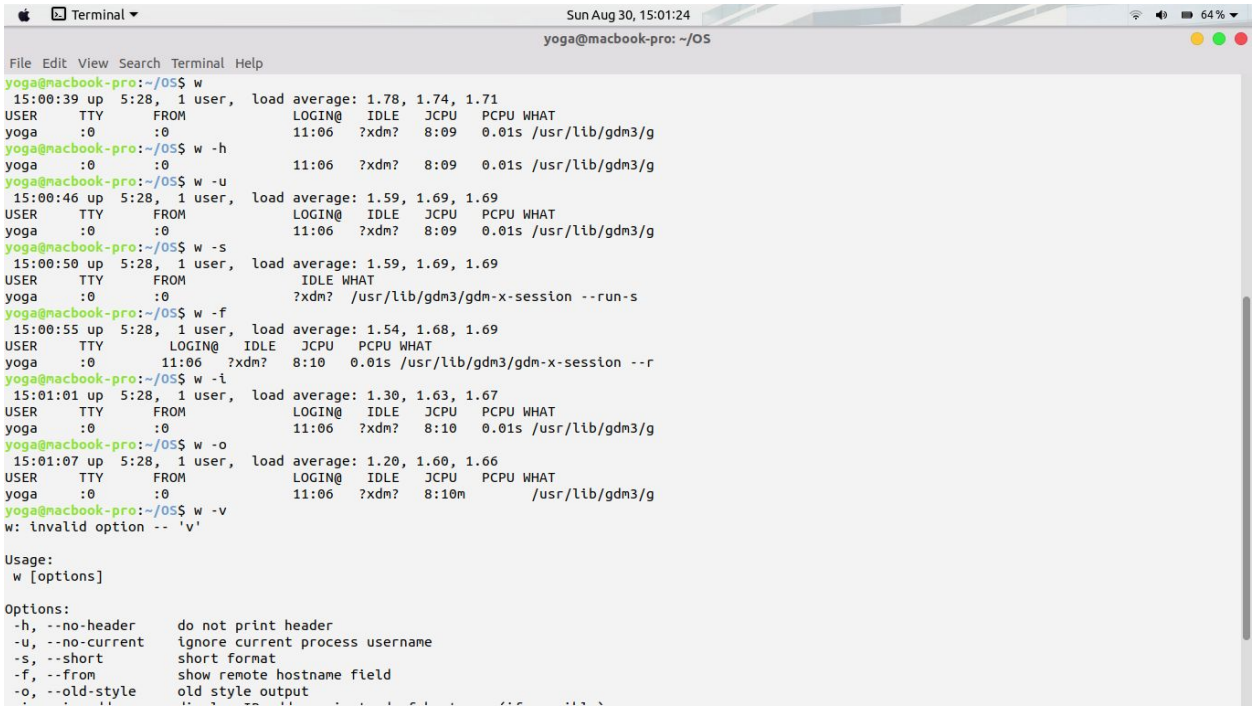
w [OPTION] [USER]...

NOTE:
OPTION and USER arguments are optional
If user is given ,Output is displayed only about that particular user

[OPTION]:

- -h:This Option does not print header
- -u:This option ignores username while finding out current processes and time
- -s:This Options prints output without JCPU/ PCPU or login time(short form)

-
- -f:This Option enables remote hostname field as “from”
- -i:In from field ,it displays IP address instead host address
- -o:This Options Prints black space for idle time less than 1 minute
- -V:Displays Version Information



6)Id Command:

Description:

It is used for the following functions:

->To display user and group names and numeric ID’s of the current user or any other user.

->To find out specific user’s UID

->Display security context of the current user.

->List out all groups a user belongs to

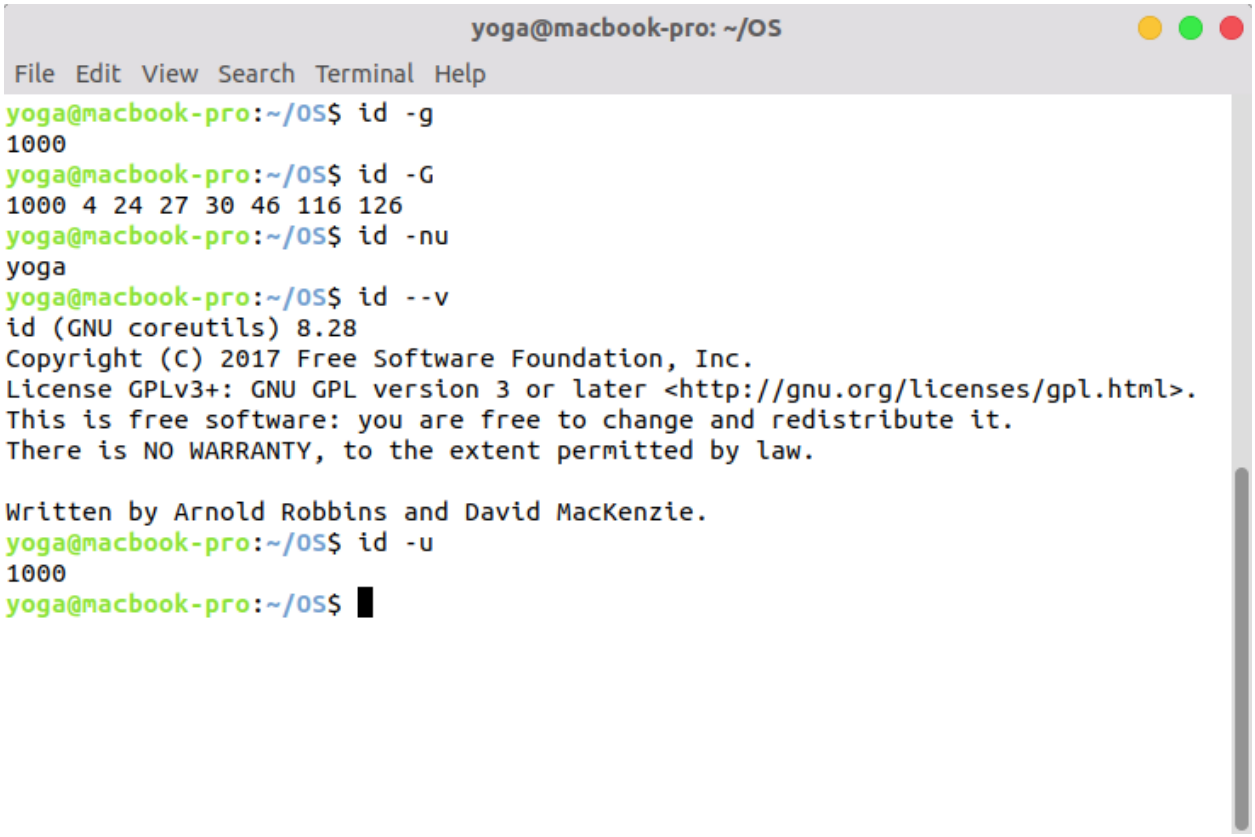
Syntax:

id [OPTION]..[USER]//to display the UID or real name

[OPTION]:

Following symbols facilitate functions such as:

- -g:To Print only the effective group id
- -G:To Print all Group ID’s
- -n:Print names instead of number//It has to accompanied with -g,u,G .Ex:-nu,-nG
- -r:Print real ID instead of numbers//It has to accompanied with -g,u,G .Ex:-r u,-r G
- -u:Print only the effective user ID
- --v:Display the version information and exit



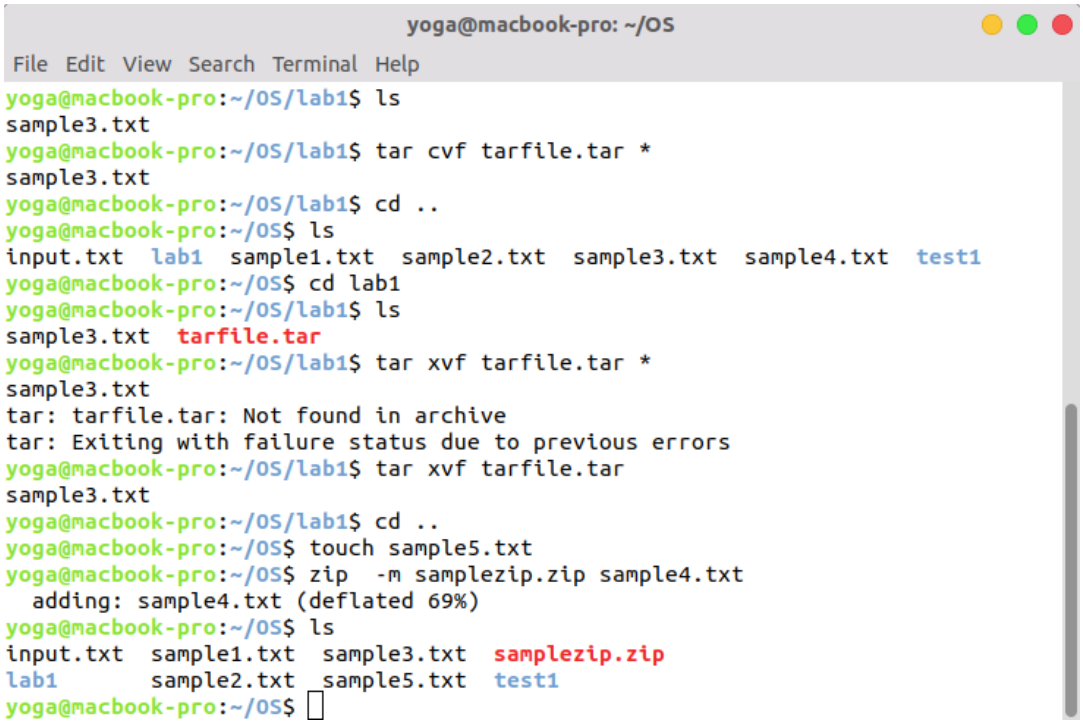
7)Zip:

Description:

->It is used to compress the files and store it as a .zip file.

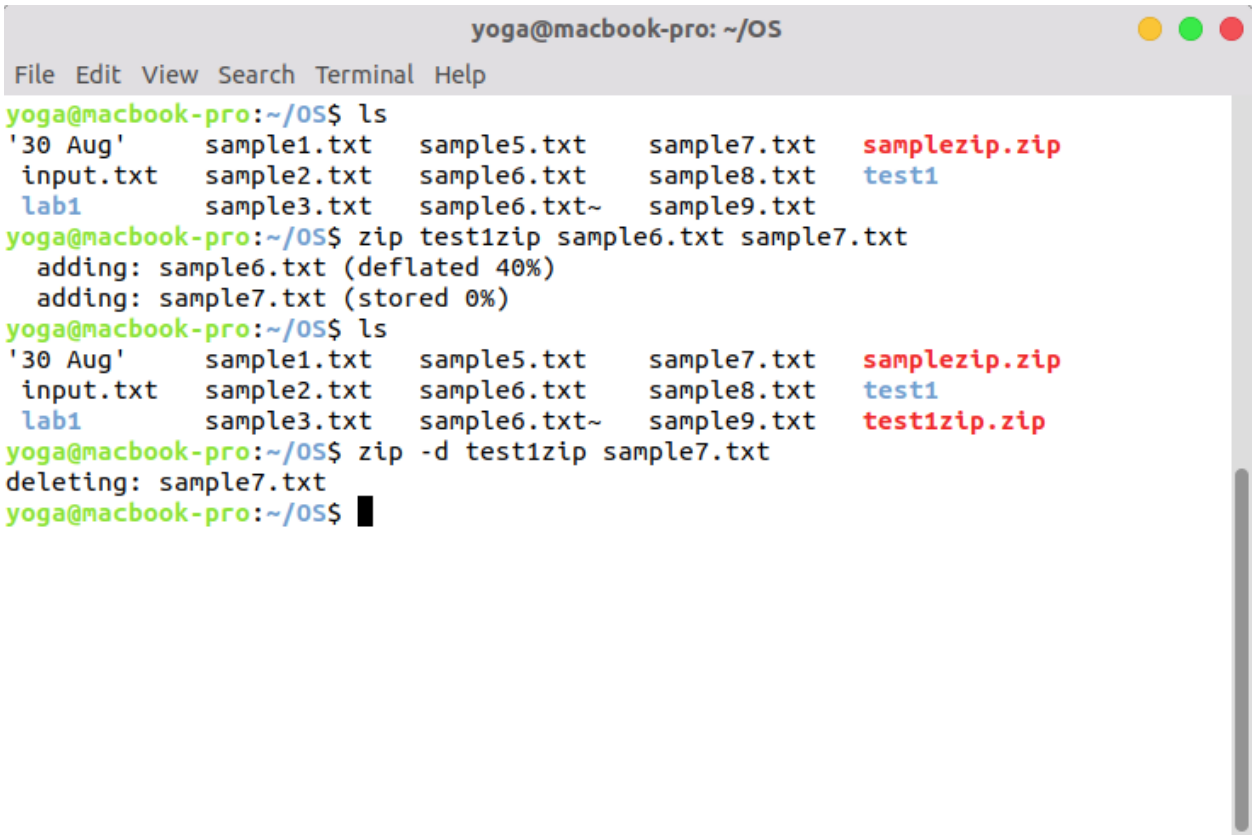
Syntax:

zip [OPTION] zipfilename files_list

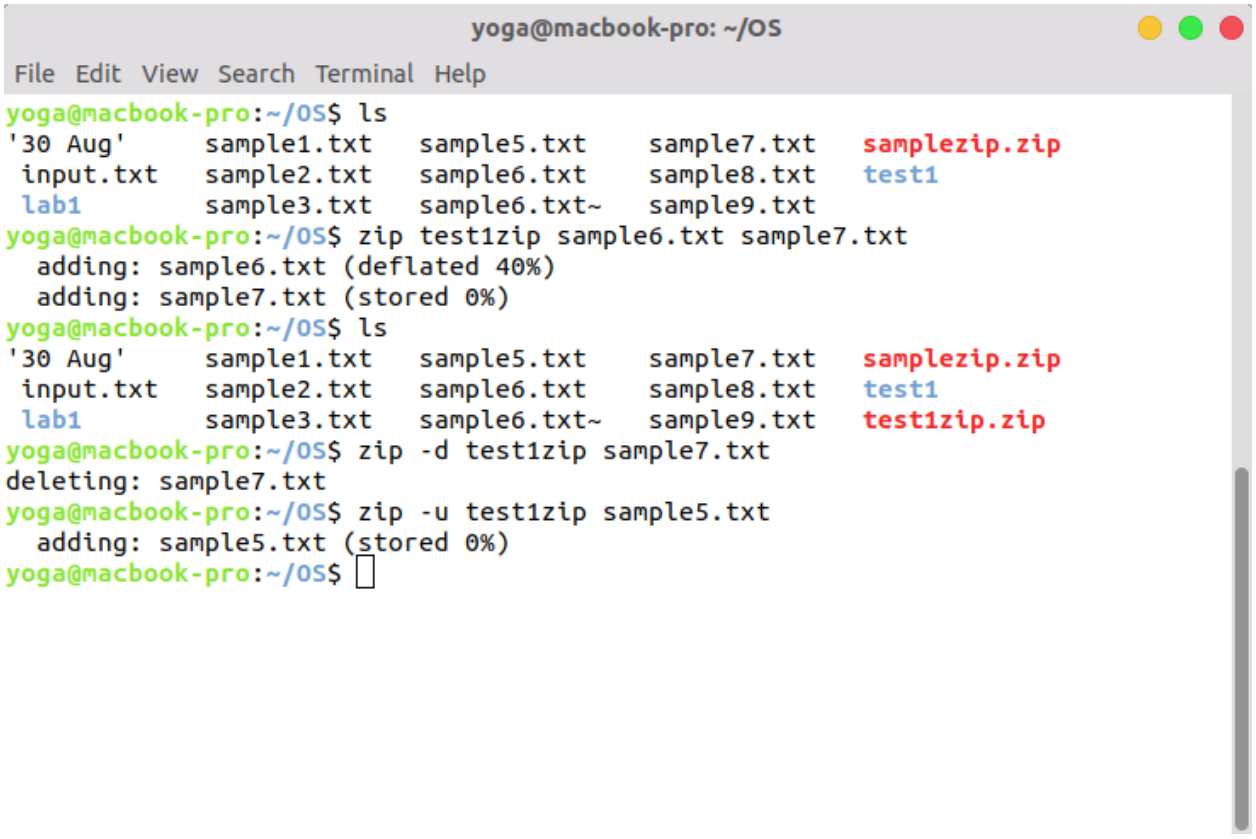


[OPTION]:

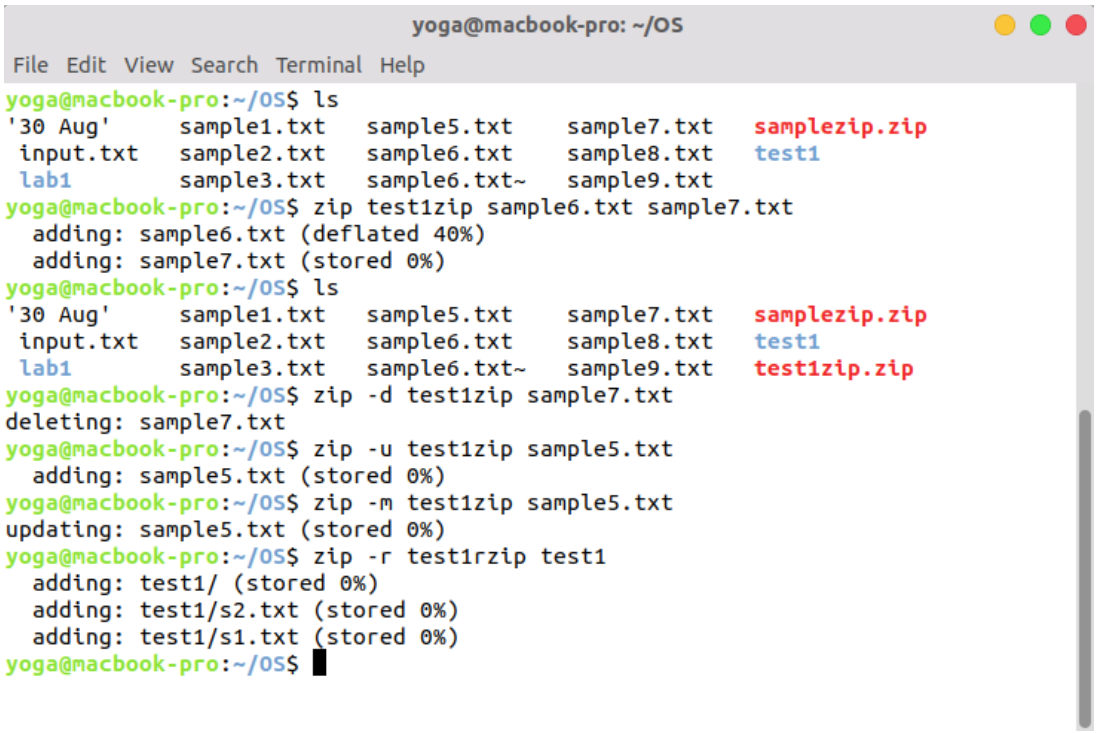
- -d:It is used to remove the files_list from the mentioned zip file.



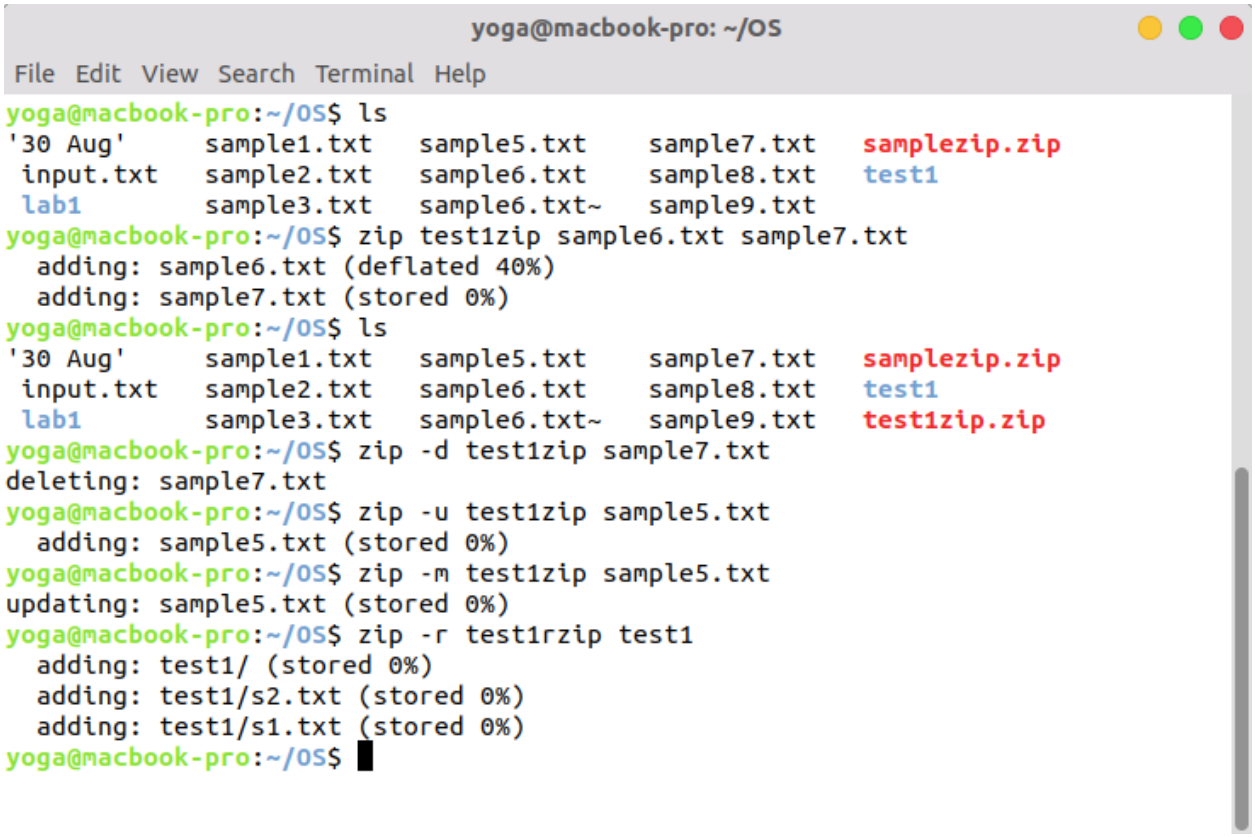
- -u:It is used to update the specified files_list or add the new files_list to existing zip file



- -m:Delete the files_list from the directory after moving the files into the zip file.



- -r:To zip a directory along with all its sub-directories(recursively).



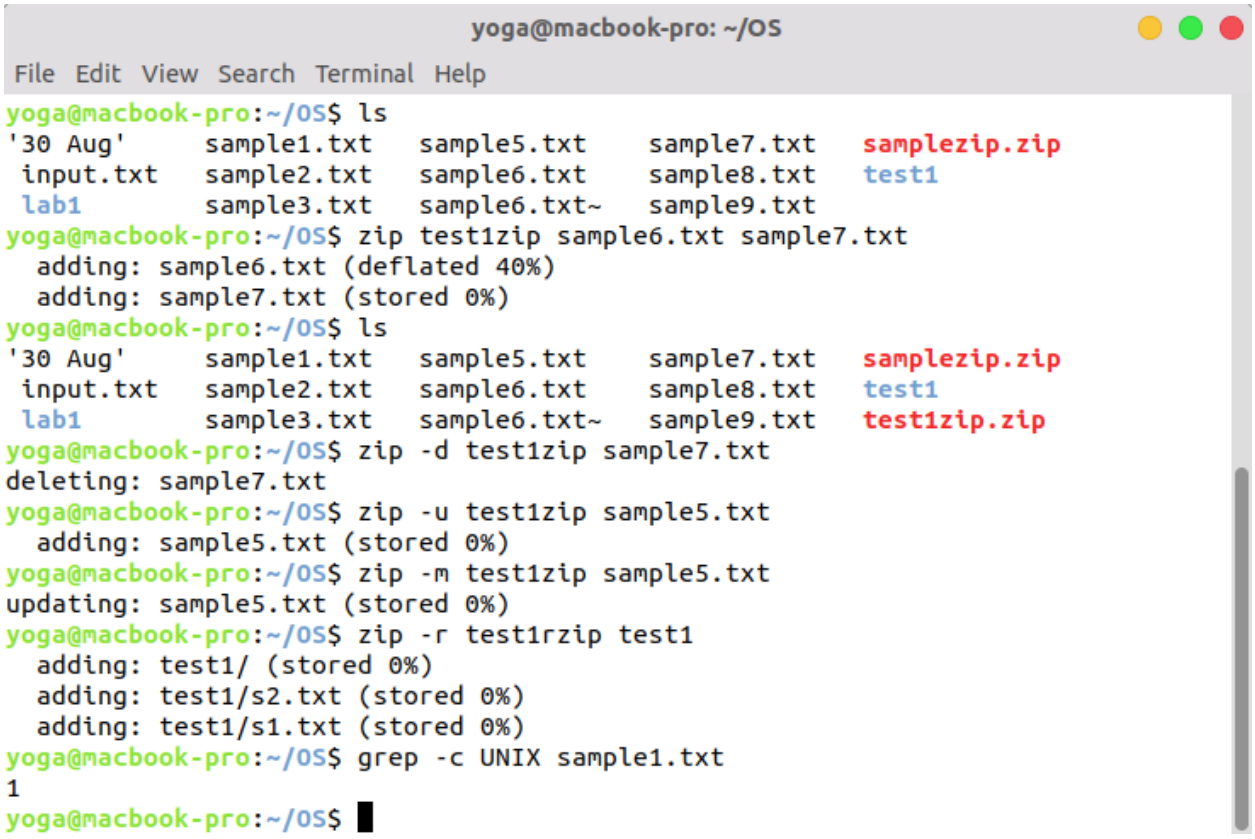
- -x:This option excludes the files_list when the entire directory is recursively zipped into a zip file
- -v:This option enables the display of progress indicator during compression.

8)grep:
Description:
->It is used to searches a file for a particular pattern of characters and displays the lines of those files if contains the matching pattern

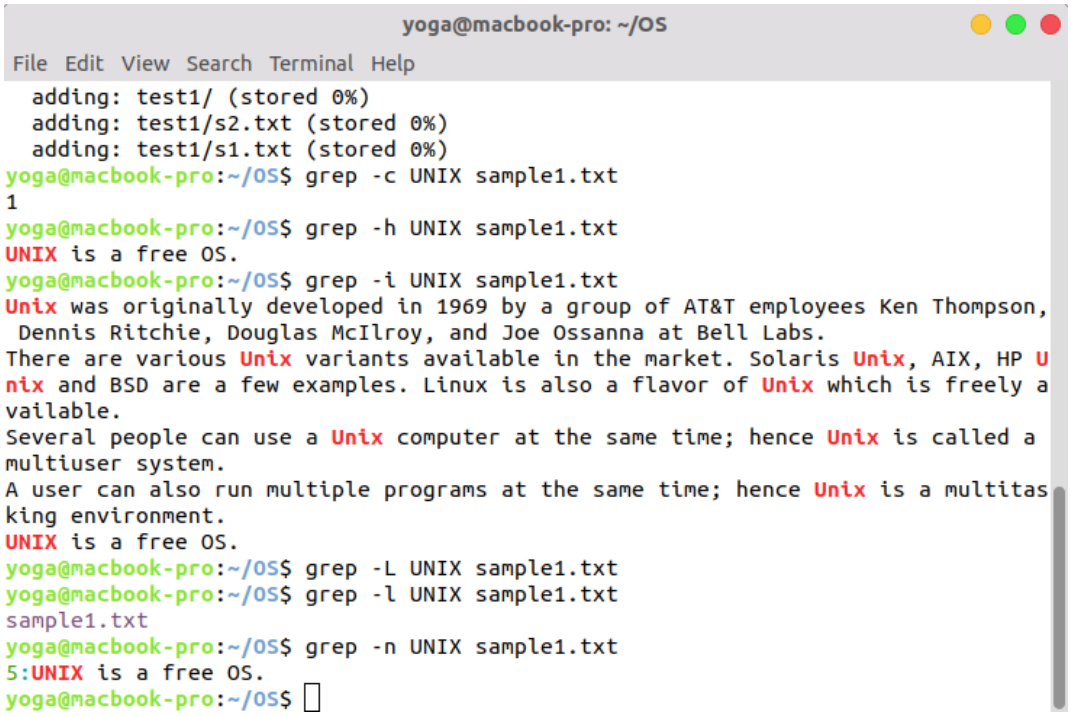
Syntax:
Grep [OPTION] pattern [files]//Used to search for “pattern” in the filename/file list mentioned

[OPTION]
Following Options enable functions such as:

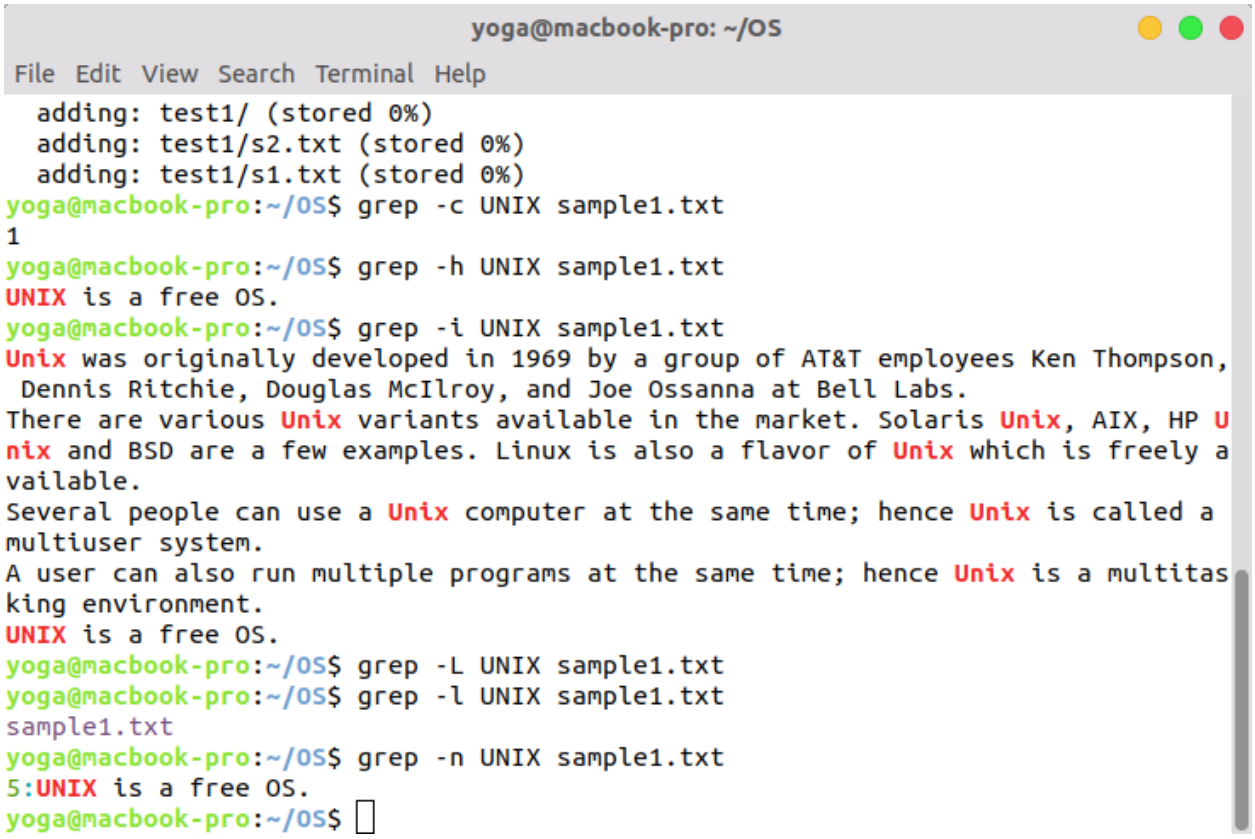
- -c : This commands prints only the no of lines that matches the pattern



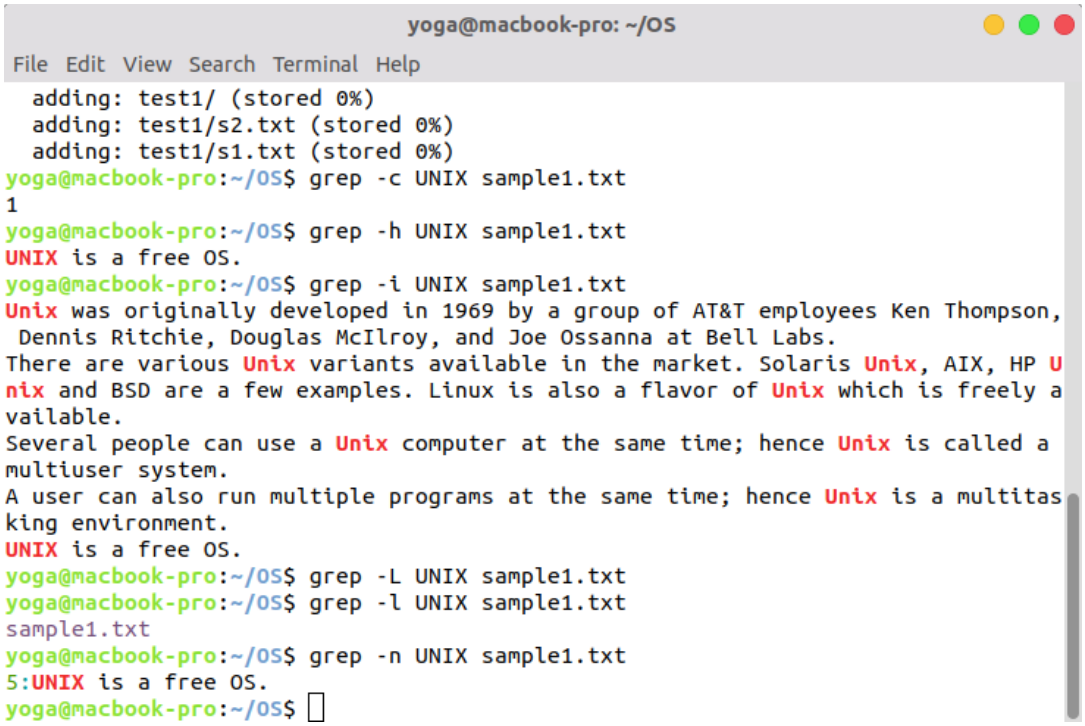
- -h:Displays the matched lines but not the filenames



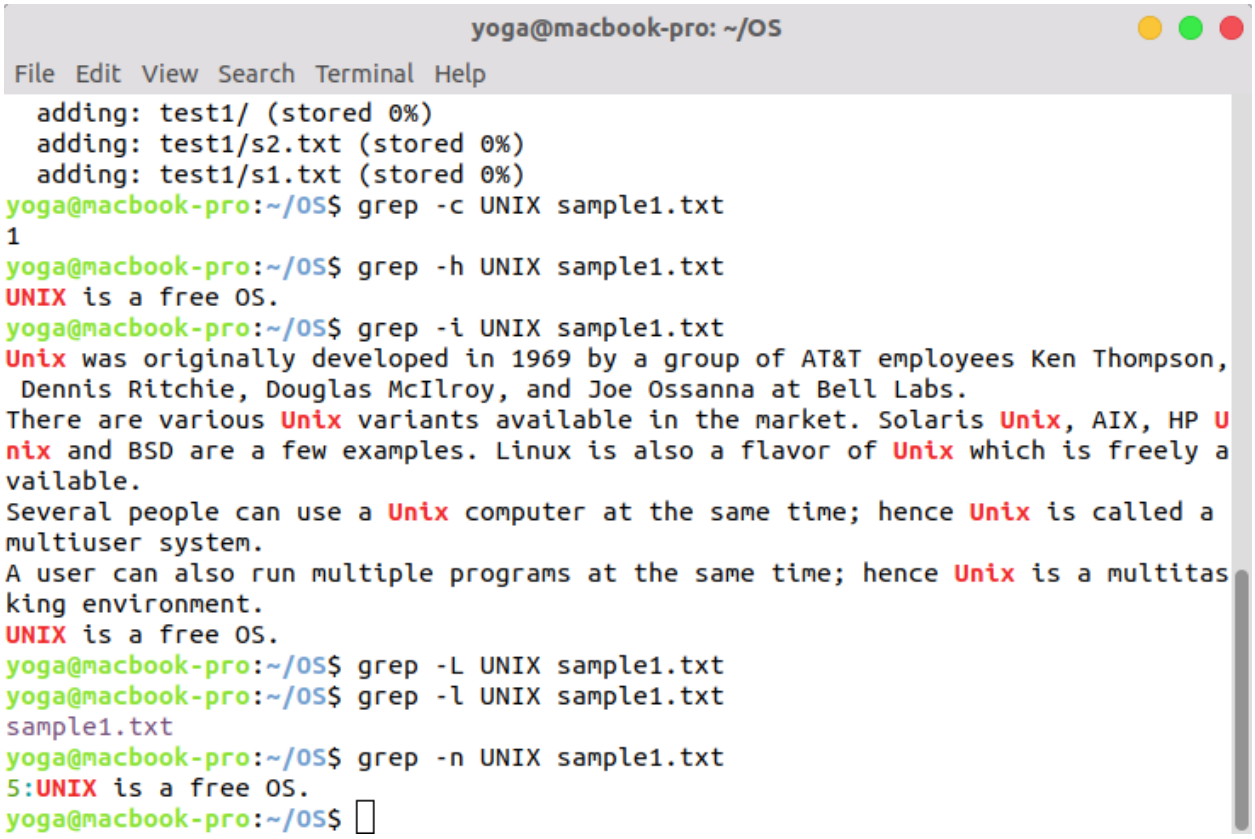
- -i:Ignores case sensitivity for searching pattern



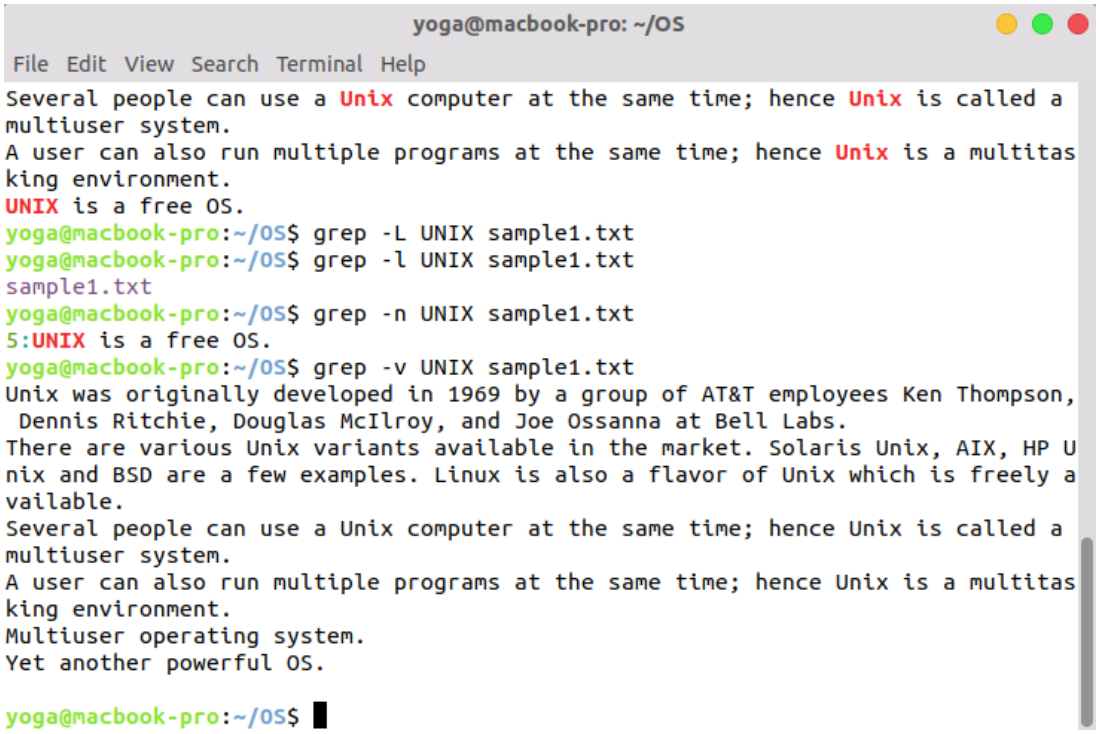
- -l:Display the list of filename that contains data with matching pattern



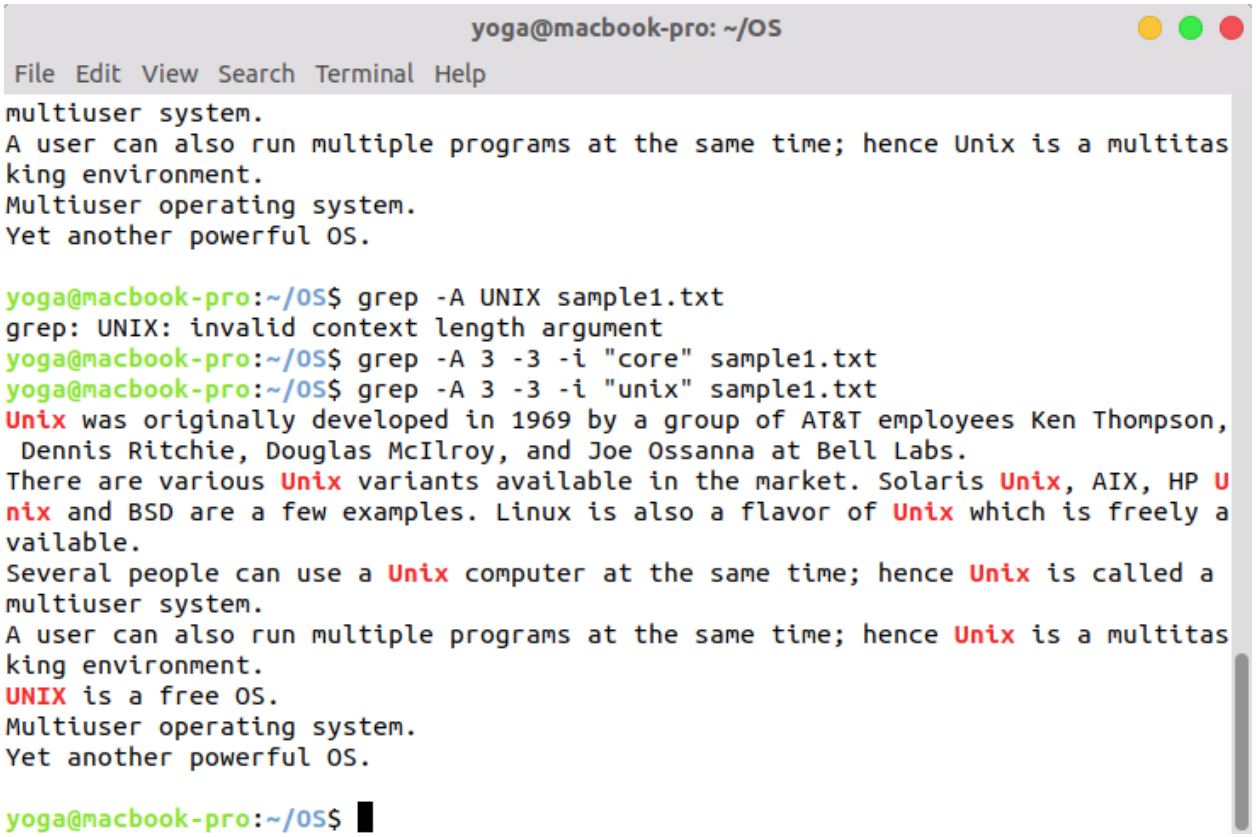
- -n:Display the matched lines and their line number.



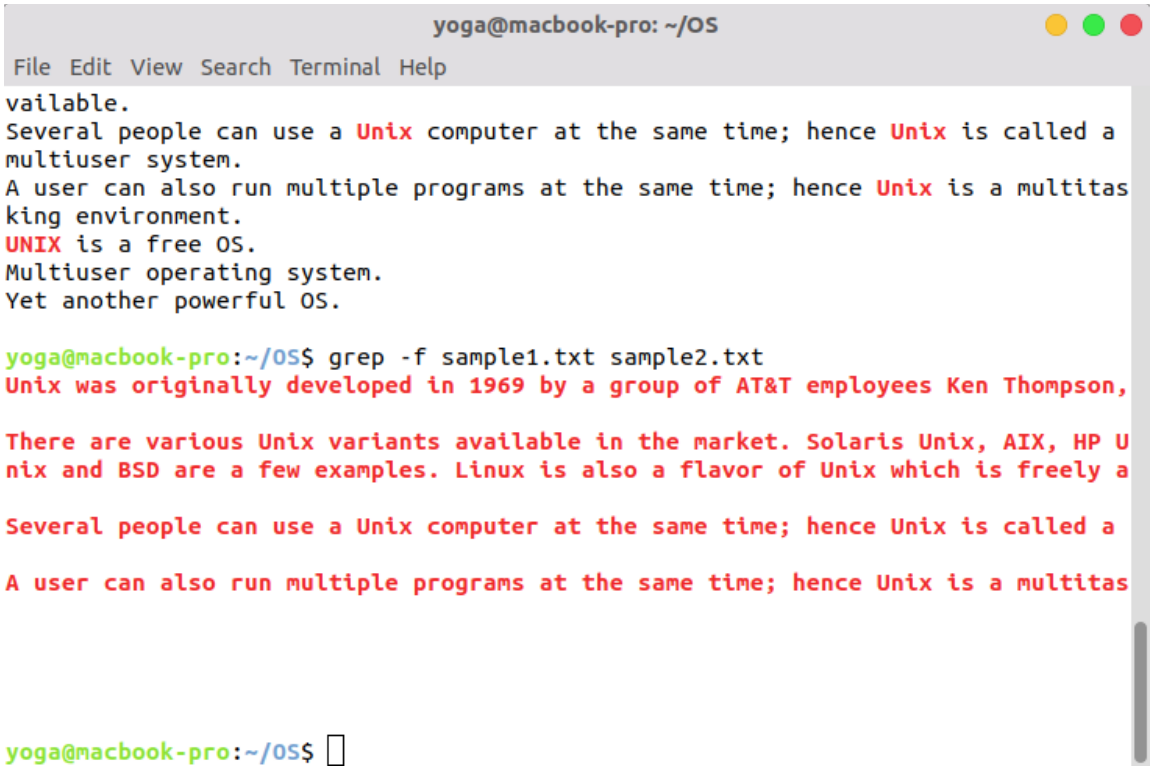
- -v:Displays all lines that do not contain matching pattern



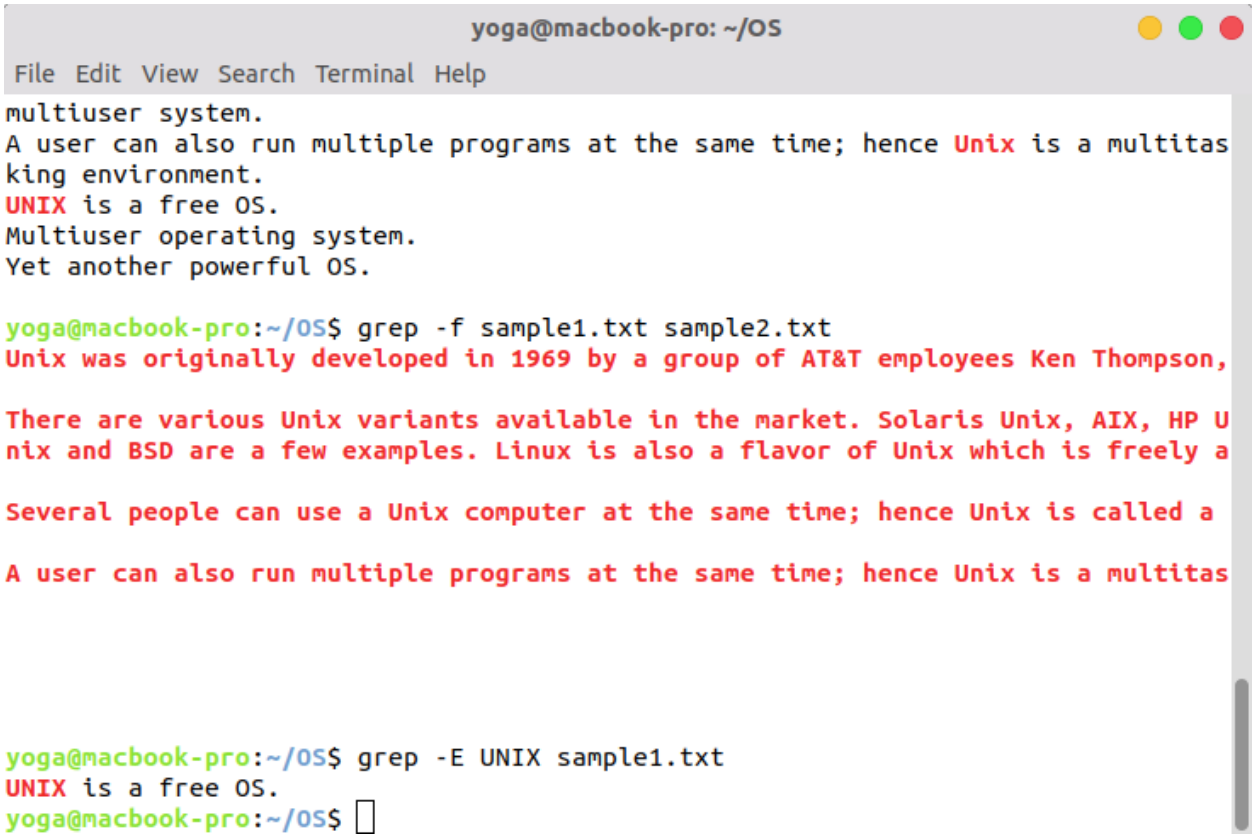
- -A [argument]:Displays [argument] no of lines before /after(if the number entered as argument is negative then before the matching pattern else after the matching pattern) the matching line



- -f file:Takes matching pattern as patterns from file .

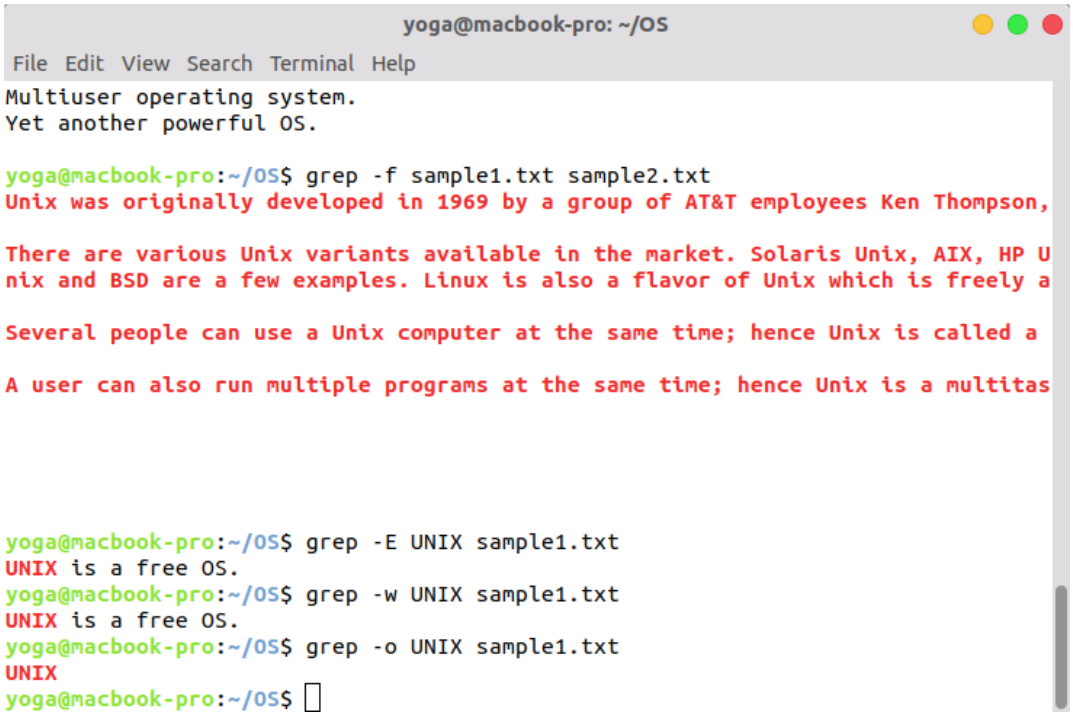


- -E:This Option enables matching pattern as some extended regular expression



- -w:Treats the pattern as a single word

- -o:Displays only the matched parts of a matching line.



9)Sort Command:

Description :

->To sort the contents of the file ,line by line and according to alphabet ,numeric,by month,in reverse order

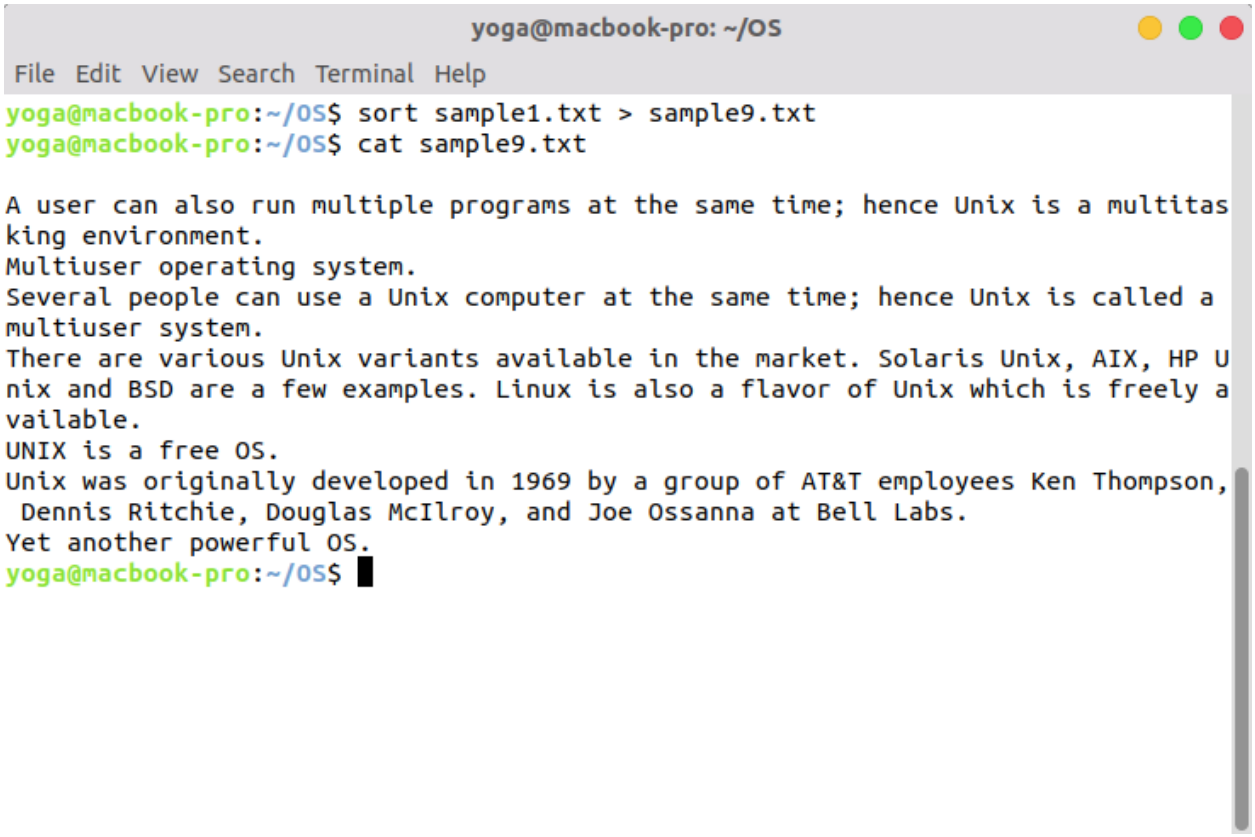
->It prints the file /concatenated file in sorted order

Order of priority in sorting

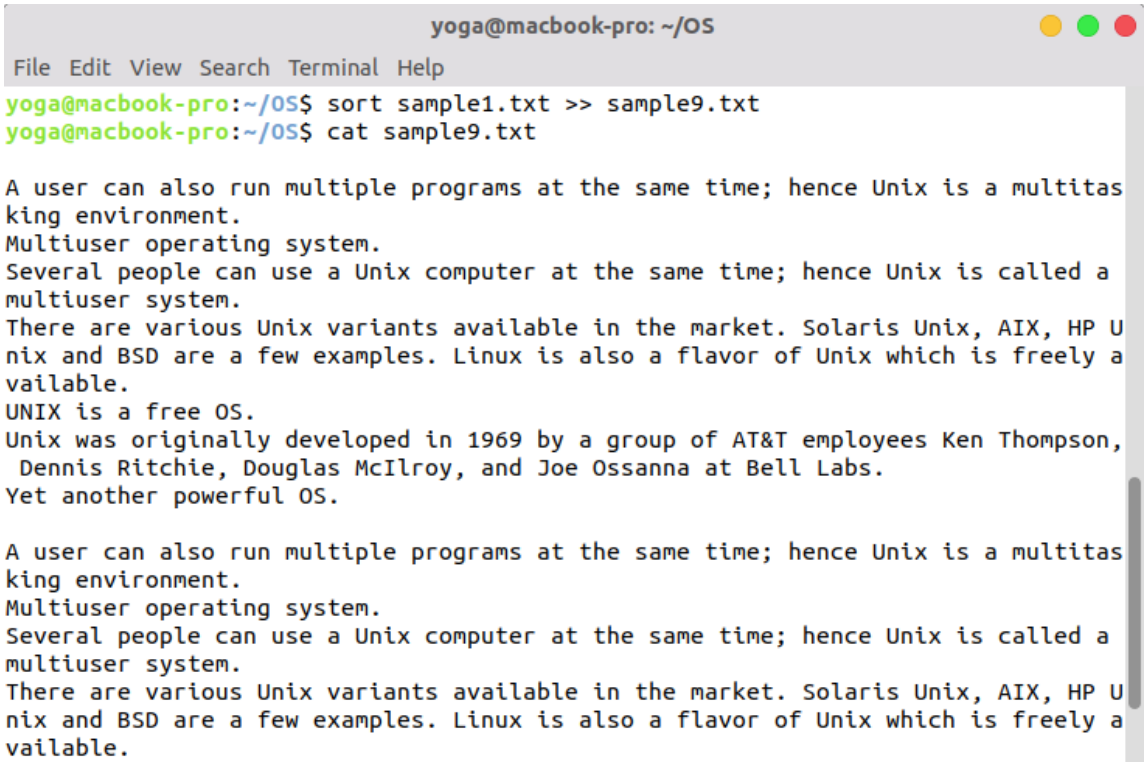
Lines starting with number >Lines starting with lowercase alphabet>Lines starting with uppercase alphabet

Syntax:

- sort [OPTION] filename // To Display the contents of the file in sorted order
- sort sourcefile > destination file //To overwrite the destination file with sorted source file content.

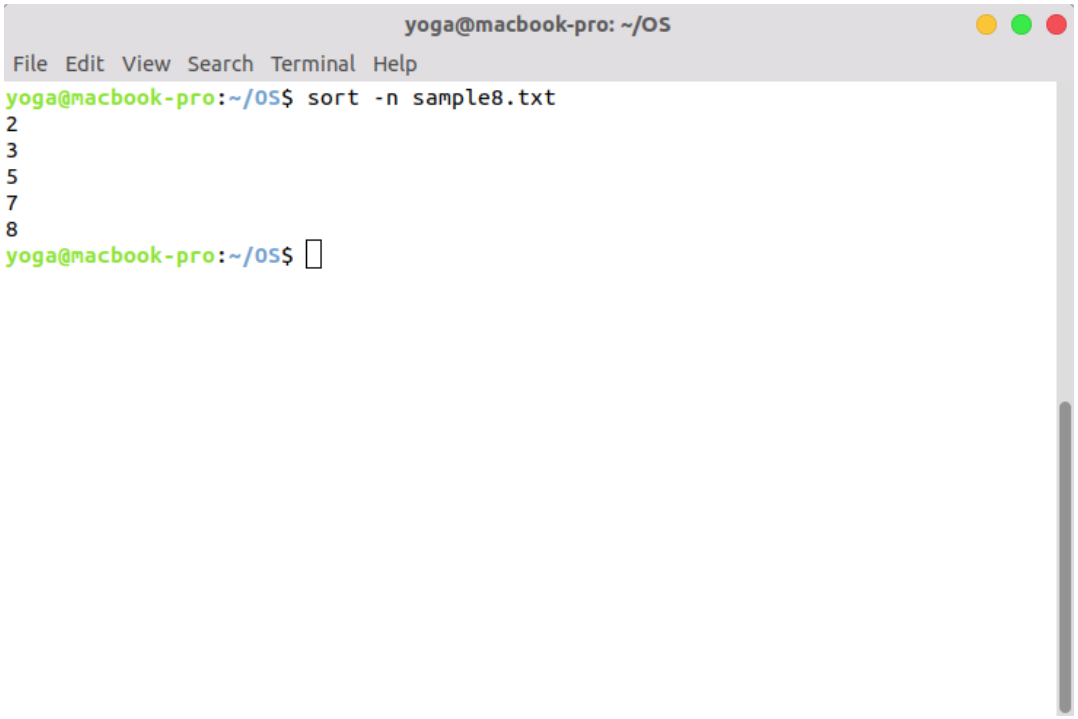


- Sort sourcefile >> destination file //To append the destination file with sorted source file content.

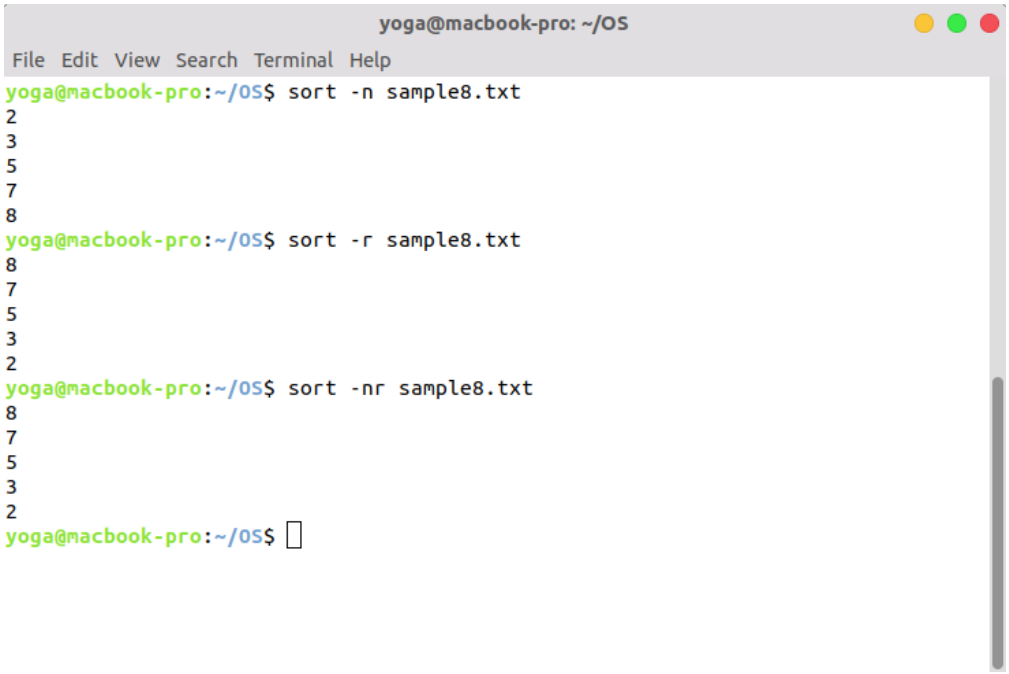


[OPTION]:

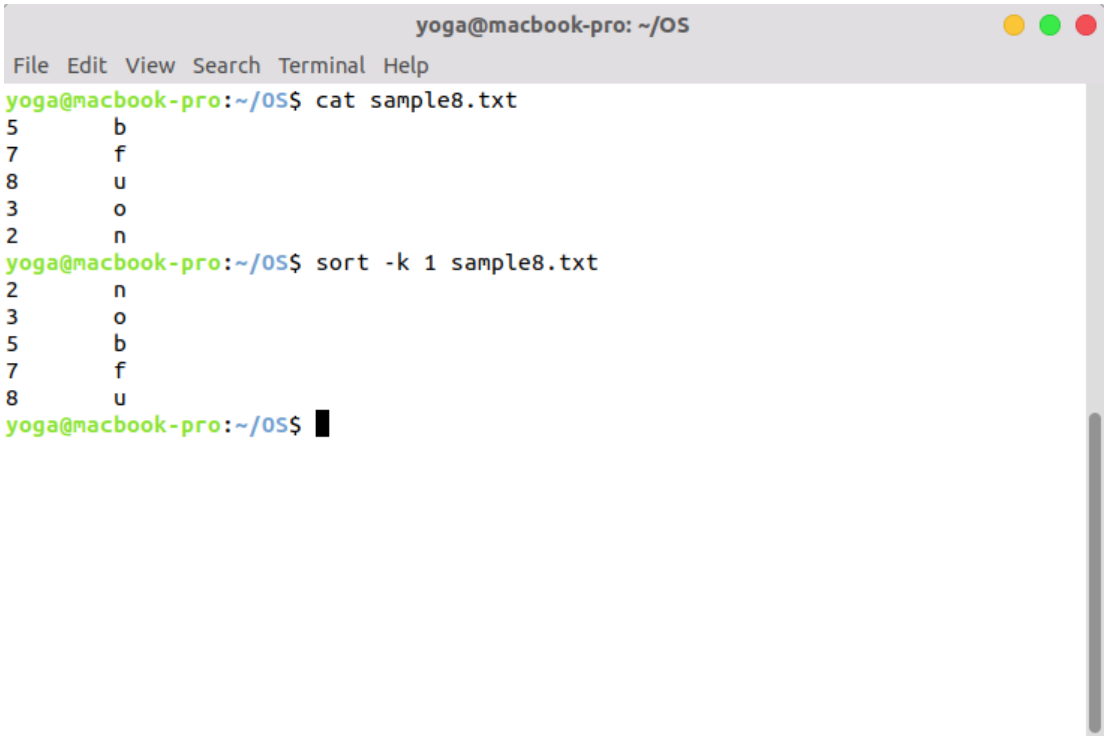
- -o:Enables output to be overwritten into a new file .Requires source filename and destination filename
- -n:To Display the file with numeric content in sorted order



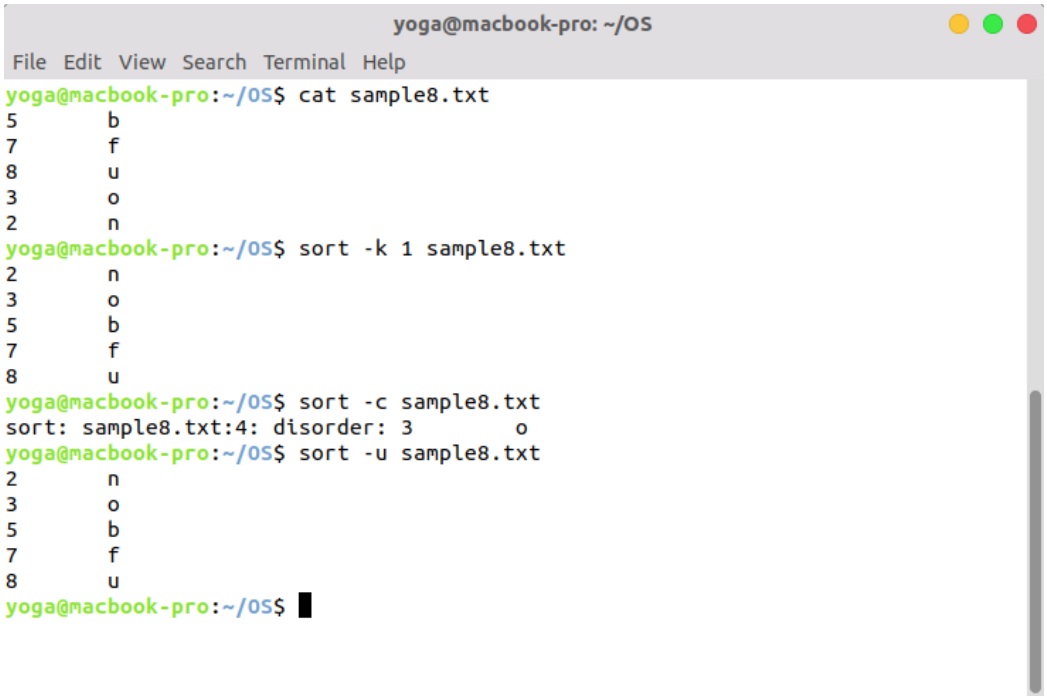
- -r:To Display the file content in reverse-sorted order /descending order by default
- -nr:To Display the file with numeric content in reverse sorted order



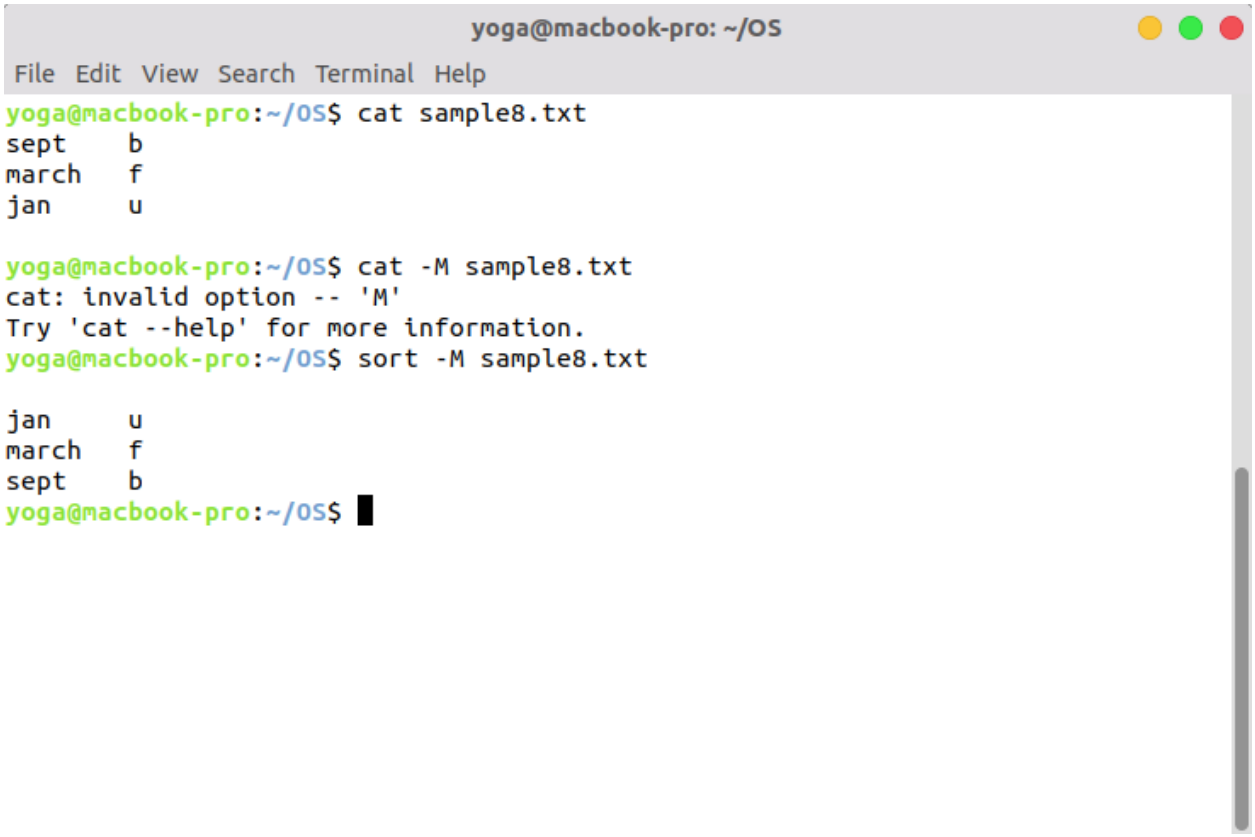
- -k [argument]:Sorts the file containing a table in sorted order based on the [argument]th column or by default :the first column



- -c:Displays disorder if the file is not already in sorted order .If the file is already in sorted order ,it displays no output
- -u:To sort and remove duplicates in the output



- -M:To sort the content of a file (containing months as data) month wise



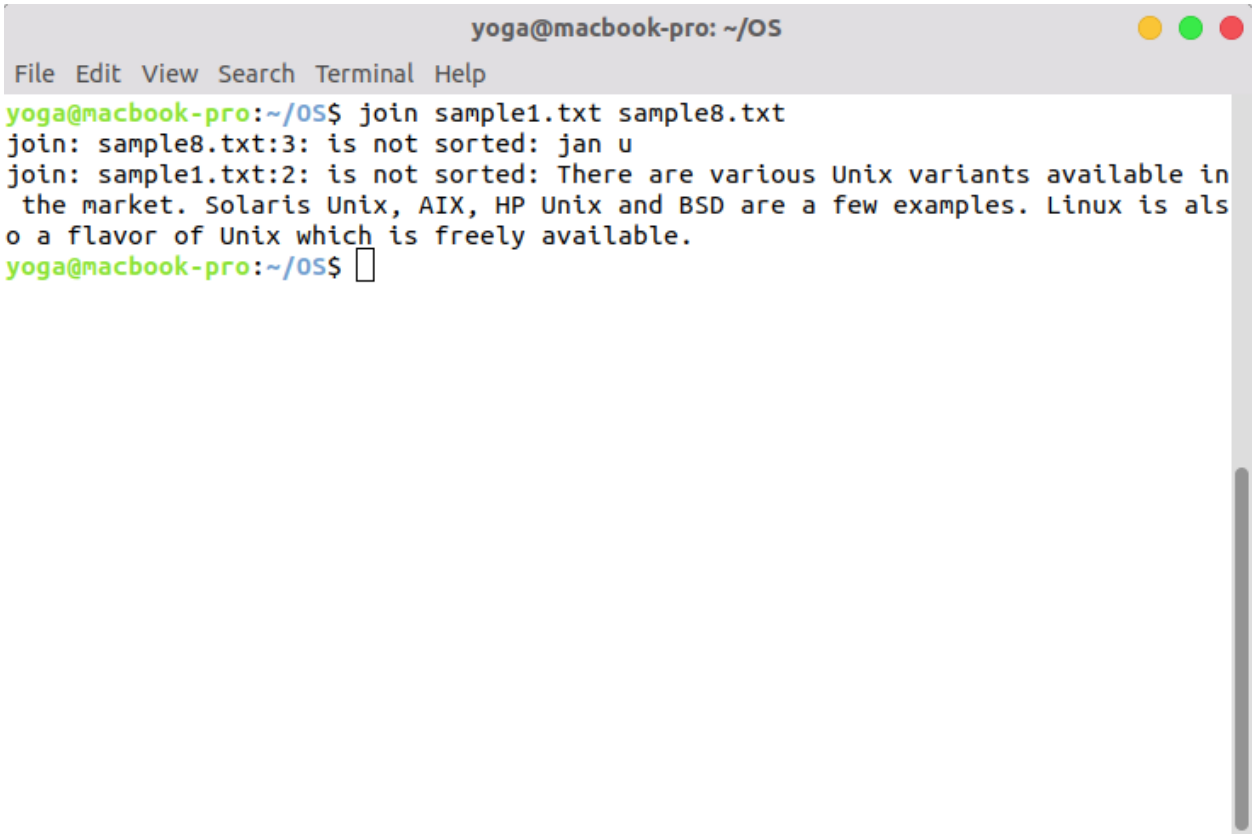
10)join command:

Description:

The join command is used for joining two files on a common field i.e based on a key field present in both the files.

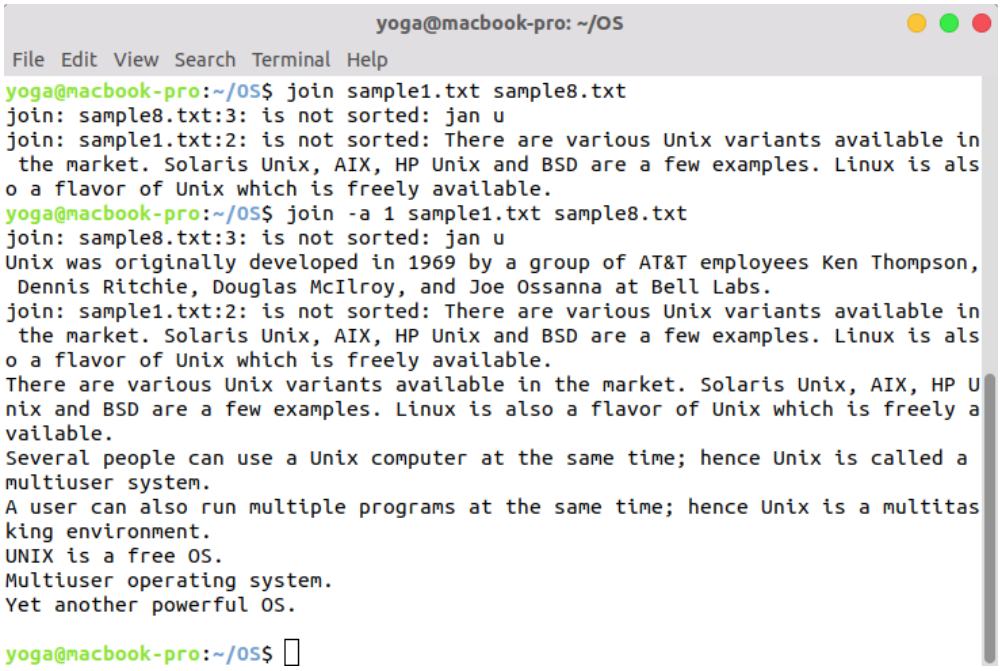
Syntax:

join [OPTION] file1 file2//to join file1 and file2

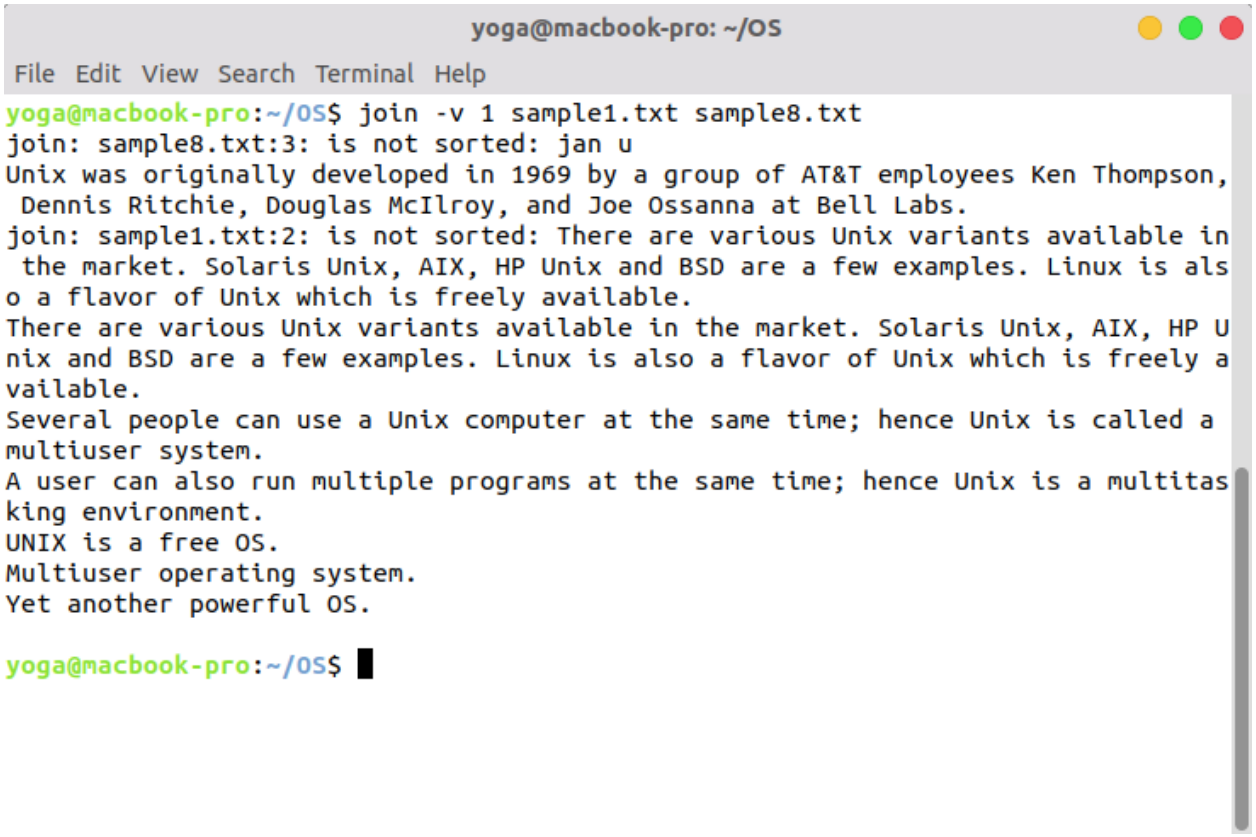


[OPTION]:

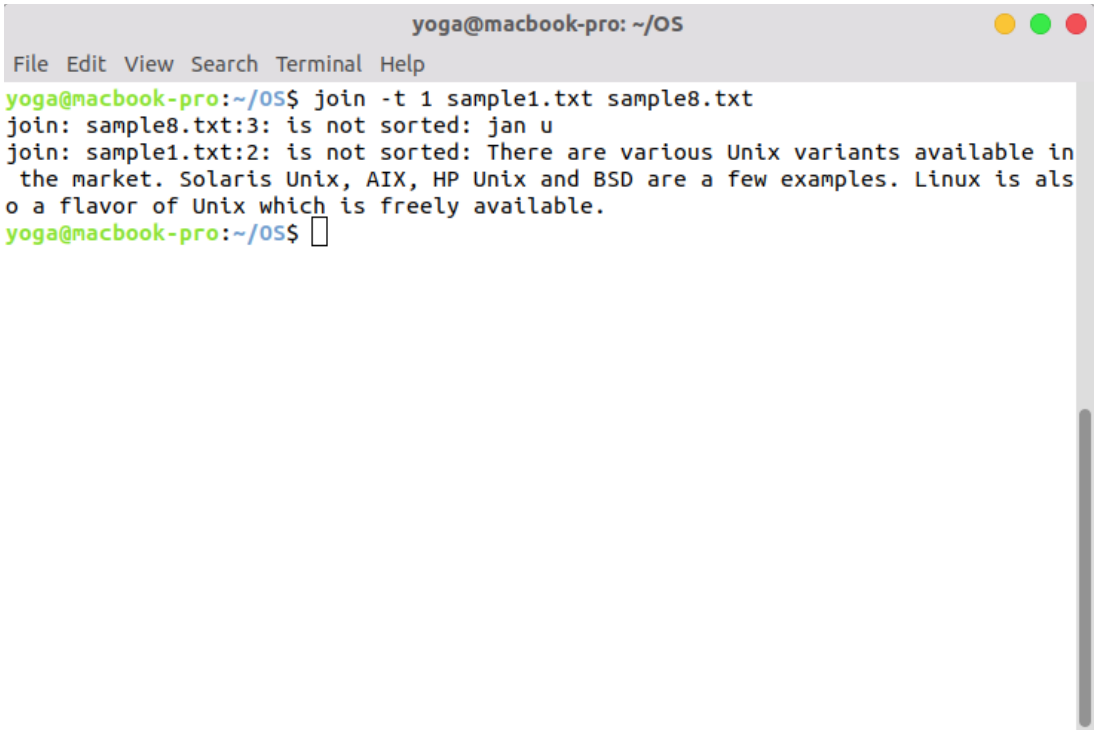
- -a [argument]:This option is used when any of the row in one file cant be matched with the other file .Ex : when file1 contains 5 rows but file2 contains only 4 rows.[argument] denotes the filename that has excess rows ,in above case argument is 1.



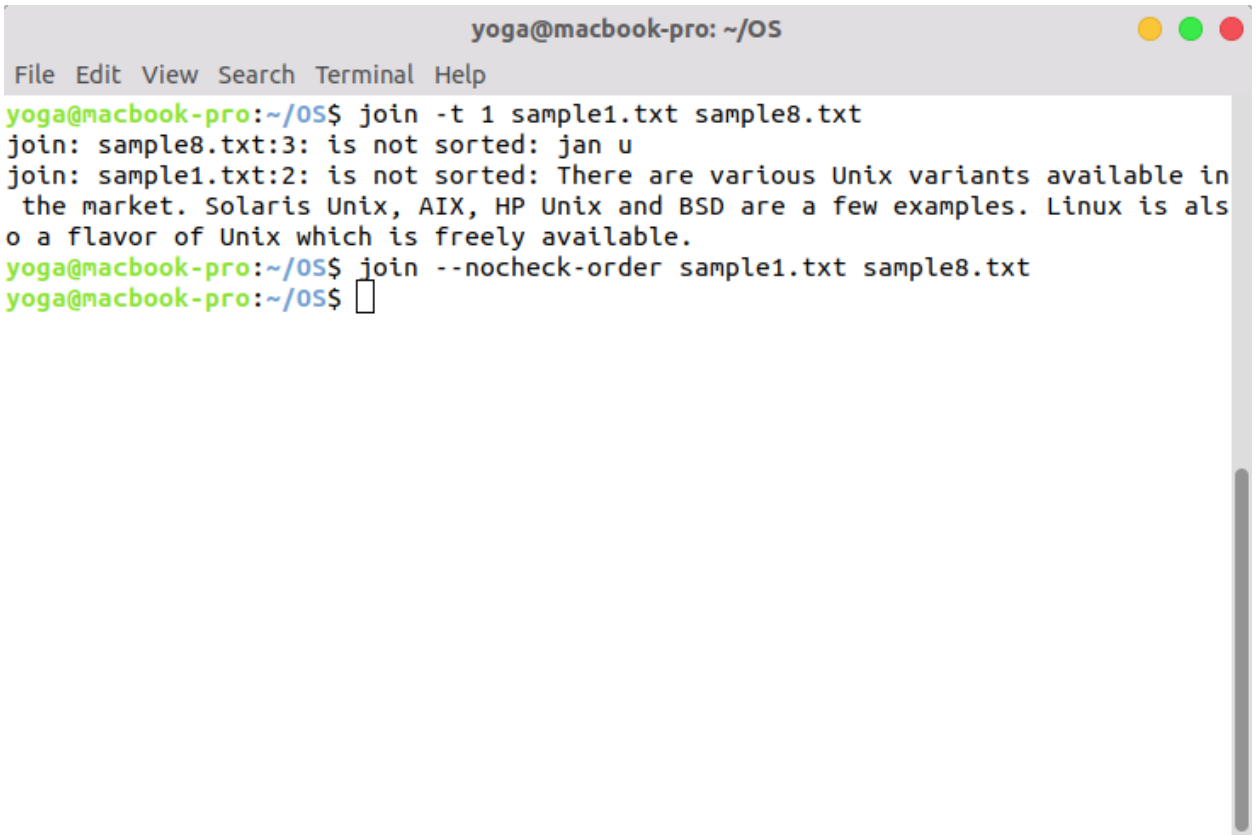
- -v [argument]:Functions/serves the same purpose as that of -a but the only difference it prints only the unprintable lines



- -t [argument] :This functions displays the argument passed(ex:like ‘“ , “) as delimiter between the output of each file while joining i.e,to separate the columns with delimiter.

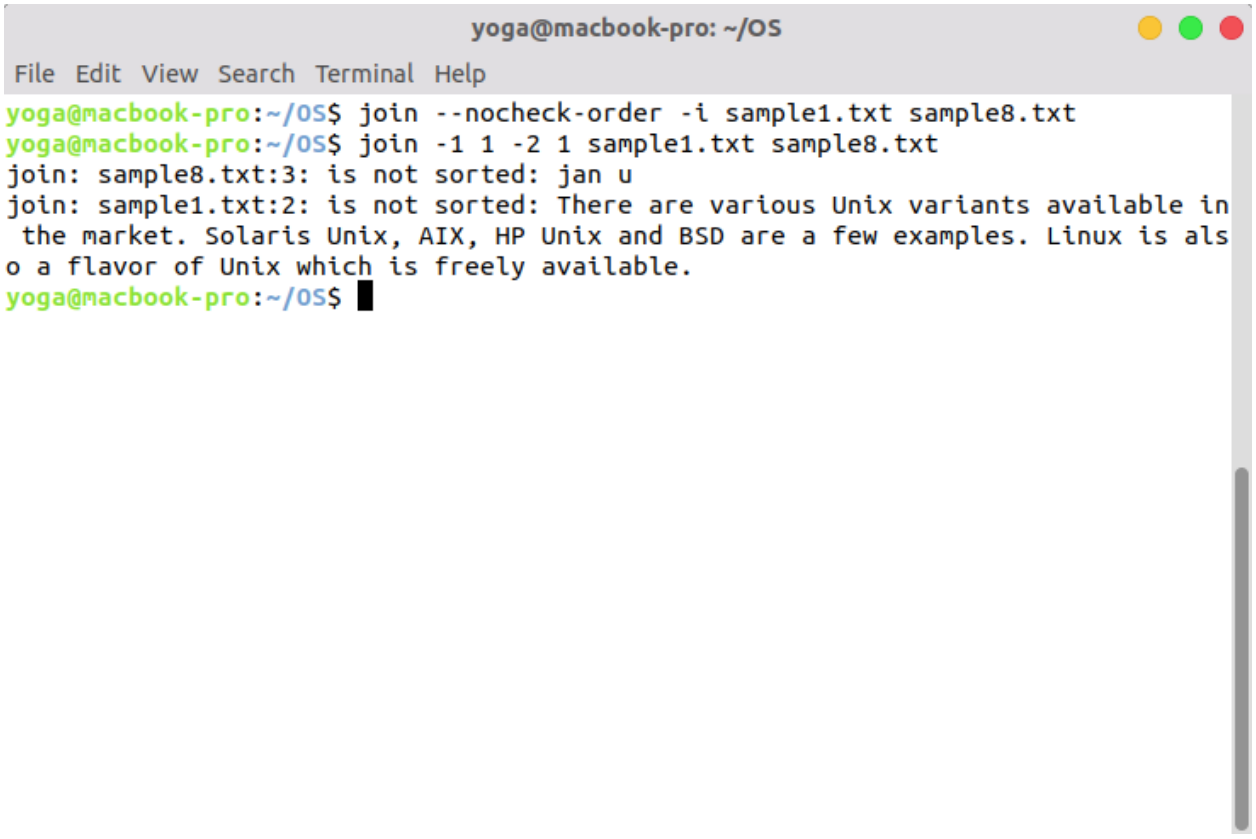


- --nocheck-order:To suppress the errors displayed when the files are being checked for sortedness of the file.



- -i:To ignore case sensitivity

- -1 [argument1]1 -2 [argument2] :These options when mentioned joins the two files by taking argument1 as the key field of file1 and argument2 as key field of file2 for joining.(Argument 1/argument2 are field number are column number)



11)sed:

Description:

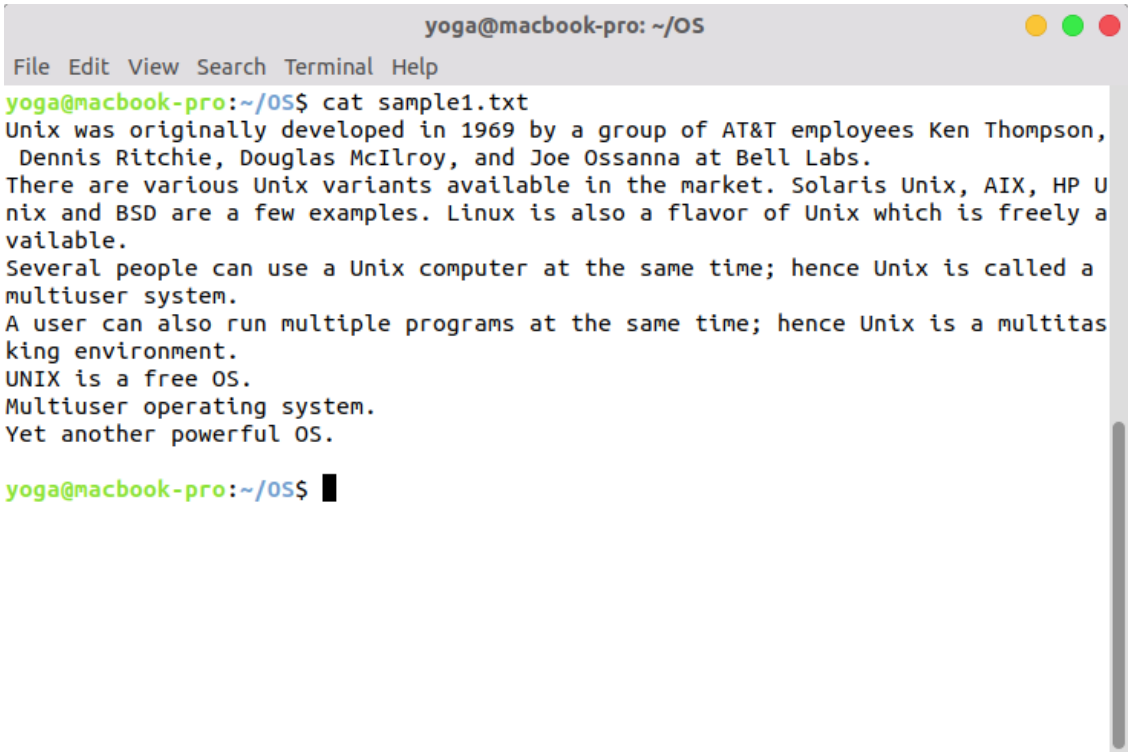
It stands for text stream editor and are used for the following functions:

a)It is used for substitution or to find and replace any text and also used for purposes like to insert and delete any text

b)Allows to perform complex pattern matching

Syntax:

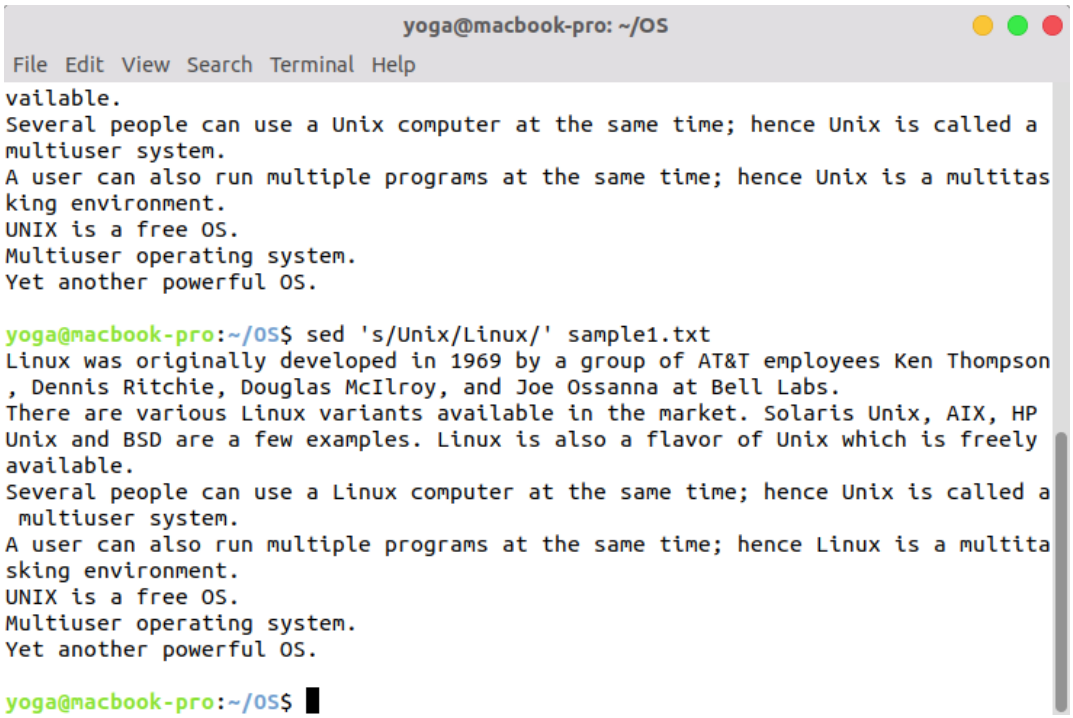
Output File before using sed



sed [OPTION] …[SCRIPT][FILES_LIST]

or

sed ‘s/word1/word2/’ files_list //Used to replace 1st occurrence of word1 in each line with word2 in all the files in the files_list

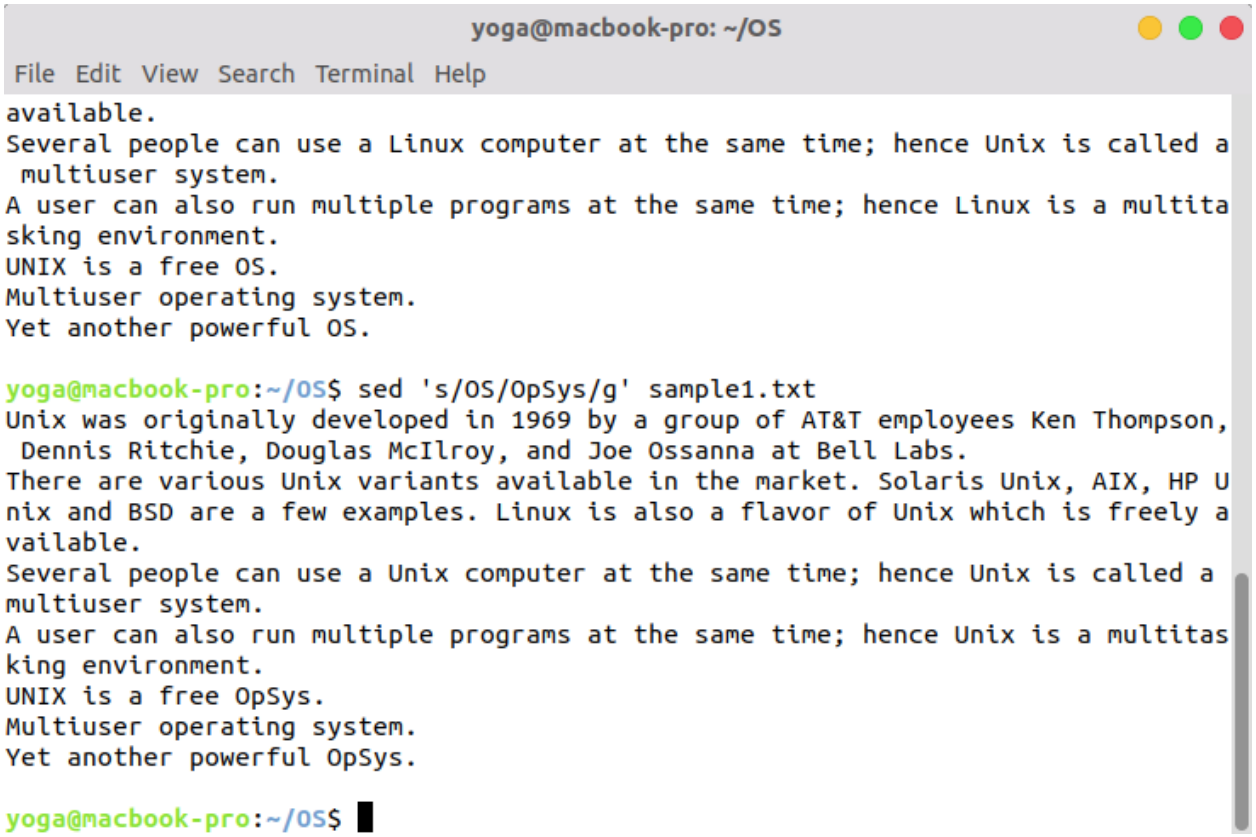


Or

sed ‘s/word1/word2/ n’ files_list //Used to replace nth occurrence of word1 in each line with word2 in all the files in the files_list

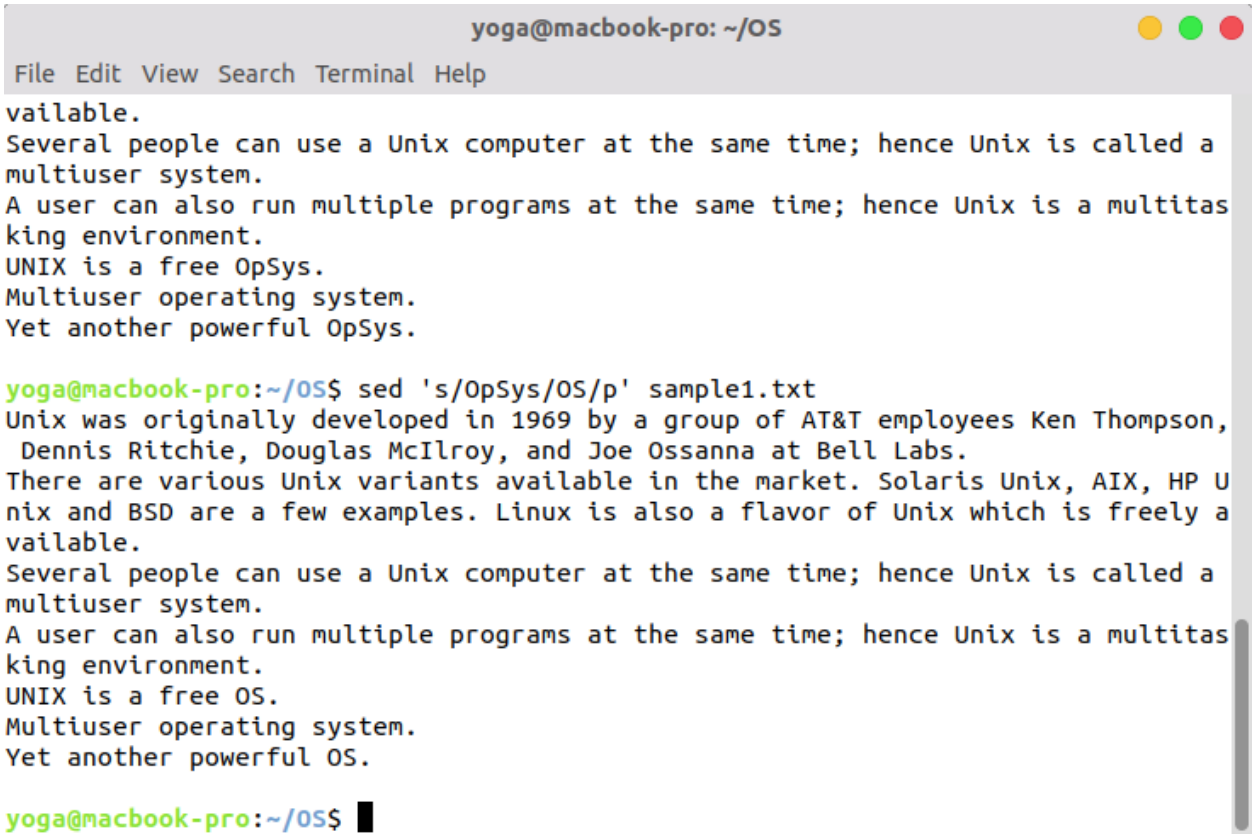
Or

sed ‘s/word1/word2/ g’ files_list //Used to replace all occurrence of word1 in each line with word2 in all the files in the files_list



Or

sed ‘s/word1/word2/ p’ files_list //Used to print the replaced-with line or the line containing the replaced pattern twice and prints the none replace line once



Or

sed ‘s/word1/word2/ ng’ files_list //Used to replace all occurrence of word1 (after n-1 occurrences of word 1) in each line with word2 in all the files in the files_list

Or

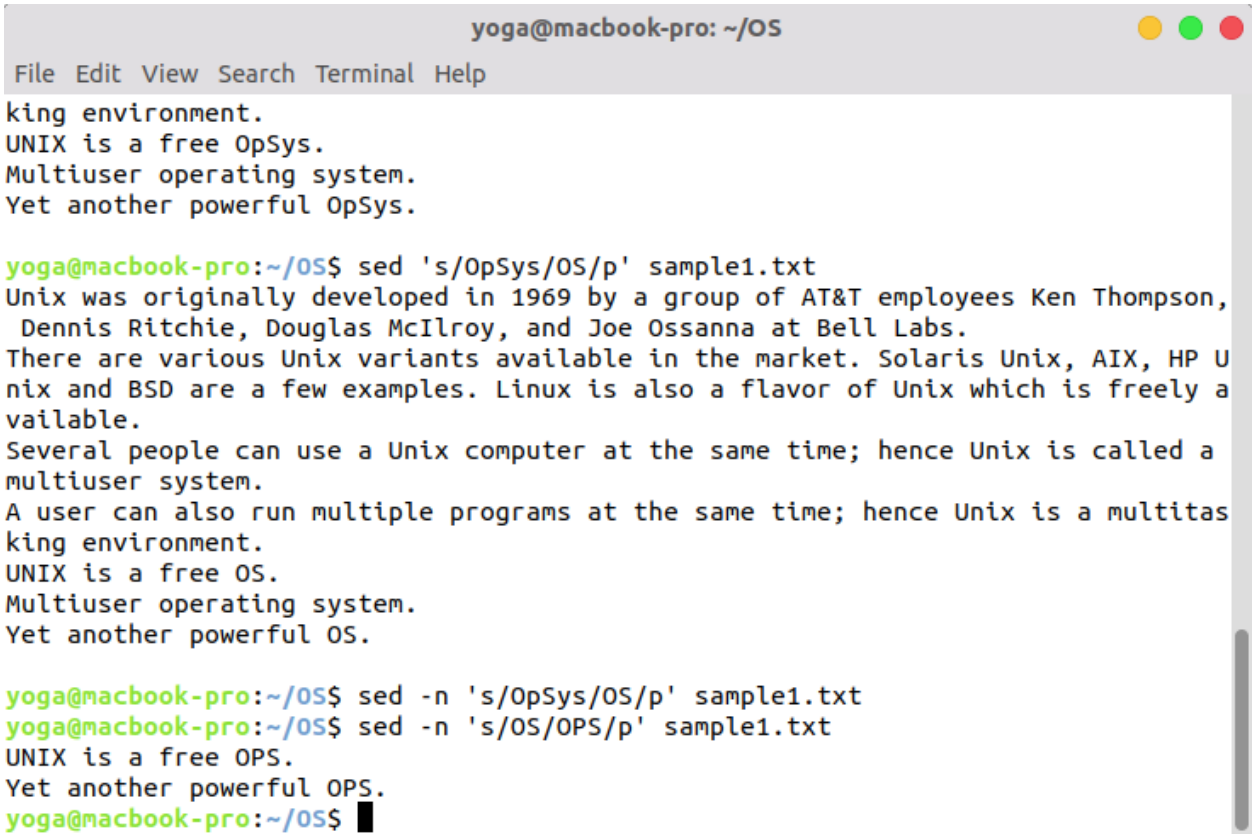
sed 's/\(\b[A-Z]\)/\(\1\)/g'//Used to Parenthesize first character of each word

Or

sed ‘n s/word1/word2/ g’ //Used to replace the occurrences of word1 only in nth line

Or

sed -n ‘ s/word1/word2/ p’ //Used to Print Only the replaced line



Or

sed ‘ n1,n2 s/word1/word2/ g’ //Used to replace only for the occurrences of pattern in the range of lines from n1,n2 .If n2 is $ then it represents last line

or

sed ‘ nd’ or sed ‘n1,n2d’//Used to delete the nth line or range of lines from n1 to n2

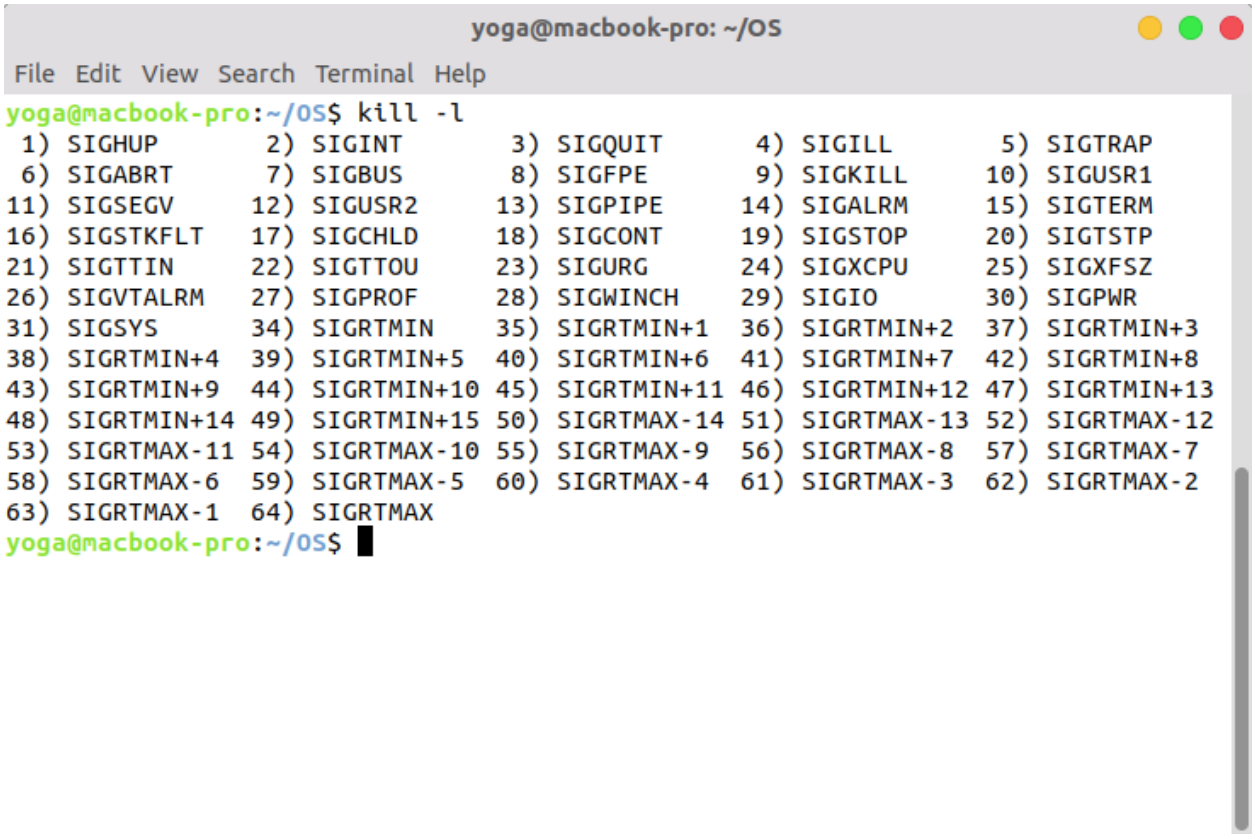
12)Kill command:

Description:

Used to Terminate process manually

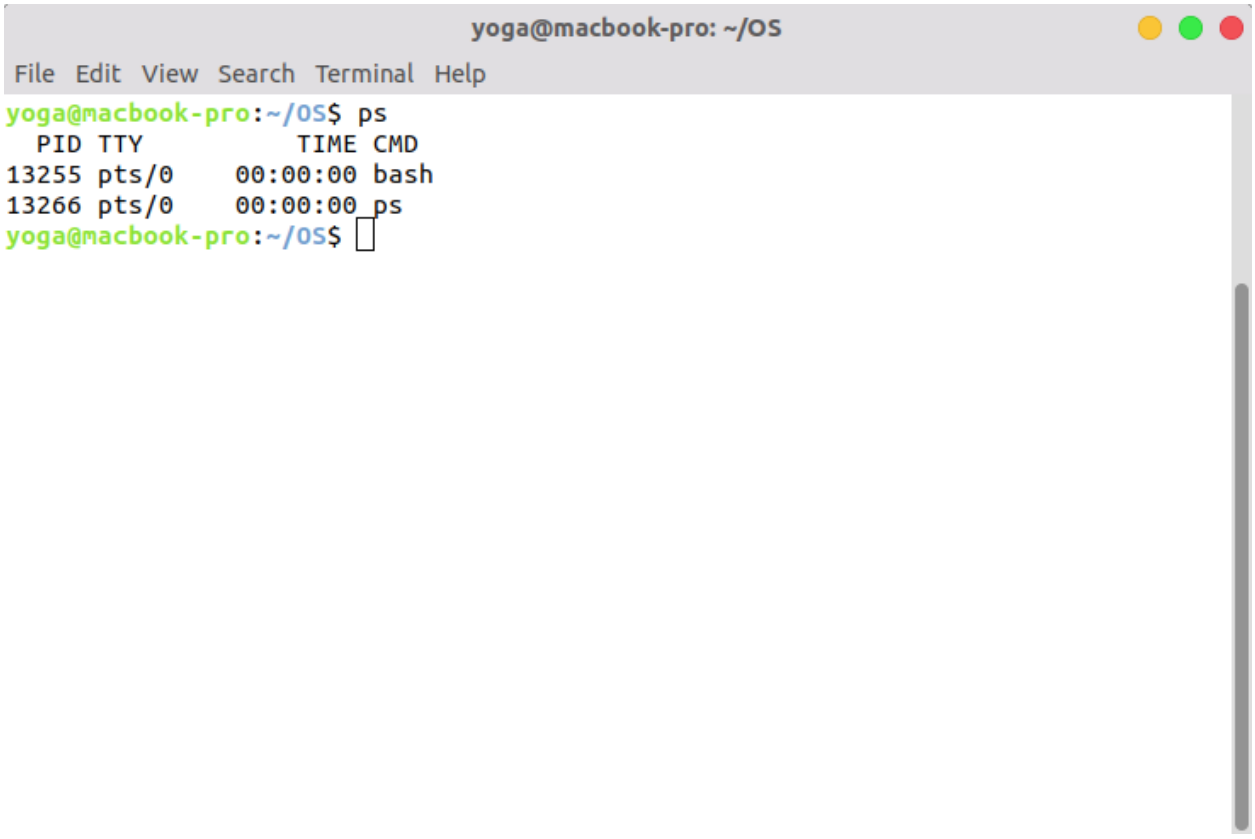
Syntax:

kill -l/-Lkilp//This Option displays all signals available for use



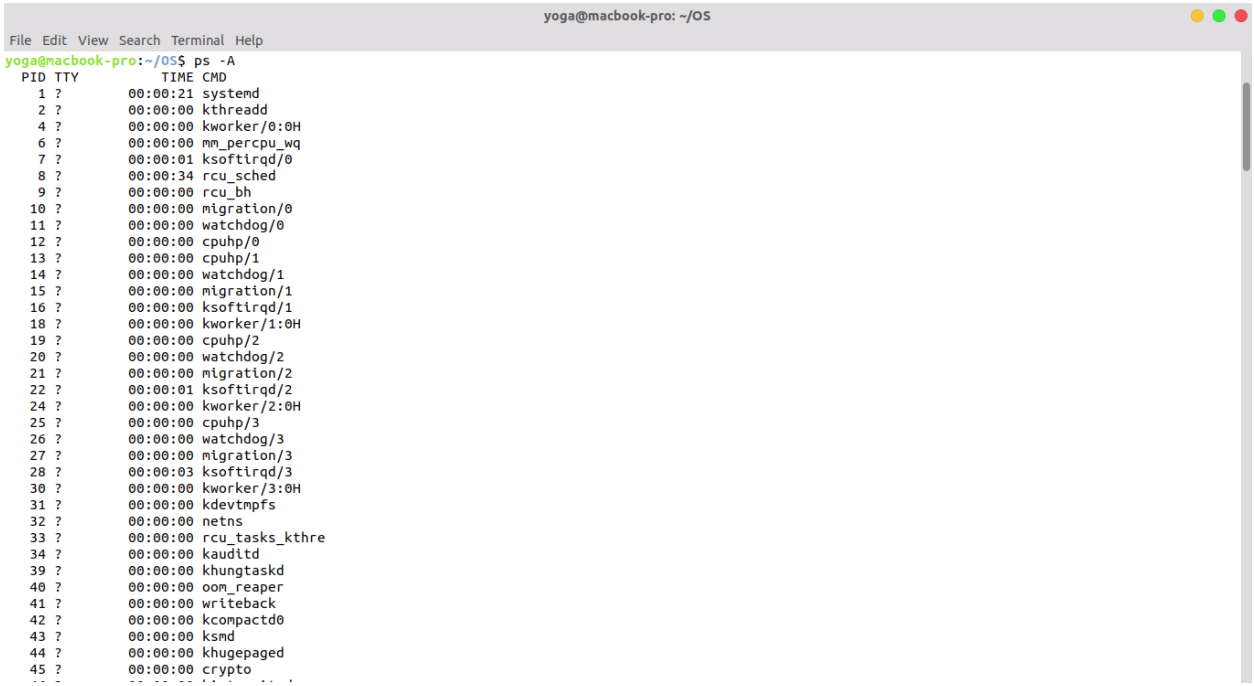
or
kill pid//To Terminate the process with the mentioned pid
Or
kill {-signal | -s signal} pid//To send particular signal .For ex: send signal as -9 or -1 to terminate pid

13)ps command:
Description:
To view information related to currently running processes on a system along with their PIDs which is read from the virtual files in /proc file system
Syntax:
ps [OPTION]//By Default without any option shows the process of the current shell

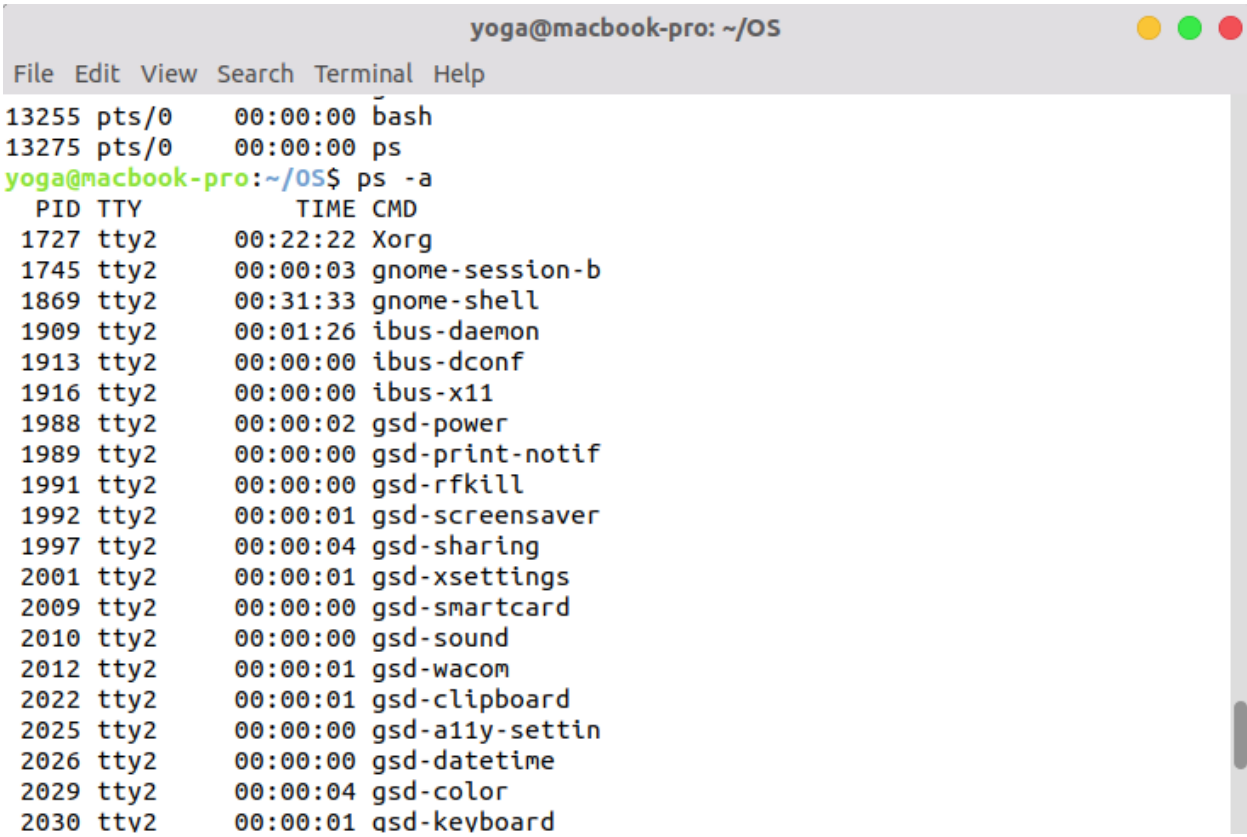


[OPTION]:

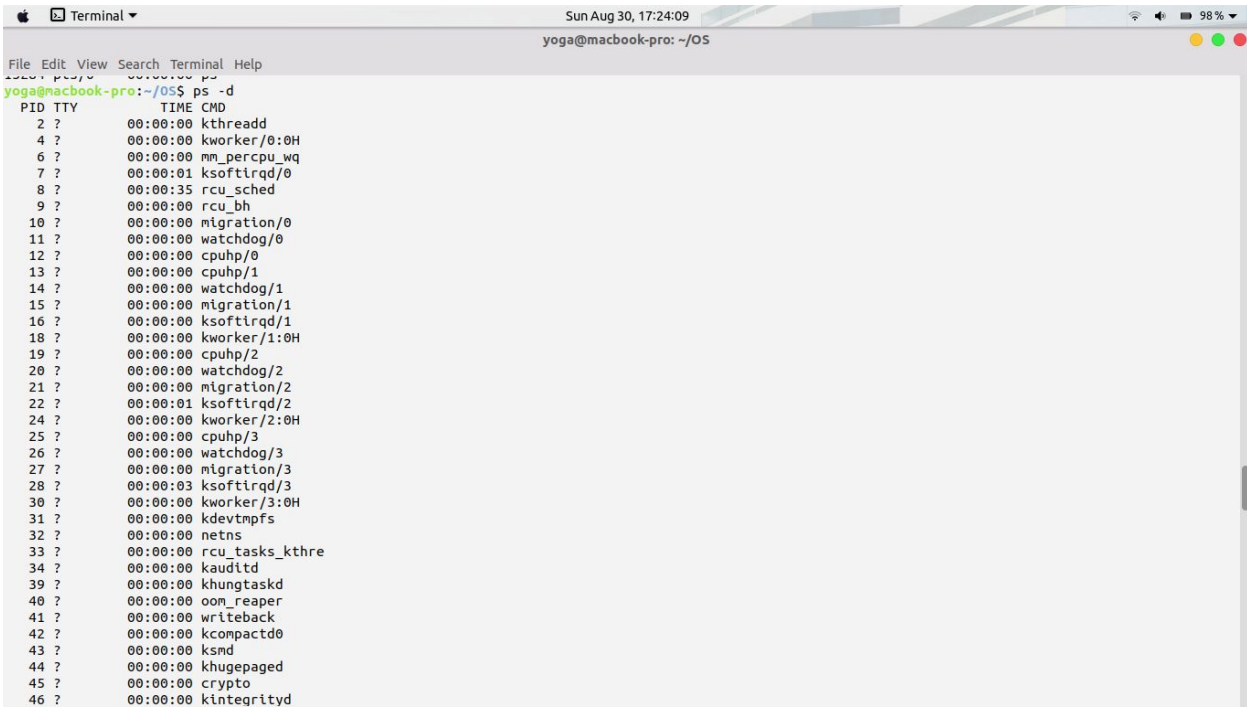
- -A/-e/-r: To show all the running processes



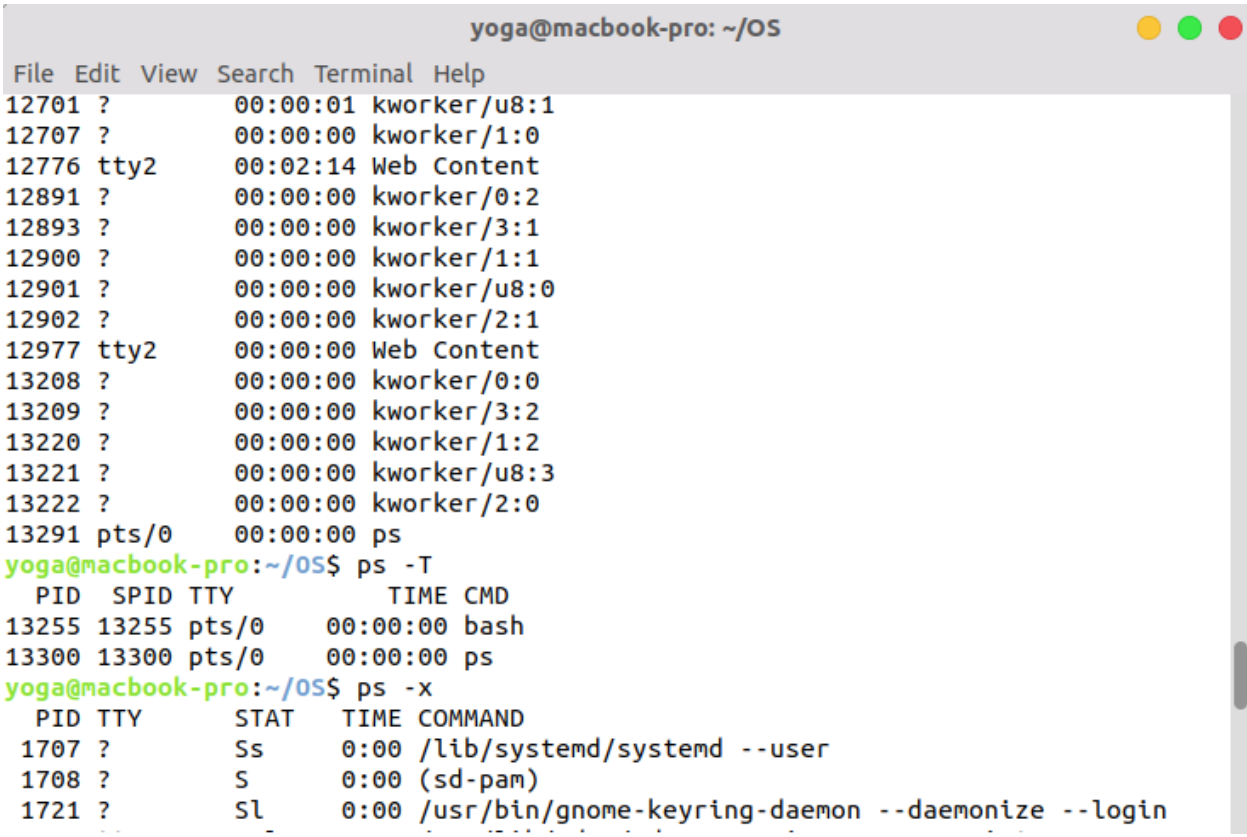
- -a:To show all the running processes not associated with a terminal



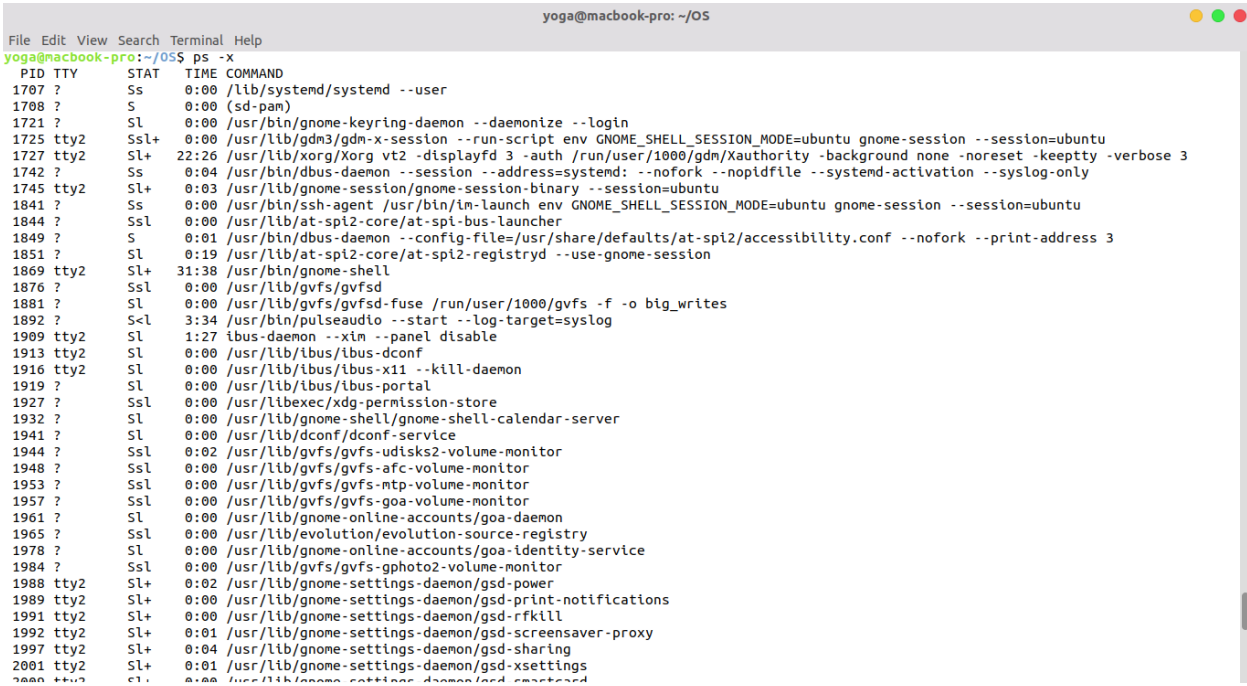
- -d:To show all the running processes excluding session leaders



- -T:To show all the running processes associated with the terminal



- -x:To show processes which has same EUID (Effective User ID)as ps



14)tr Command:

Description:

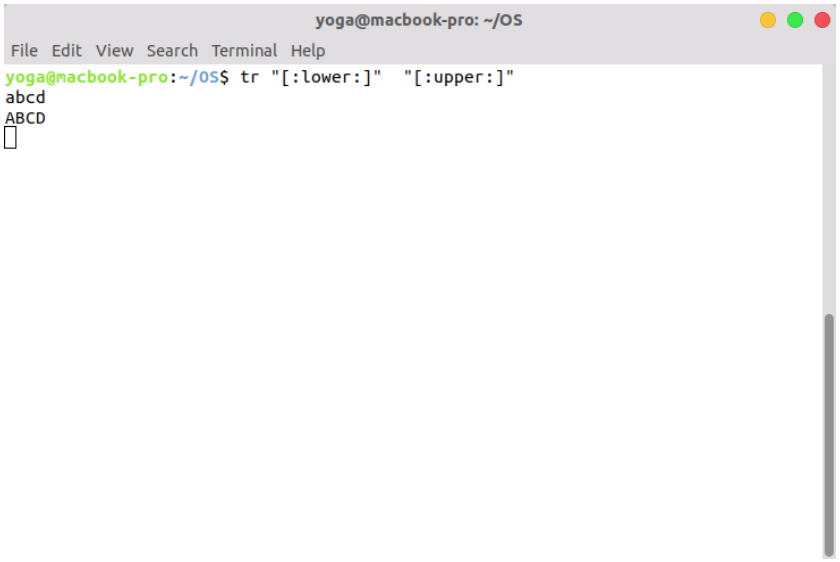
->It is used for translating or deleting specific character.

->Translating involves uppercase to lowercase

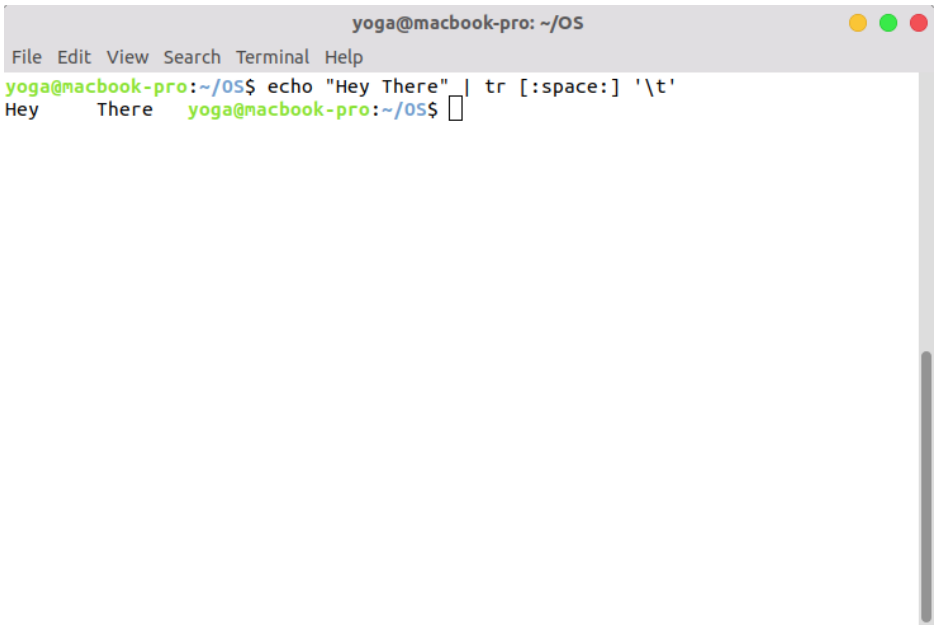
->Also used for basic find and replace functions

Syntax:

- tr [OPTION] SET1 [SET2]
- tr “[:lower:]” “[:upper:]” //to Convert/translate lower case to uppercase letters

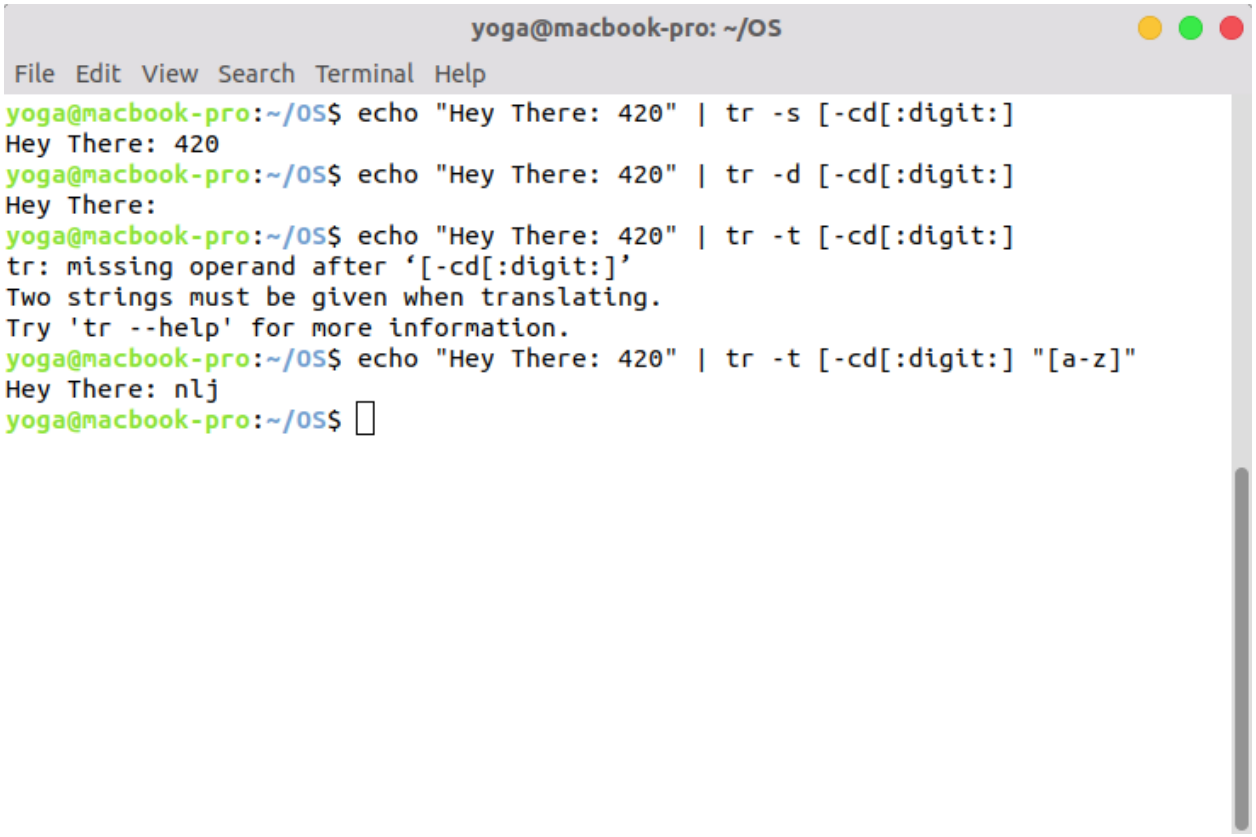


- tr [:space:] ‘\t’ //to Convert/translate white spaces to tab spaces



[OPTION]:

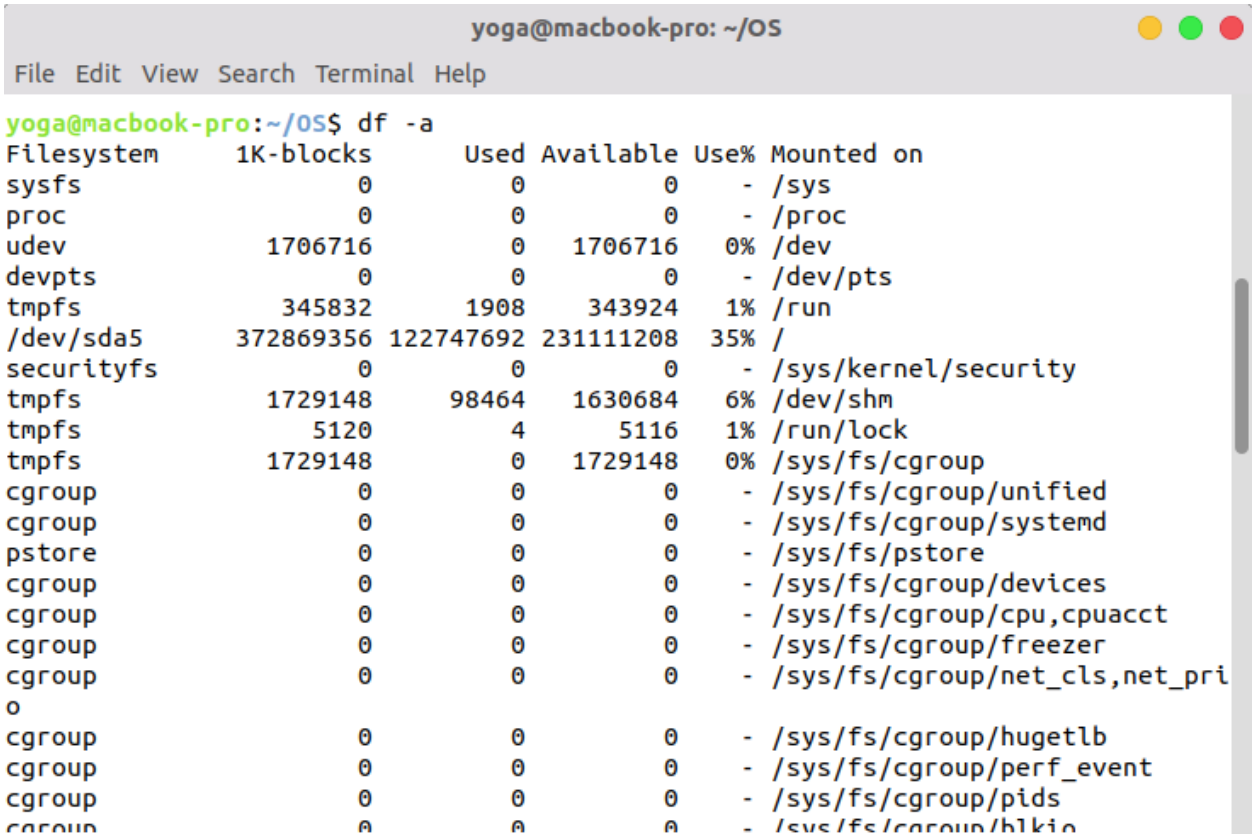
- -c: Complements the set of characters in string //displays only the string mentioned in SET
- -d:Delete characters in the SET1 from the output
- -s:replaces repeated characters in SET1 with single occurrence
- -t:truncates SET1



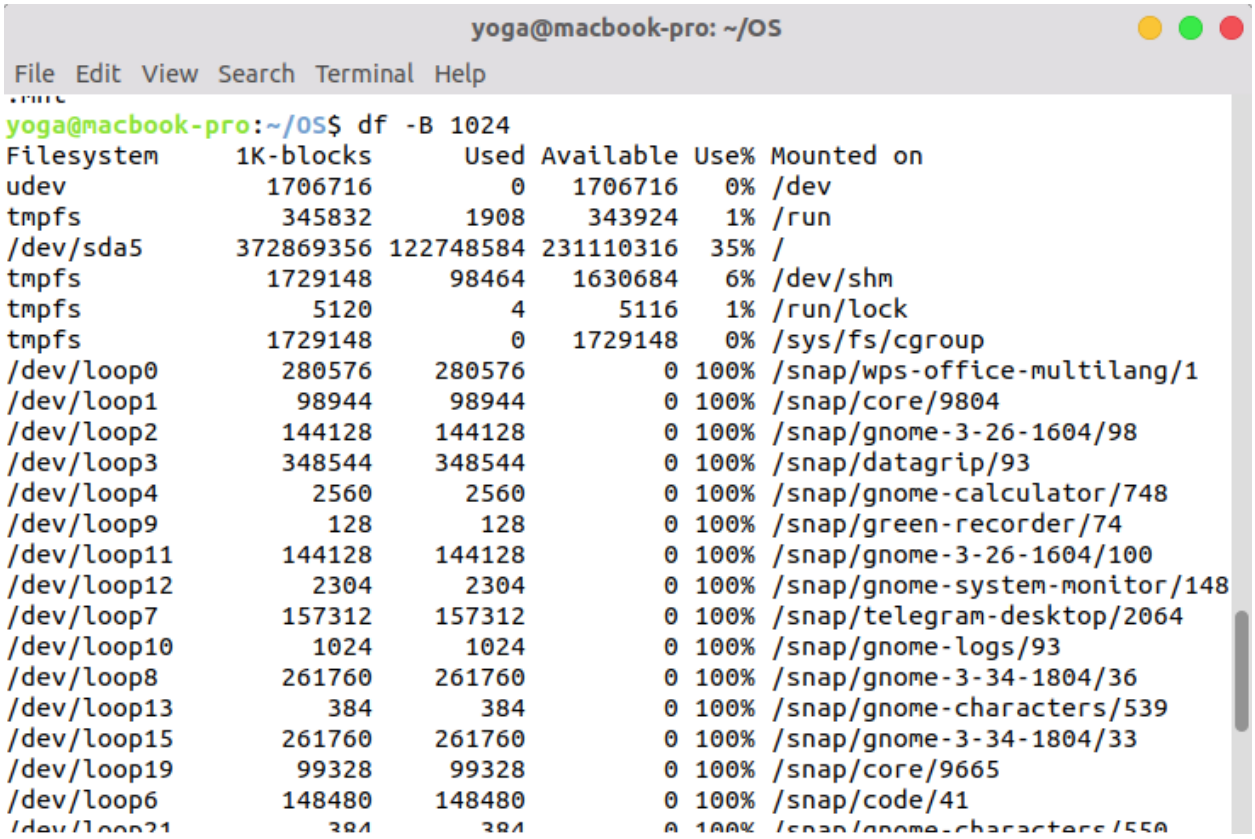
15)df command:
Description:
Used to display information related to file systems about available and total space.
Syntax:
df [OPTION]...[FILE]//default argument df displays spaces available on all currently mounted file system

[OPTION]:

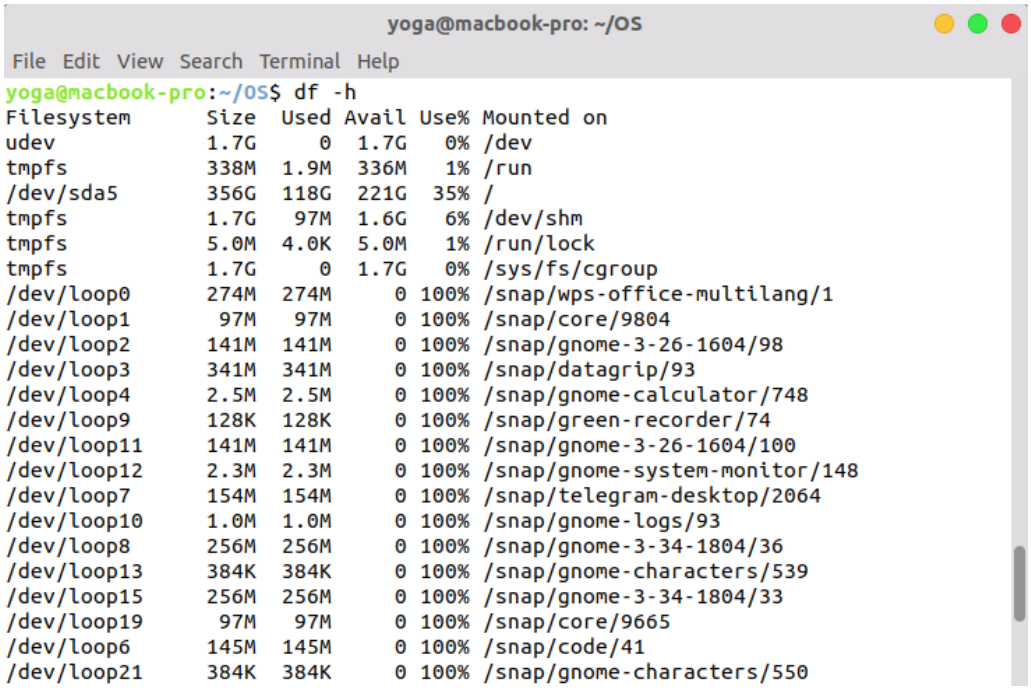
- -a/-all:Include all file systems including inaccessible and duplicate file systems



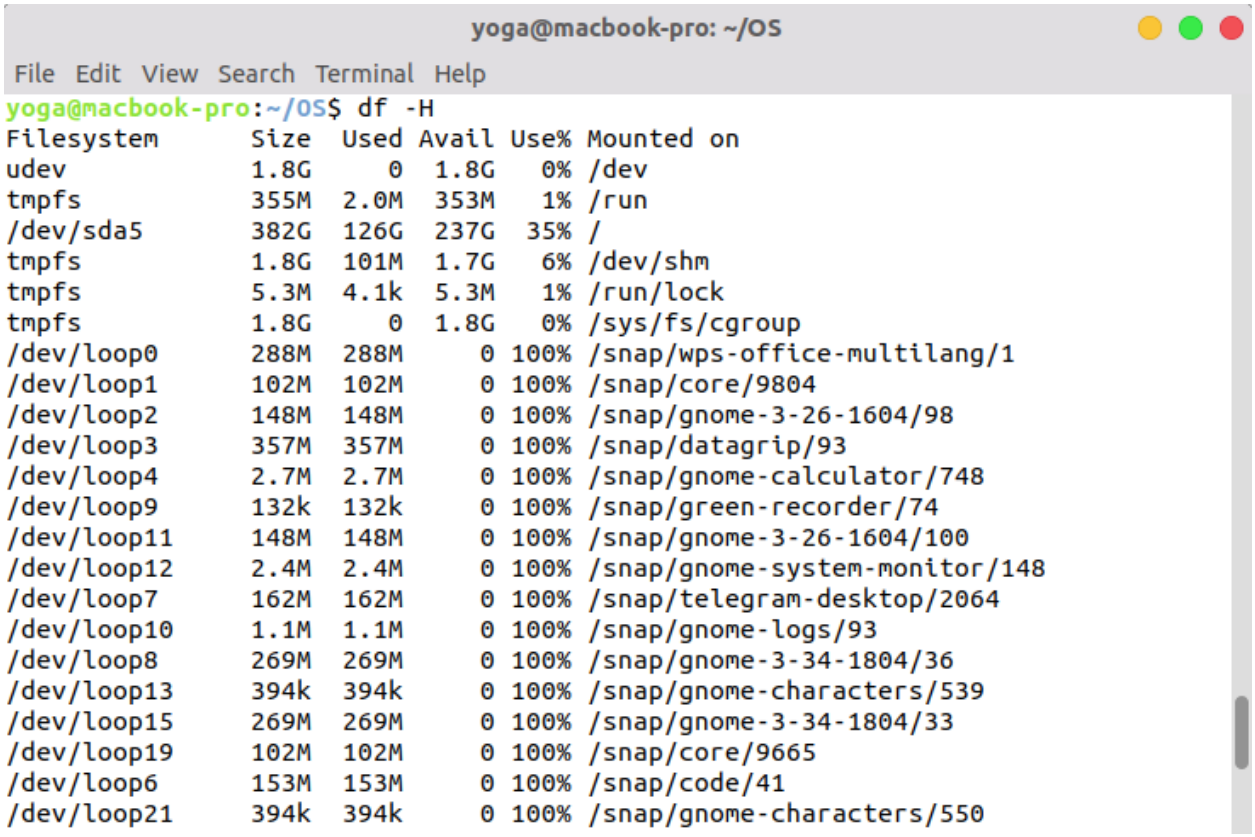
- -B/-block-size=SIZE:Scales sizes by SIZE before printing them



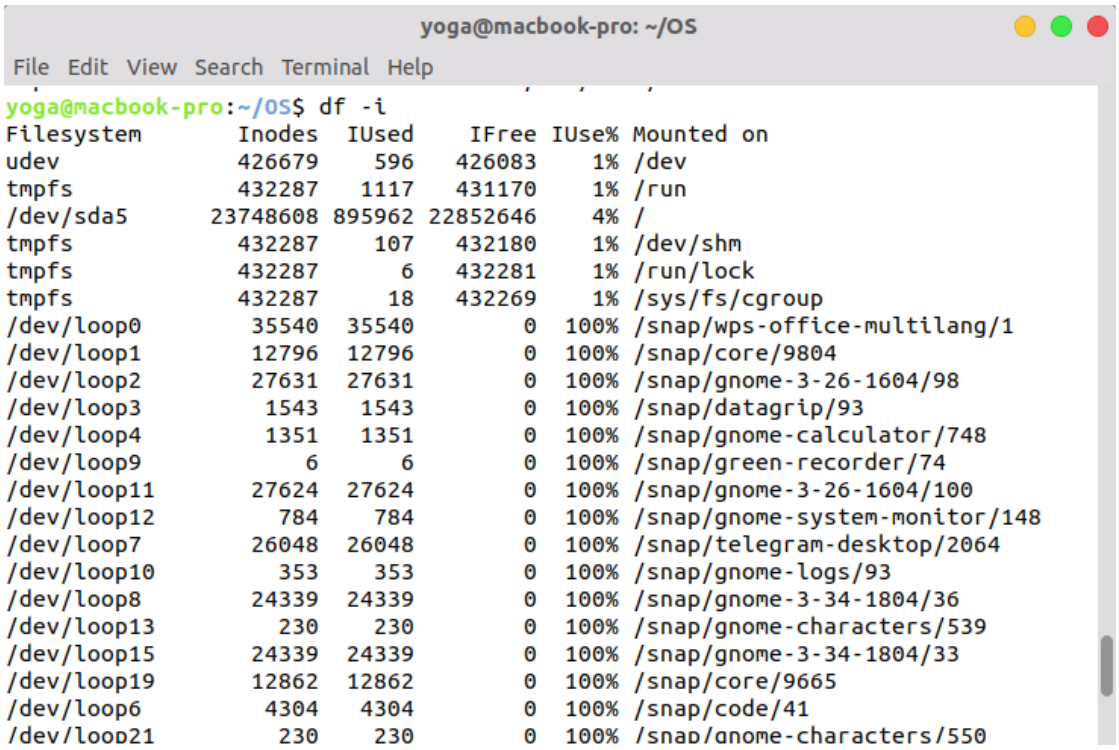
- -h:Prints sizes in power of 1024



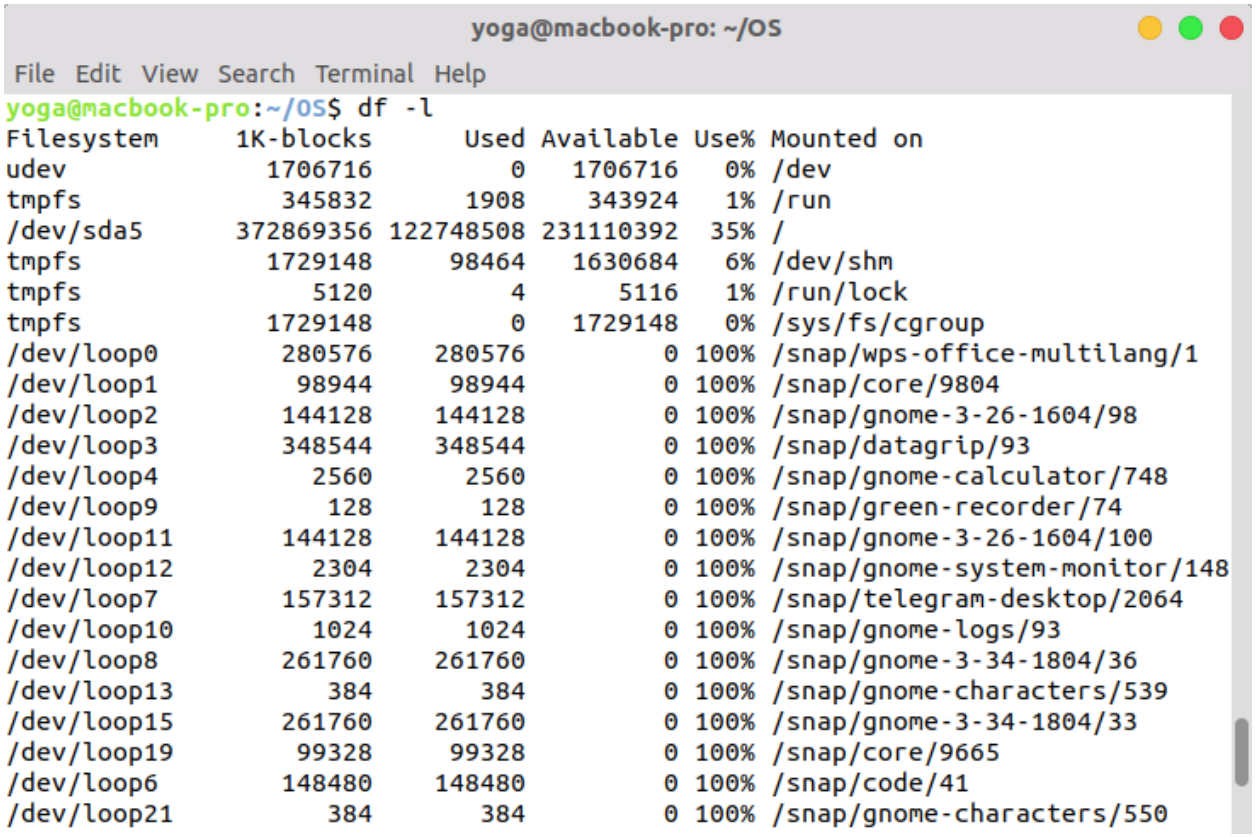
- -H:Print Sizes in power of 1000



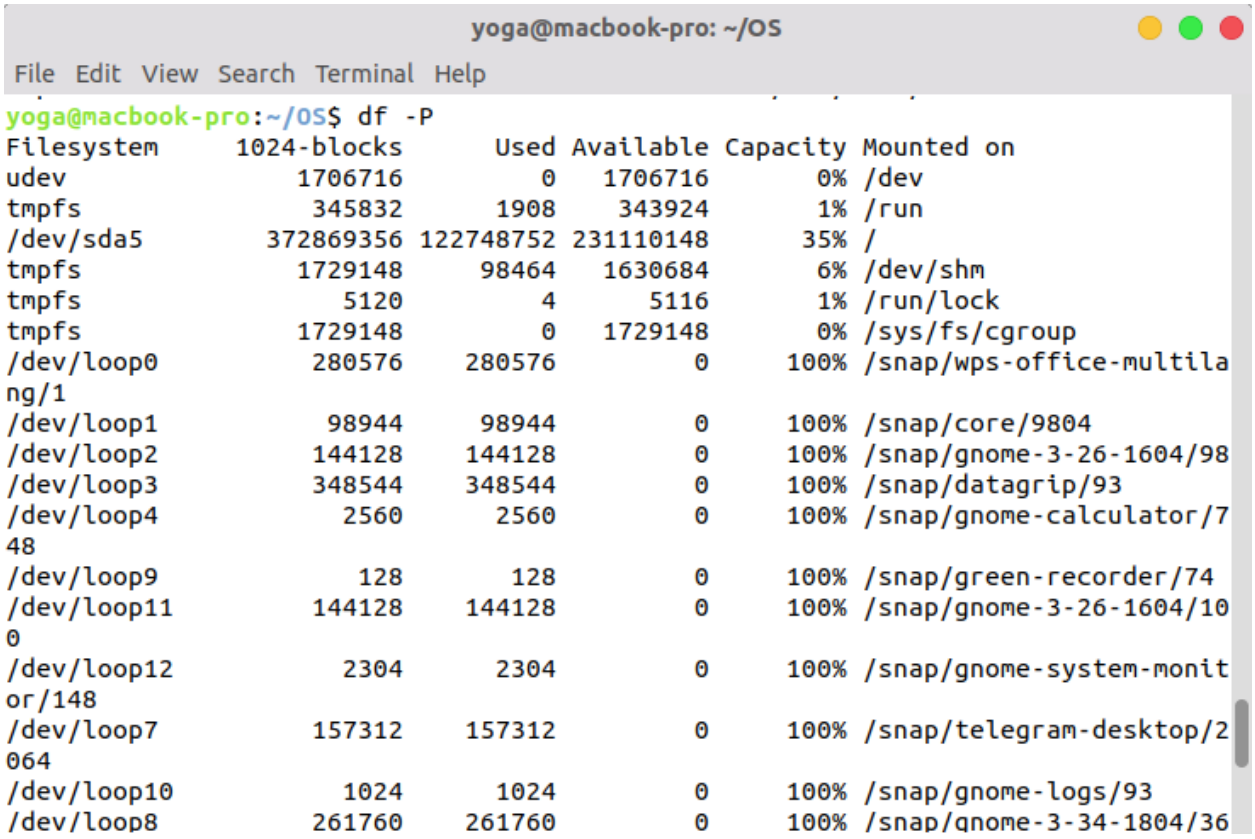
- -i :list inode information instead of block usage



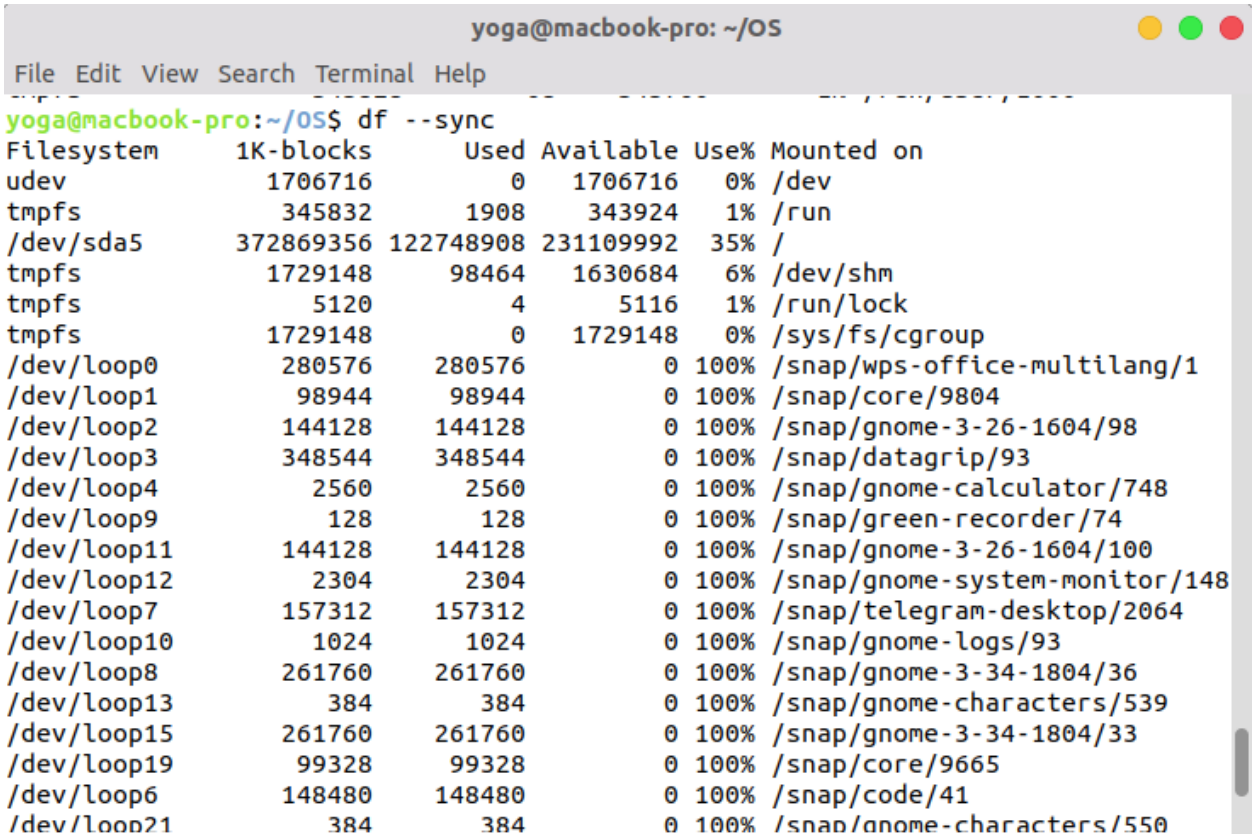
- -l:Display only local file systems



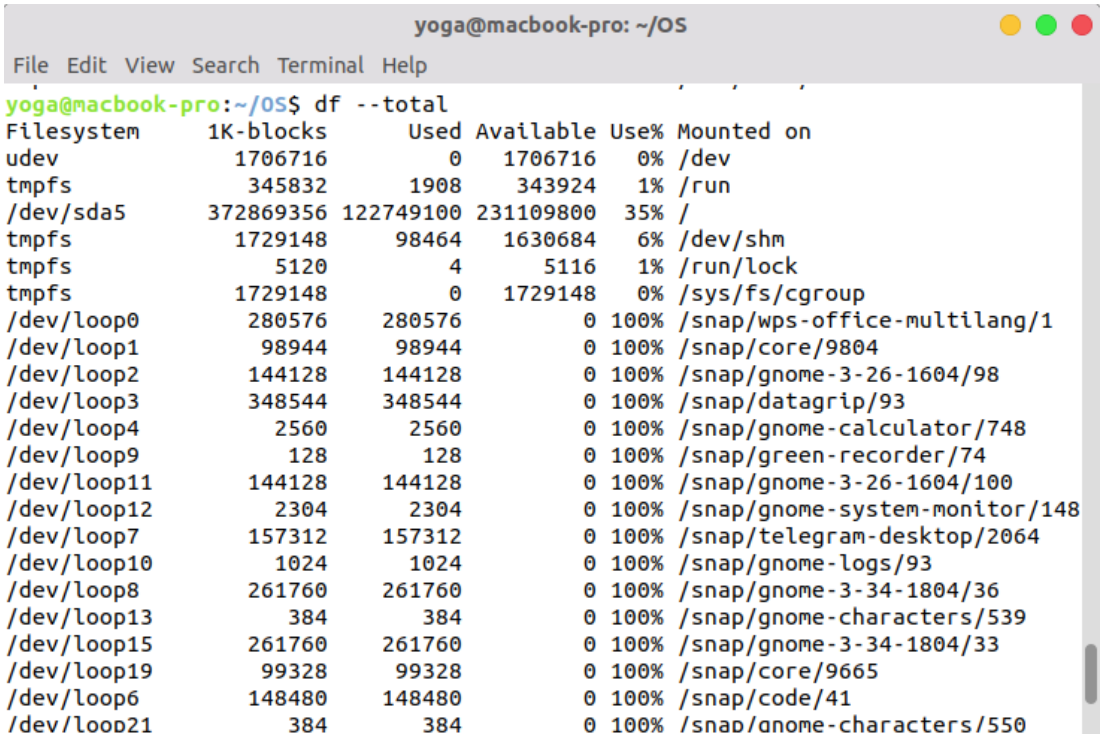
- -P:Use POSIX output format


yoga@macbook-pro: ~/OS
File Edit View Search Terminal Help
yoga@macbook-pro:~/OS$ df -P
Filesystem 1024-blocks Used Available Capacity Mounted on
udev 1706716 0 1706716 0% /dev
tmpfs 345832 1908 343924 1% /run
/dev/sda5 372869356 122748752 231110148 35% /
tmpfs 1729148 98464 1630684 6% /dev/shm
tmpfs 5120 4 5116 1% /run/lock
tmpfs 1729148 0 1729148 0% /sys/fs/cgroup
/dev/loop0 280576 280576 0 100% /snap/wps-office-multilang/1
/dev/loop1 98944 98944 0 100% /snap/core/9804
/dev/loop2 144128 144128 0 100% /snap/gnome-3-26-1604/98
/dev/loop3 348544 348544 0 100% /snap/datagrip/93
/dev/loop4 2560 2560 0 100% /snap/gnome-calculator/748
/dev/loop9 128 128 0 100% /snap/green-recorder/74
/dev/loop11 144128 144128 0 100% /snap/gnome-3-26-1604/100
/dev/loop12 2304 2304 0 100% /snap/gnome-system-monitor/148
/dev/loop7 157312 157312 0 100% /snap/telegram-desktop/2064
/dev/loop10 1024 1024 0 100% /snap/gnome-logs/93
/dev/loop8 261760 261760 0 100% /snap/gnome-3-34-1804/36

- --sync:This option is used to invoke sync before getting usage info



- --total :Display total space used



16)du Command:

Description:

->It is used to estimate /display files/directory space usage

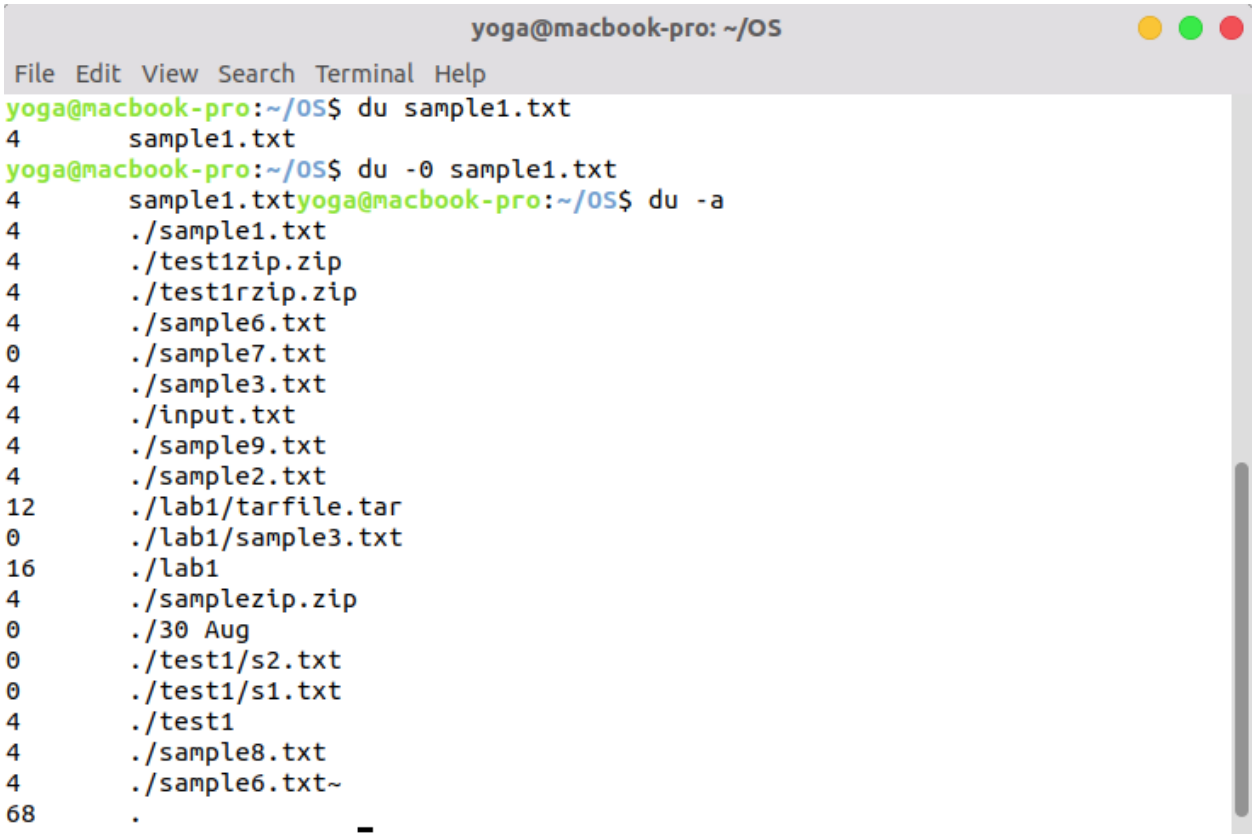
Syntax:

du[OPTION].....[FILE]

[OPTION]:

- -0/-null: Displays output with each line ending with NULL
- -a/-all:
- --apparent-size:Print apparent sizes ,rather than disk usage
- -B:scale sizes to SIZE before printing the output
- -c,-total:Display output as grand total
- -d,--max-depth=N:Print output with total for directories with N or fewer levels
- -h:Display output i.e file size in readable format(K,M,G)
- -S:Prints output with including sizes of sub-directories
- -s:Display only total for each directory

- --time:Displays last modification time



17)fc Command:

Description:

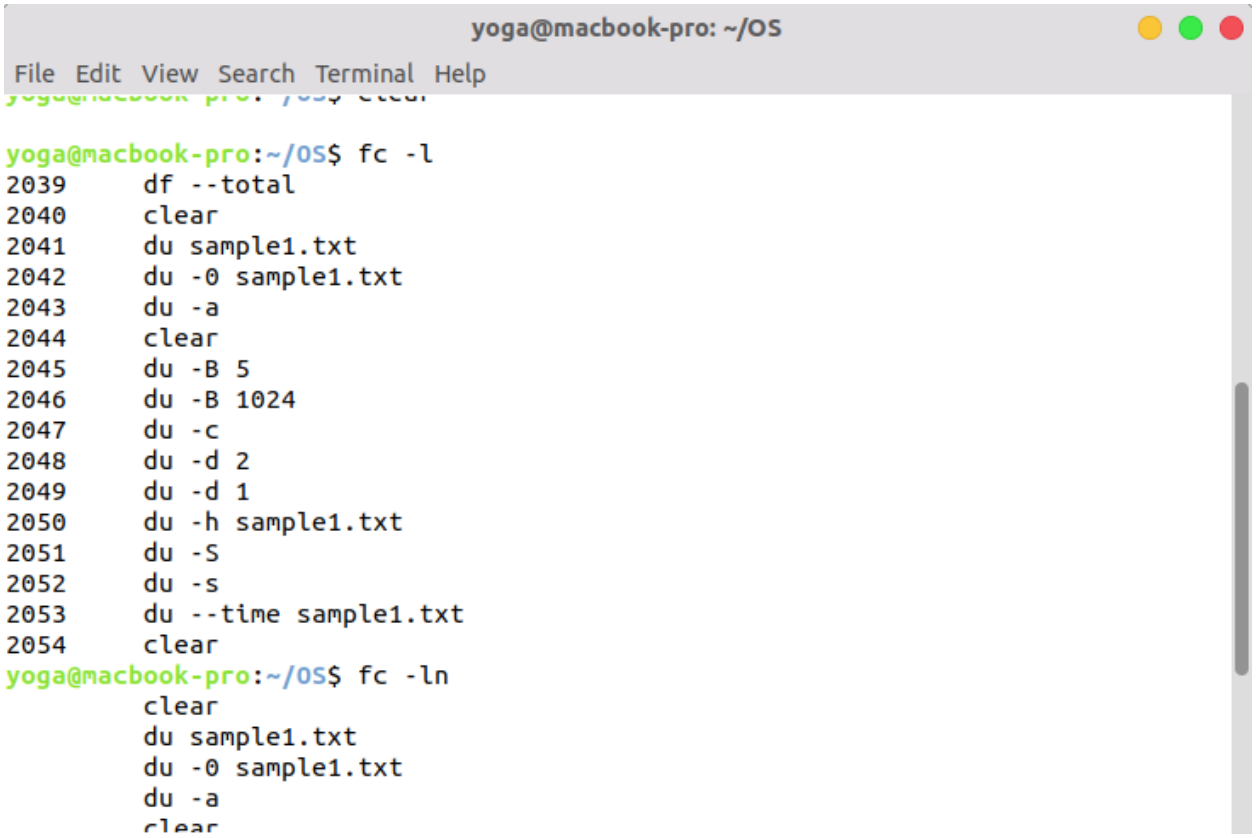
It is used to edit and re-execute the previously entered commands in a shell without re-writing them

Syntax:

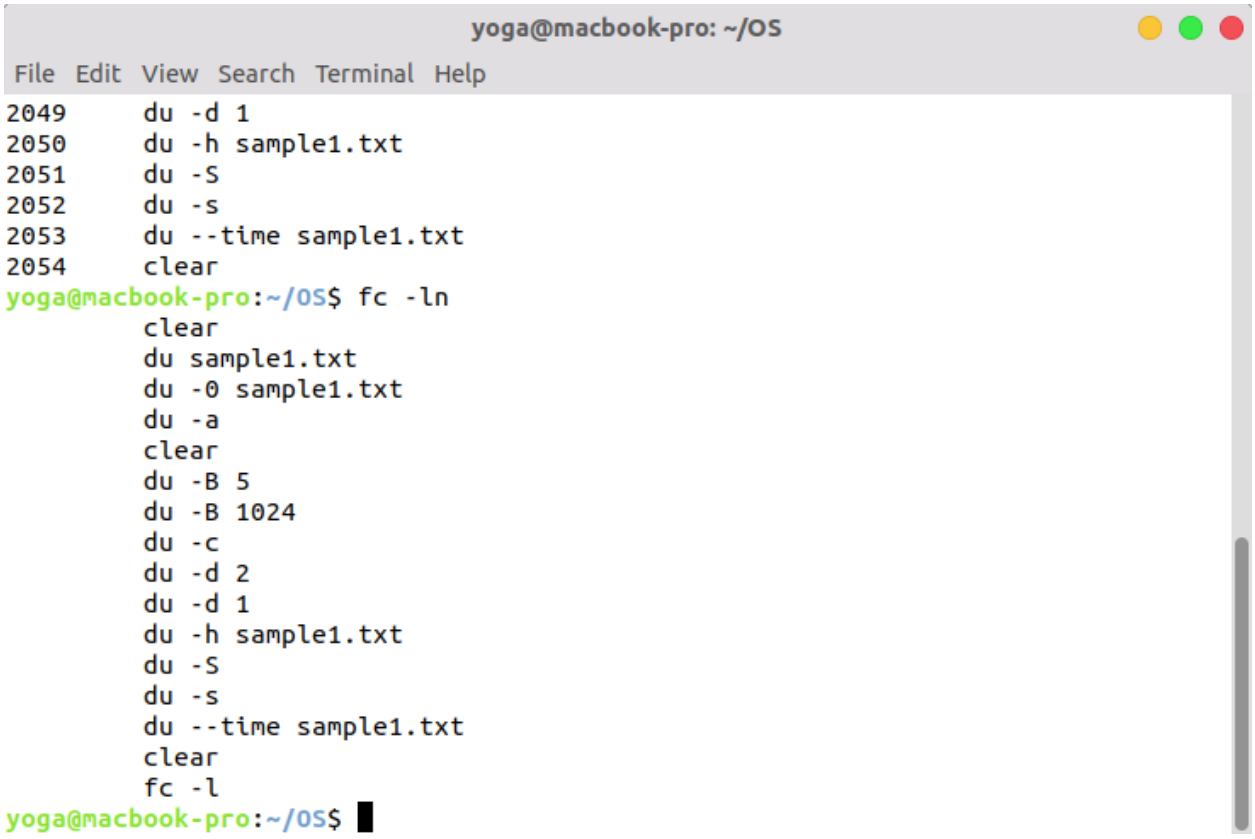
fc [-e ename] [OPTION] [first] [last]
// ename :Refers to editor to be used
// first and last used for specifying the commands to be edited
fc -s [pat=rep] [command]
echo “shutdown -h now” | at -m HH:MM //to shutdown at HH:MM today

[OPTION]:

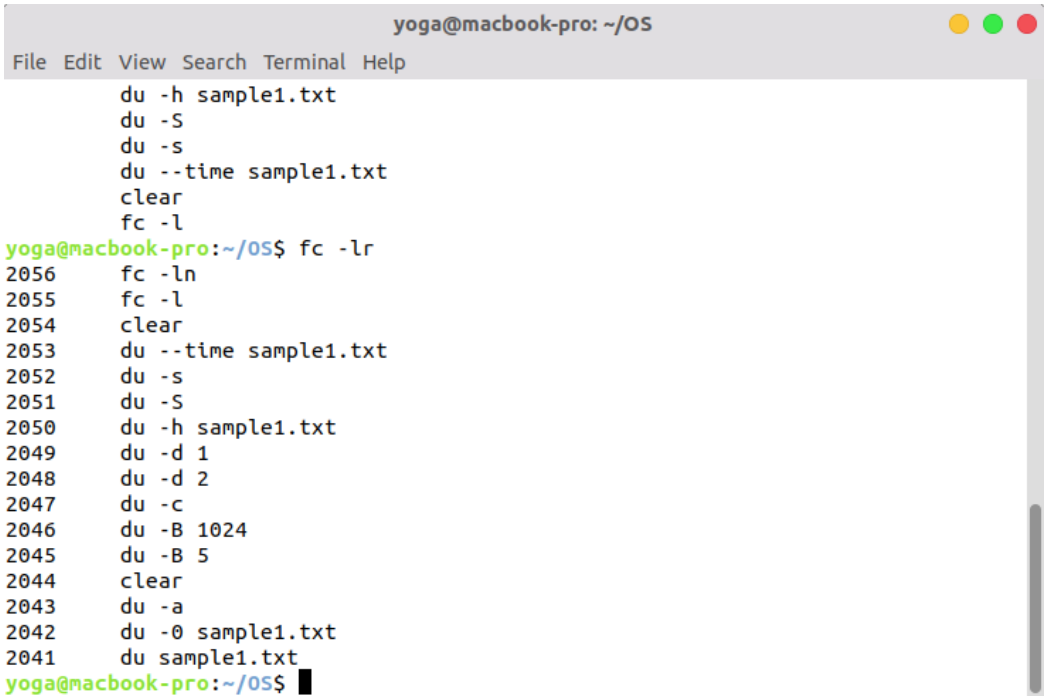
- -l :Used to only display the previously entered commands .



- -ln: Used to list the numbers without line numbers(by default ,output is printed with line numbers)



- -lr:Used to list the newest/recently entered commands first



- -e ename: Used to open the last typed commands in editor “ename”

18)at command:

Description:

->This command is used to schedule a command to be executed at a particular time in the future.

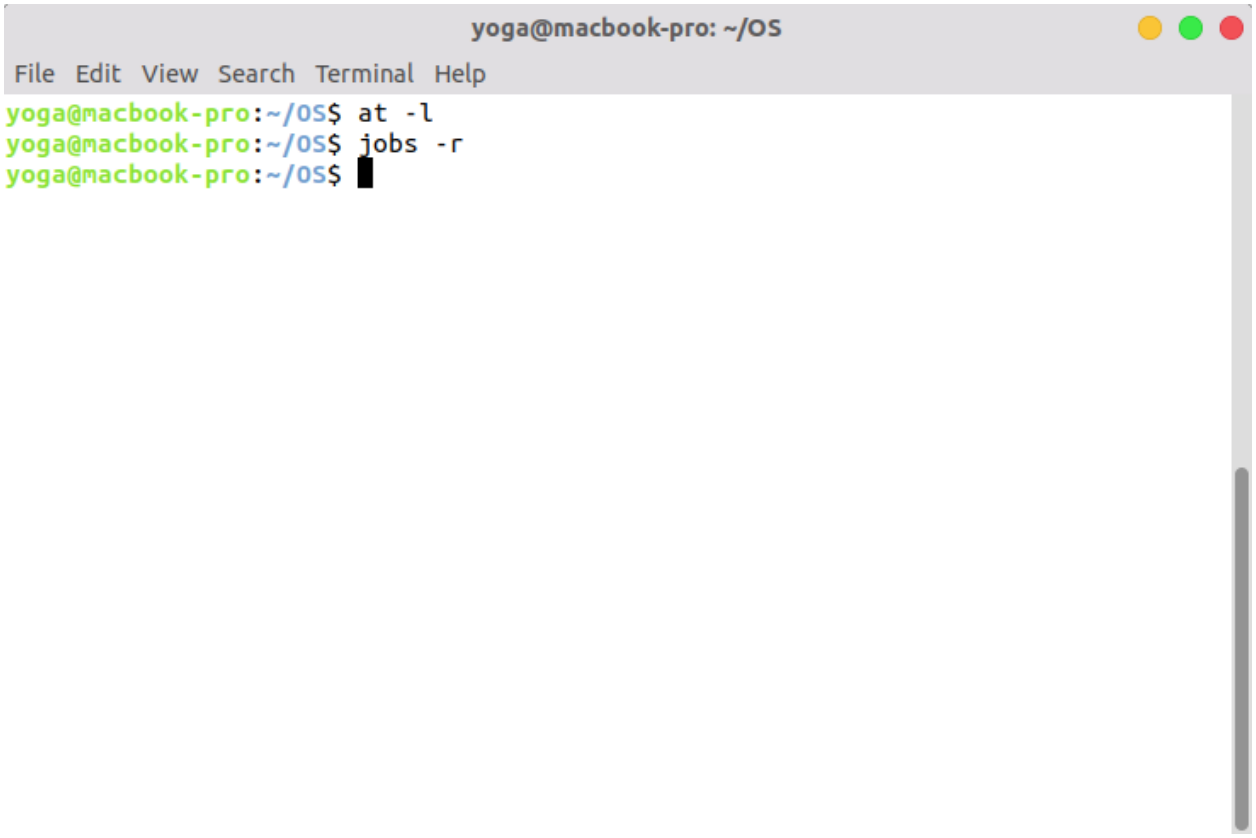
->It can also be used to mail at any time

Syntax:

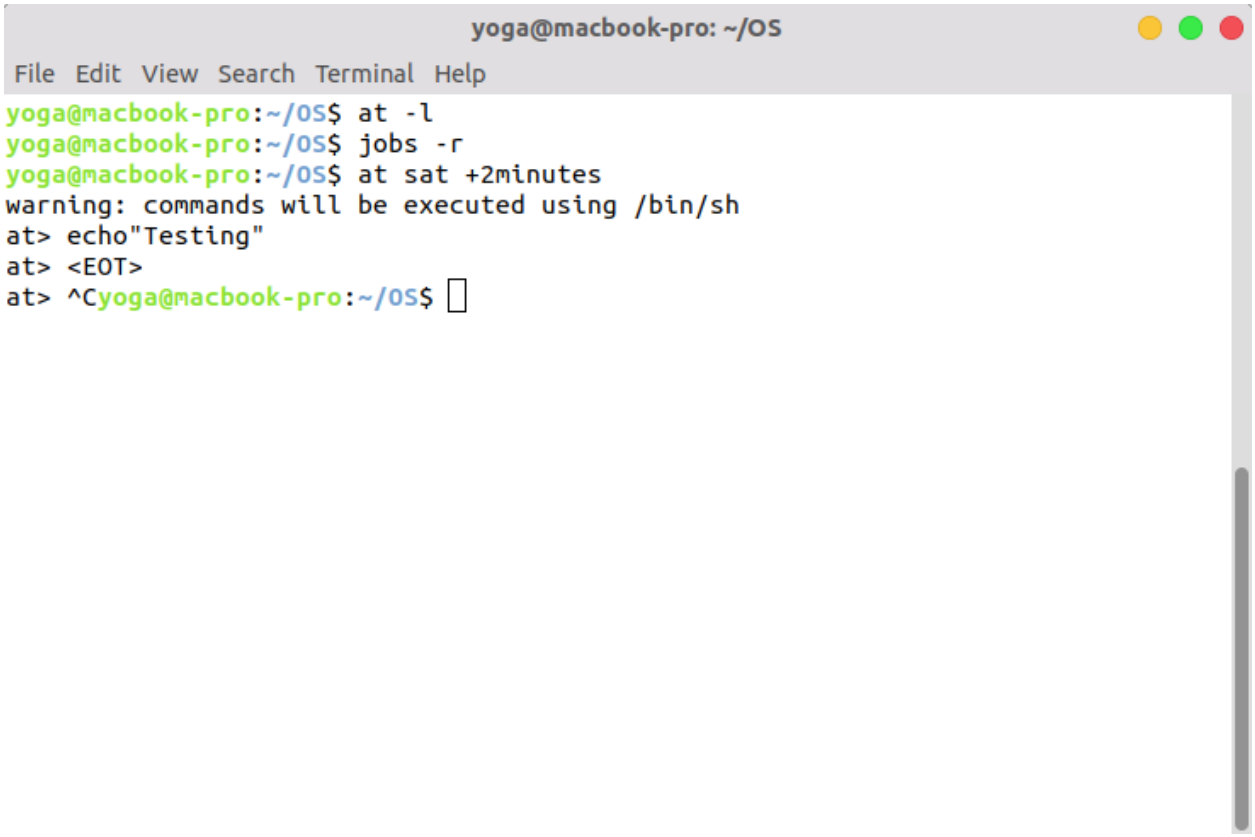
at [OPTION..] runtime

[OPTION]:

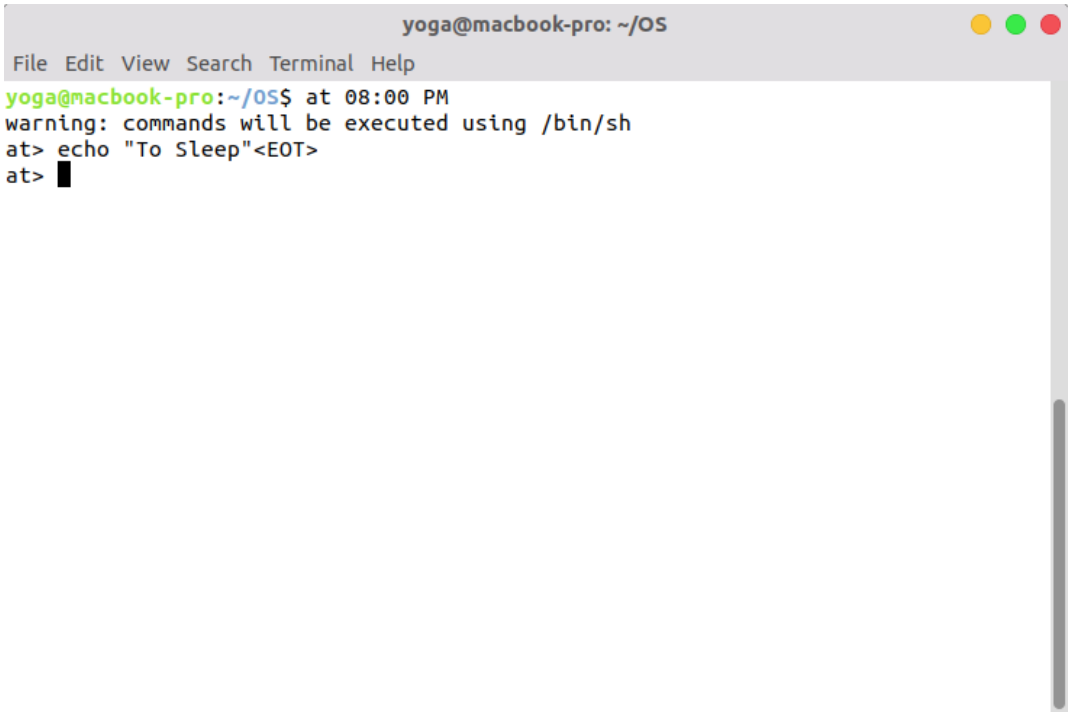
- -l :To list the user's pending jobs



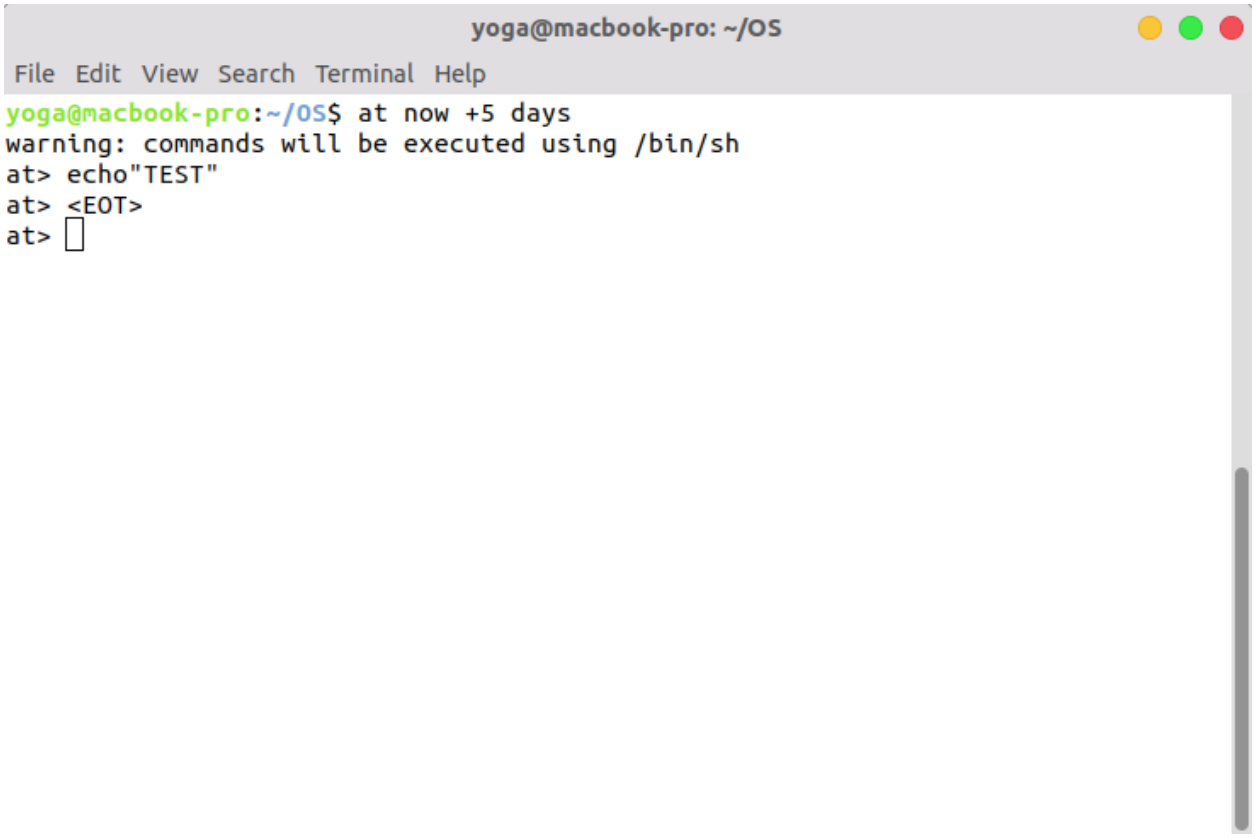
- day +n minutes:To schedule a job at ‘’DAY”(Ex:MONDAY) at a time n minutes later than current time (Ctrl-d to schedule)



- HH:MM MMDDYY:To schedule a job at HH:MM time and at date “MMDDYY”



- now +n days:To schedule a job at n time(MINUTES/HOURS) from now



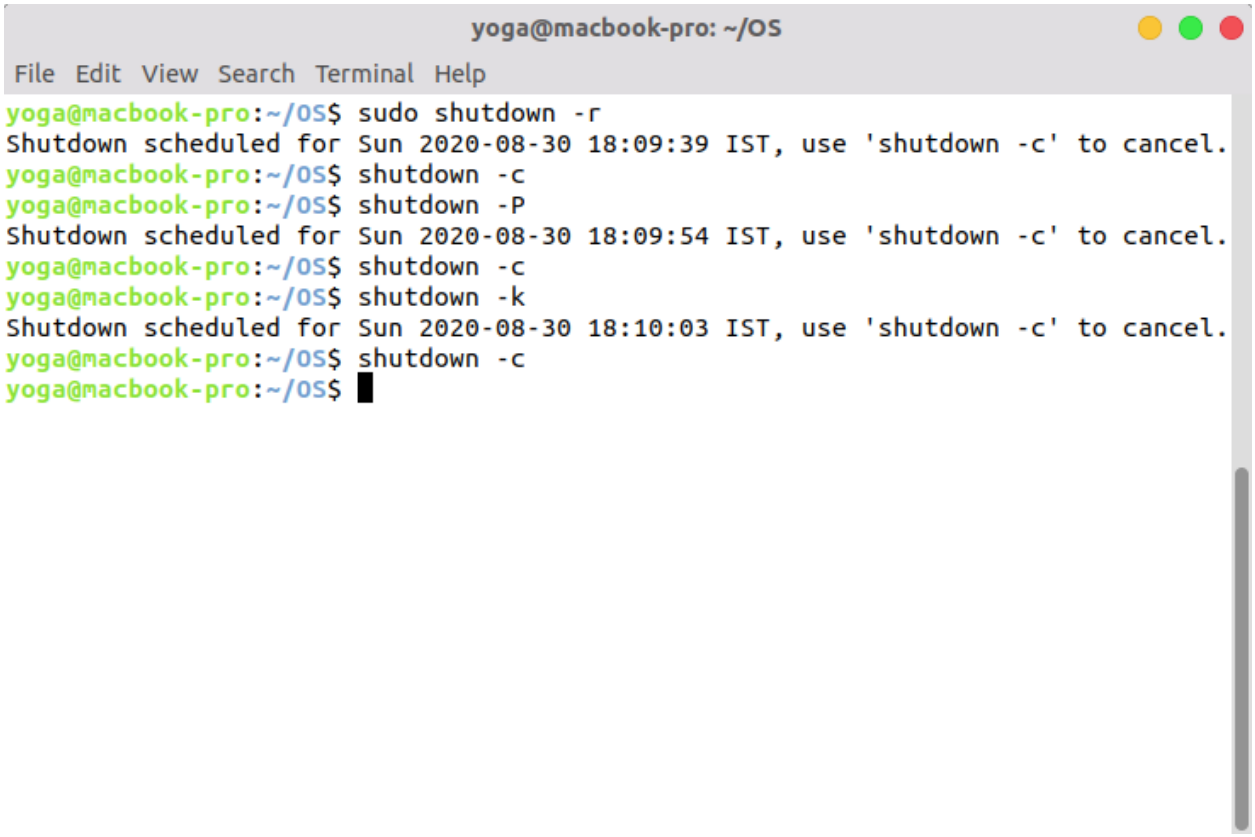
- -r jobid:To delete a job

19)Shutdown Command:
Description:
->It is used to shutdown the system in a safe way.
->It can be used to schedule the shutdown.
//NOTE :Only Root user can execute shutdown command
Syntax:
shutdown [OPTIONS] [TIME] [MESSAGE]
sudo shutdown [TIME] [MESSAGE]

//OPTIONS :used for commands like halt power-off
//TIME :Used To specify shutdown process Ex:=+n (after n minutes) ,HH:MM //format,now,etc
//MESSAGE:Used to specify a message to display it to all users who are logged in

[OPTIONS]:

- -r:This Option Requests system to be restarted after shutdown and use
- -c:Cancels a running shutdown //TIME will not be specified but message can be specified
- -h:To Request system to halt or power off after shutdown
- -P:Requests system to be powered off
- -k:Only display warning messages and disable logins.



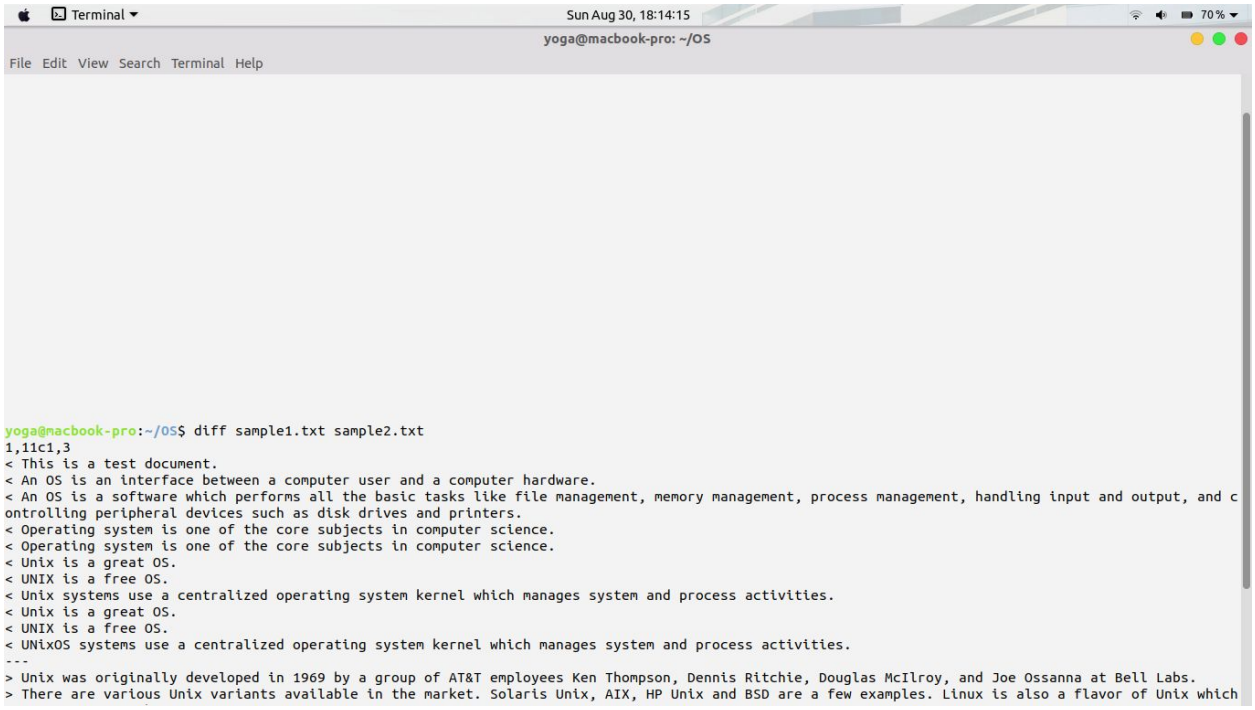
20)diff Command:

Description:

It is used to display differences in the files by comparing the files line by line

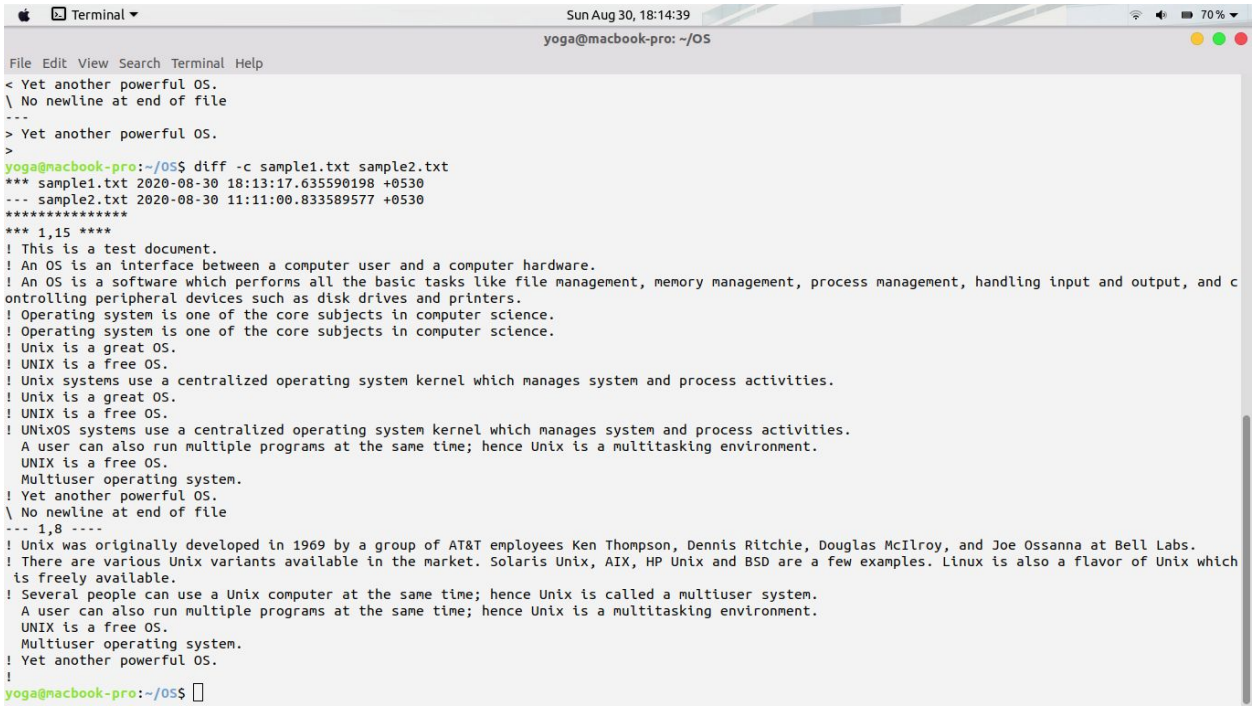
Syntax:

diff [OPTION] file1 file2

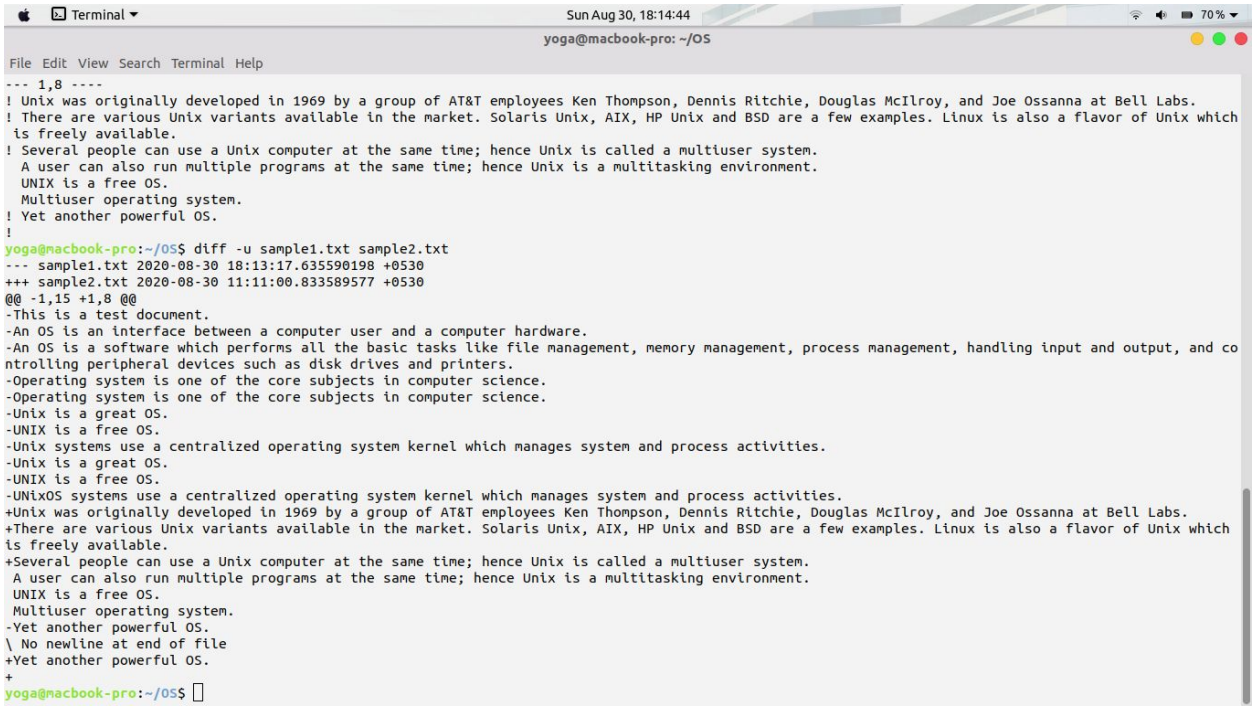


[OPTION]:

- -c:To view differences between files in context mode

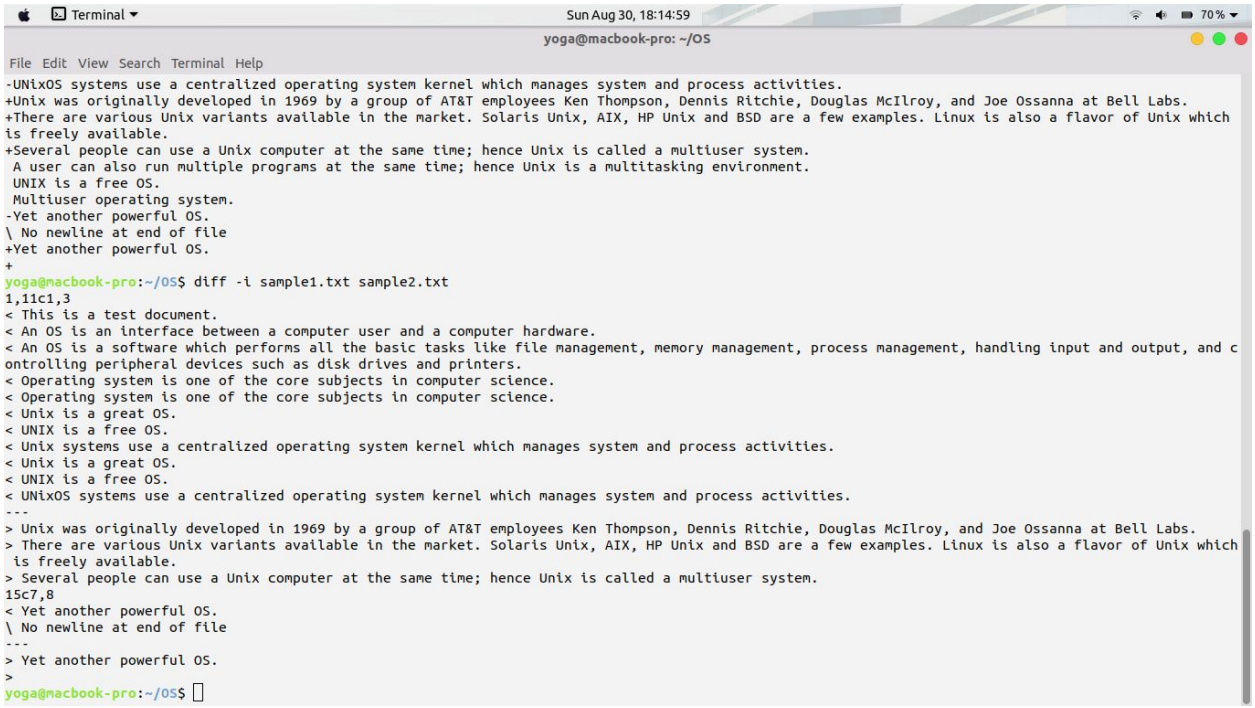


- -u:To view differences in Unified Mode.

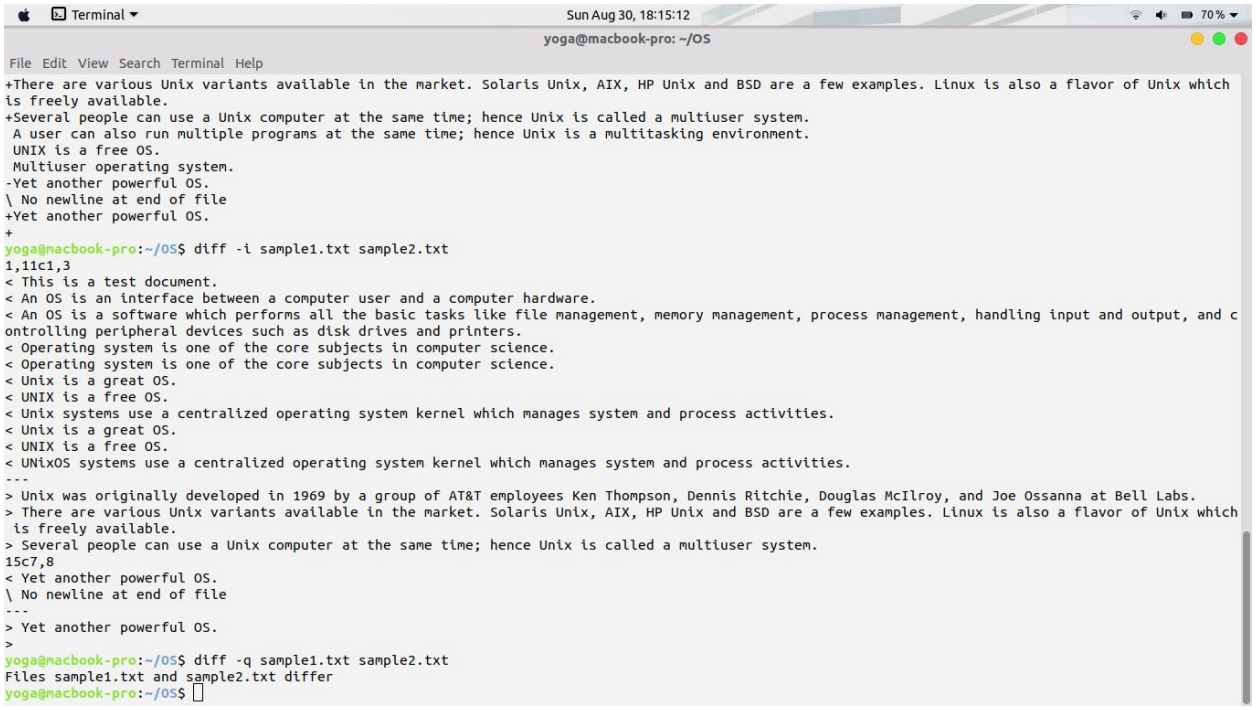


//DIFFERENCE BETWEEN UNIFIED AND CONTEXT MODE IS THAT UNIFIED MODE DOES NOT DISPLAY ANY REDUNTANT INFORMATION(IN CONCISE FORM)

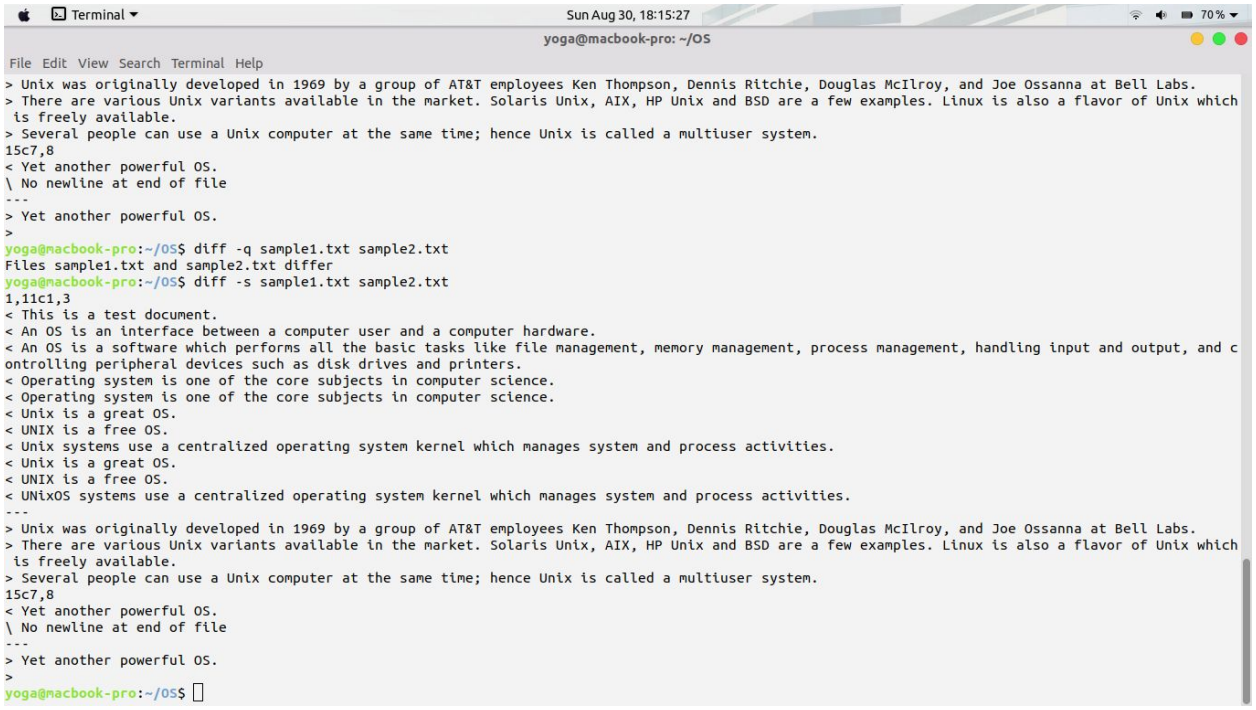
- -i:This Command ignores case sensitivity while comparing the file



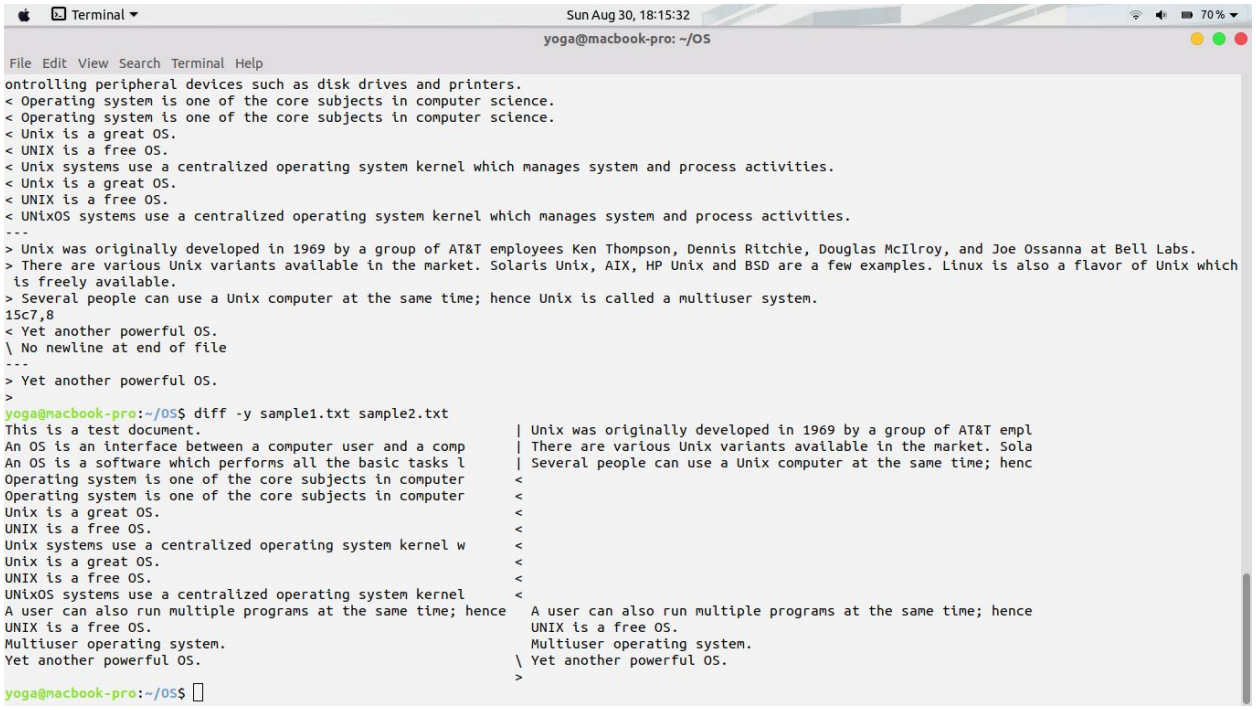
- -q:Reports only when files differ



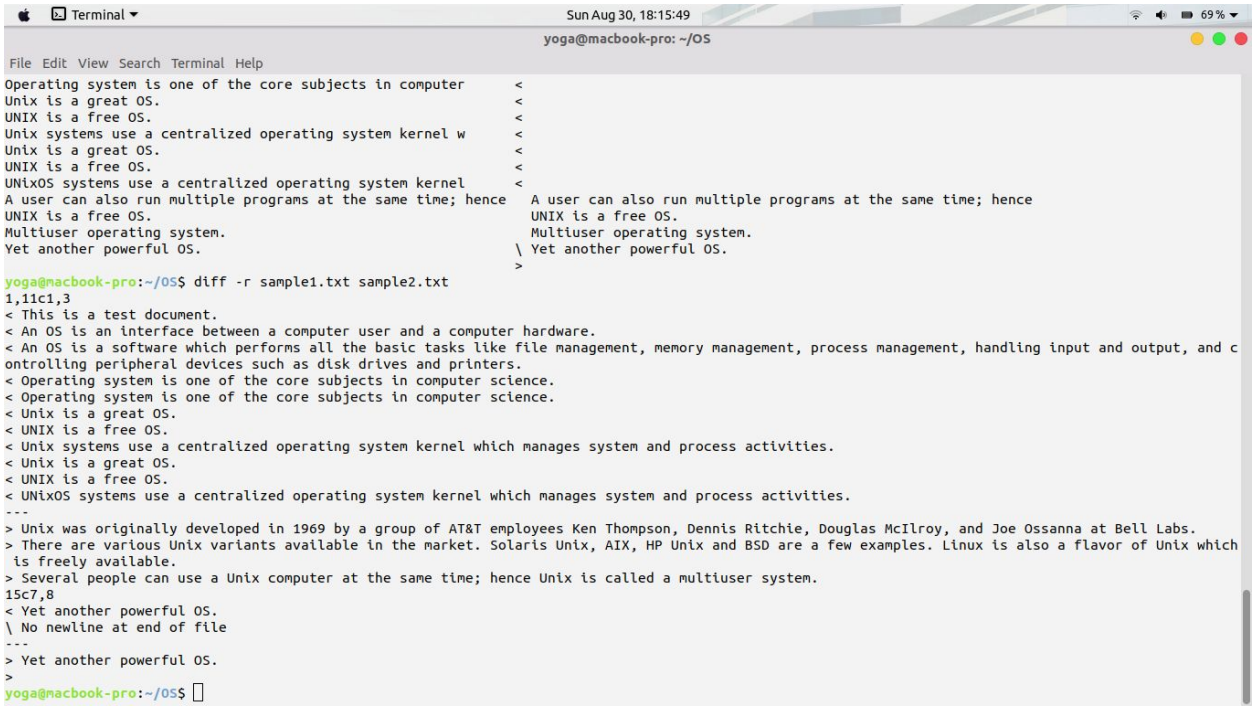
- -s:Reports when two files are same



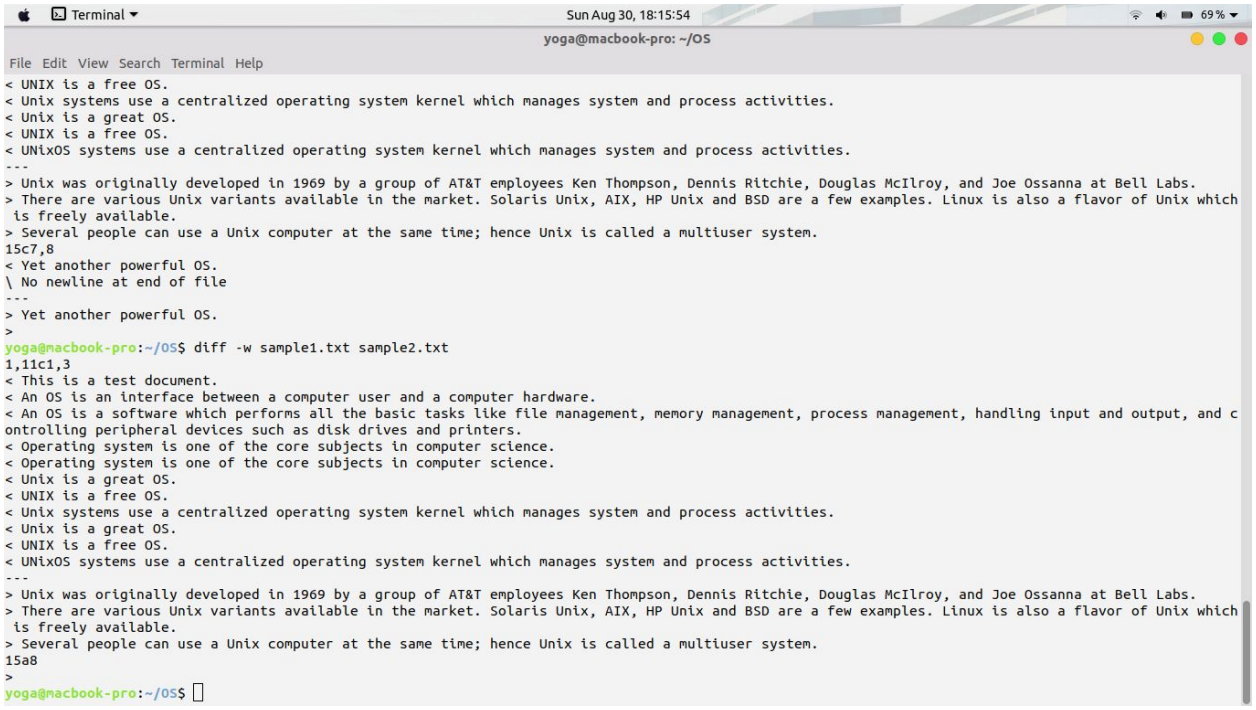
- -y:Displays output in two columns



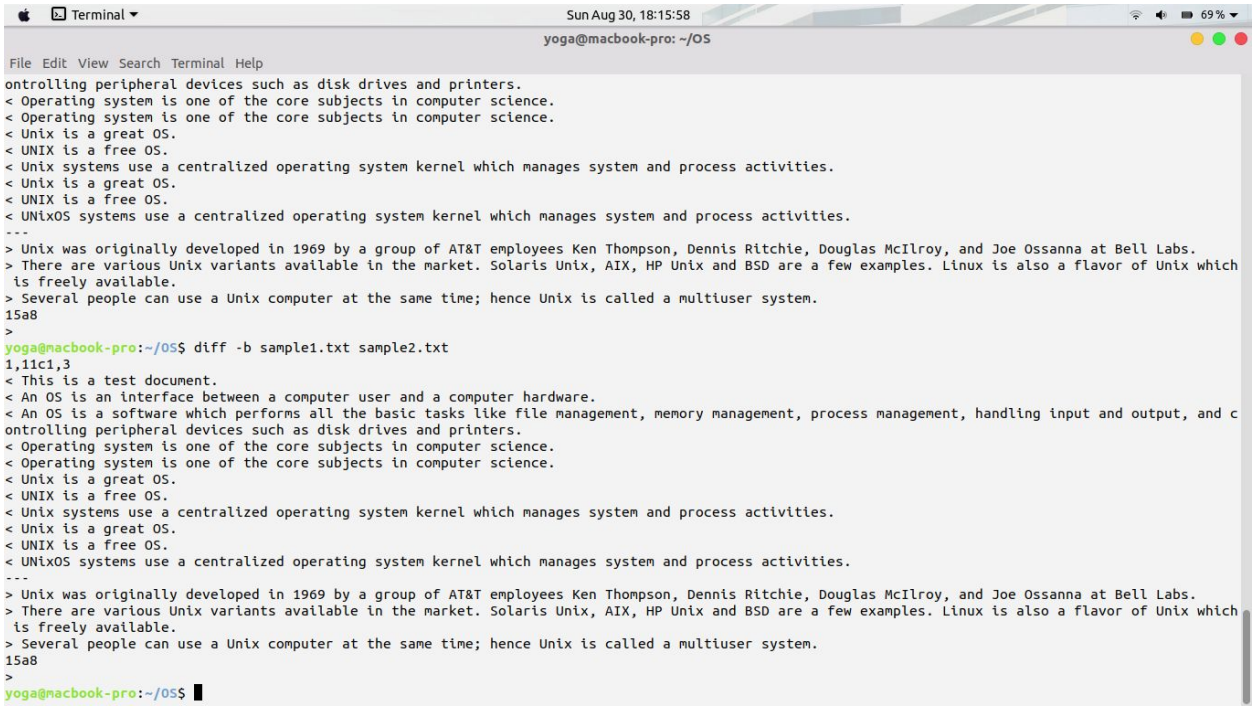
- -r:Recursively compares any sub-directories found



- -w:Ignores all white space



- -b:Ignores changes where lines are all blank



- --version:This option is used to display the version of diff currently running on system

21)Find command:

Description:

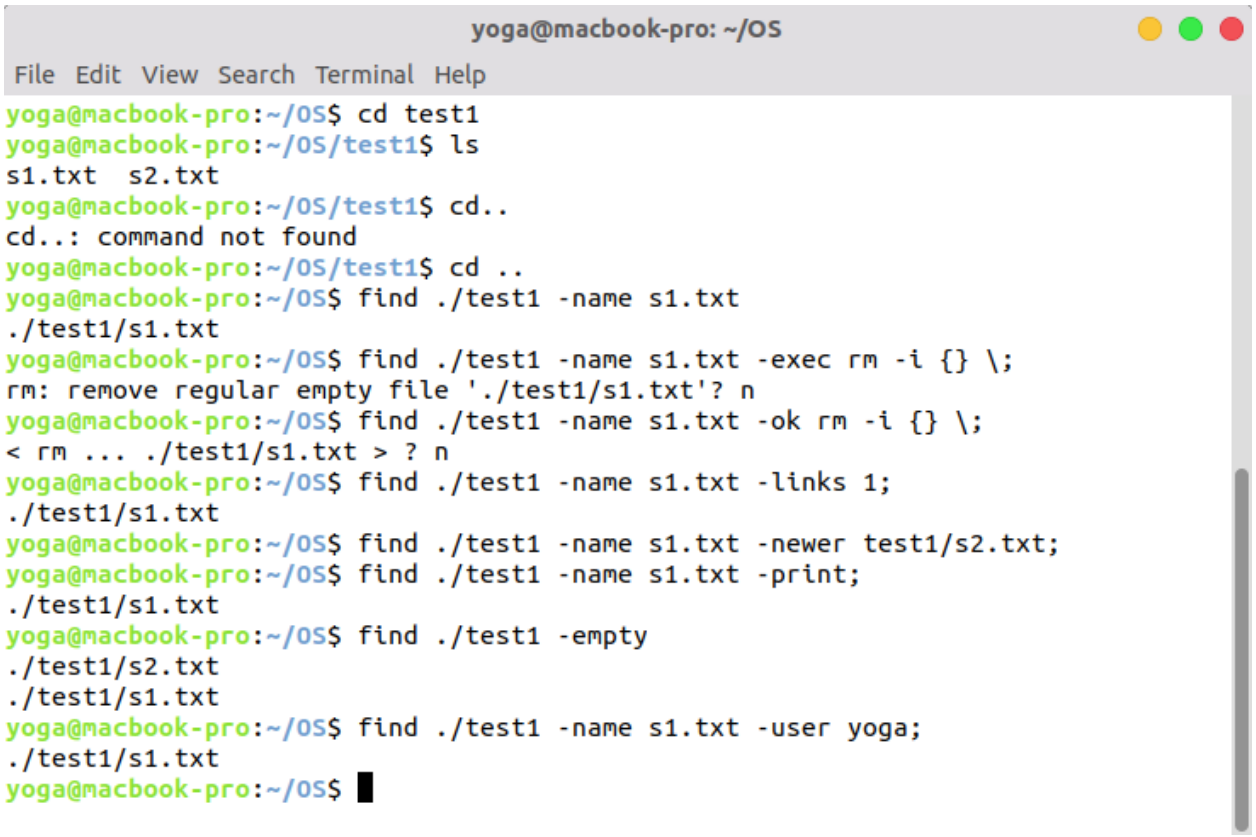
->It can be used to find files and directories and to perform operations on them

Syntax:

find [location to start searching from] [pattern] [FILENAME] [OPTIONS]
Ex:find ./new -name sample.txt

[OPTION]:

- -exec CMD:Return 0 and successful command execution.
- -ok CMD:This option prompts user first and functions similar to exec cmd
- -links N:Search for files with ‘N’ links
- -newer file:Facilitates search for files that were modified or created after “File”
- -print:Displays the path name of the files found by using the rest of the criteria
- -empty:Search for empty files and directories
- -size+N/-N:Search for files of ‘N’ blocks ;If ‘c’ is mentioned after ‘N’ :itcan be measured size in characters ‘+N’ means size greater and ‘-N’ means size lesser than ‘N’ blocks
- -user name:Search for files owned by username or ID “name”.



22)locate command:

Description:

It is used to find the files by name.

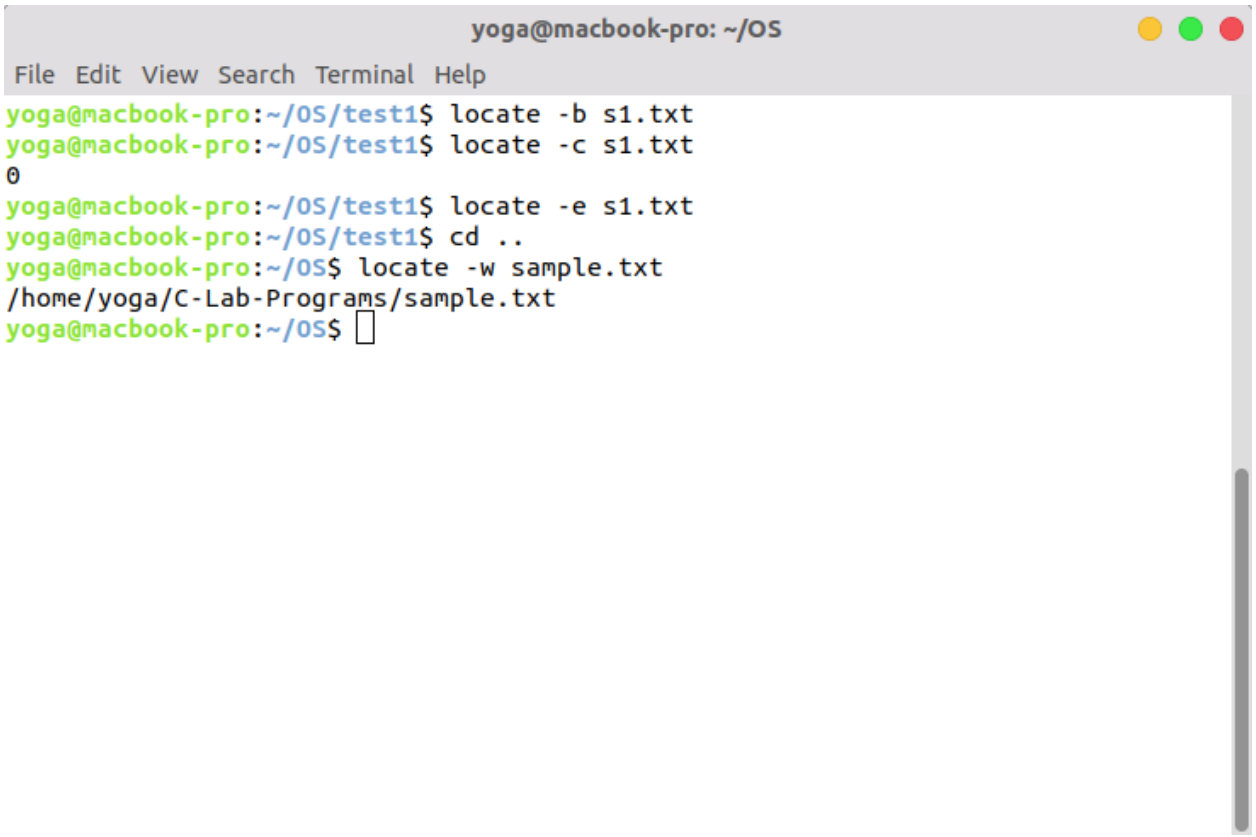
It works faster than find command because instead of searching the file system when a file system is initiated ,it would look through a database.

Syntax:

locate [OPTION] [PATTERN] [FILENAME]

[OPTION]:

- -b,--basename:Match only the base name against the specified pattern
- -c,--count:Displays only the no of matching entries
- -e:Displays only the files that exist during the time locate is run
- -L,--follow:While checking for files,if -e option is specified then it follows trailing symbolic links.This cause broken symbolic links to be omitted.
- -i,--ignore case:Ignores case sensitivity while matching patterns
- -l num-limit,-n LIMIT :Stops after finding “LIMIT” entries.
- -0,--null:Seperate the entries on output using the ASCII NULL character instead of displaying each entry on seperate line.
- -q:Suppresses errors displayed while reading and processing databases.
- -w,--wholename :Matches only the whole path name against the specified pattern



23)ifconfig command:

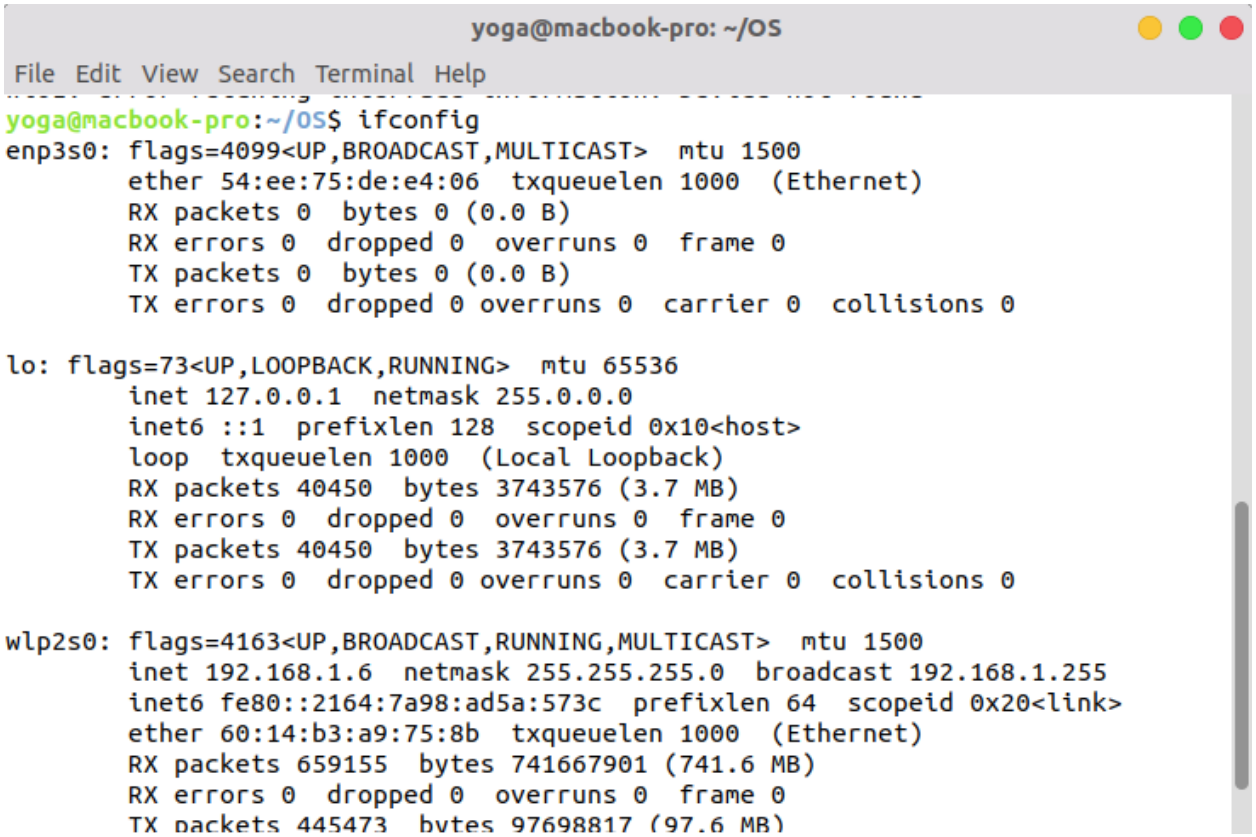
Description:

It is used to configure the kernel-resident network interfaces.

It is also used to assign IP address and netmask to an interface or disable an interface

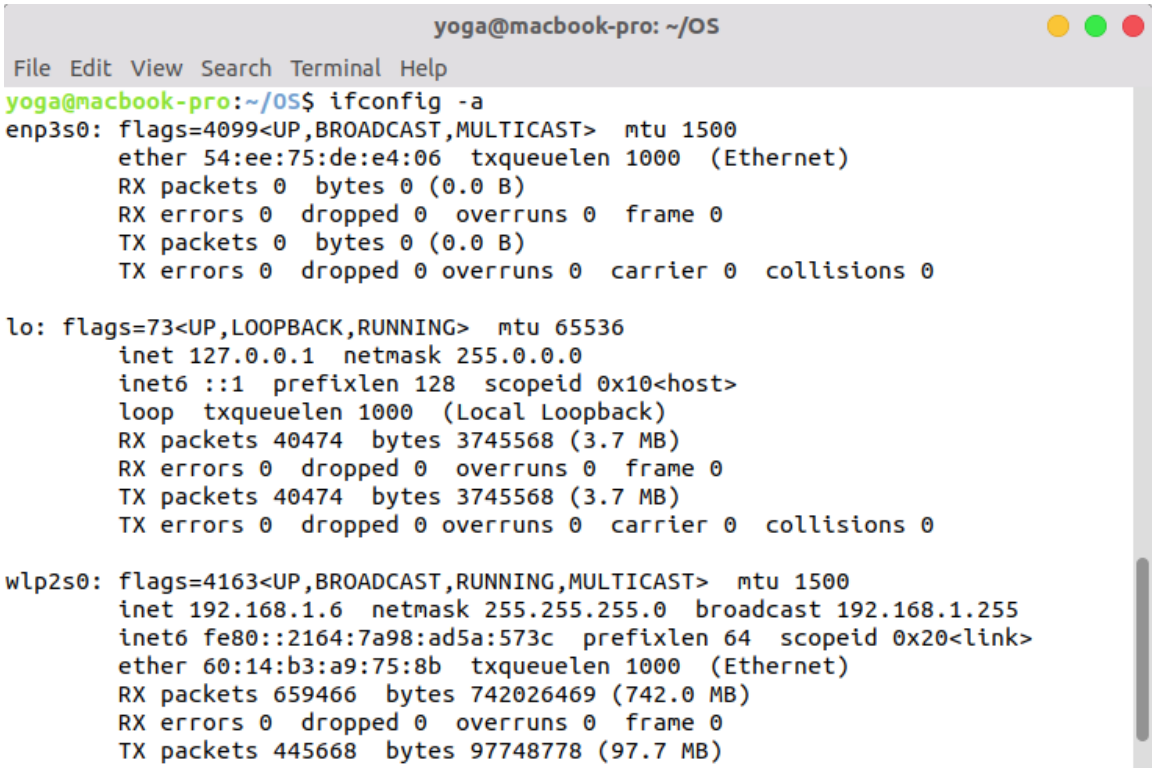
Syntax:

ifconfig [OPTION] [INTERFACE]

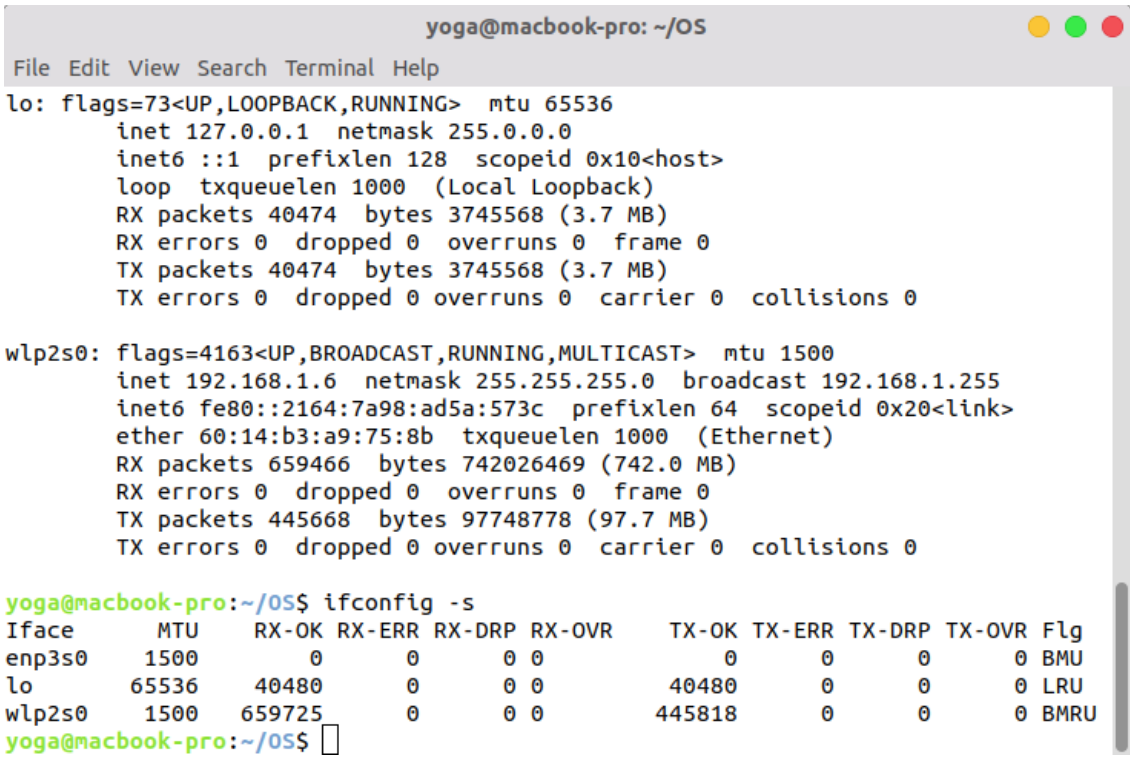


[OPTION]:

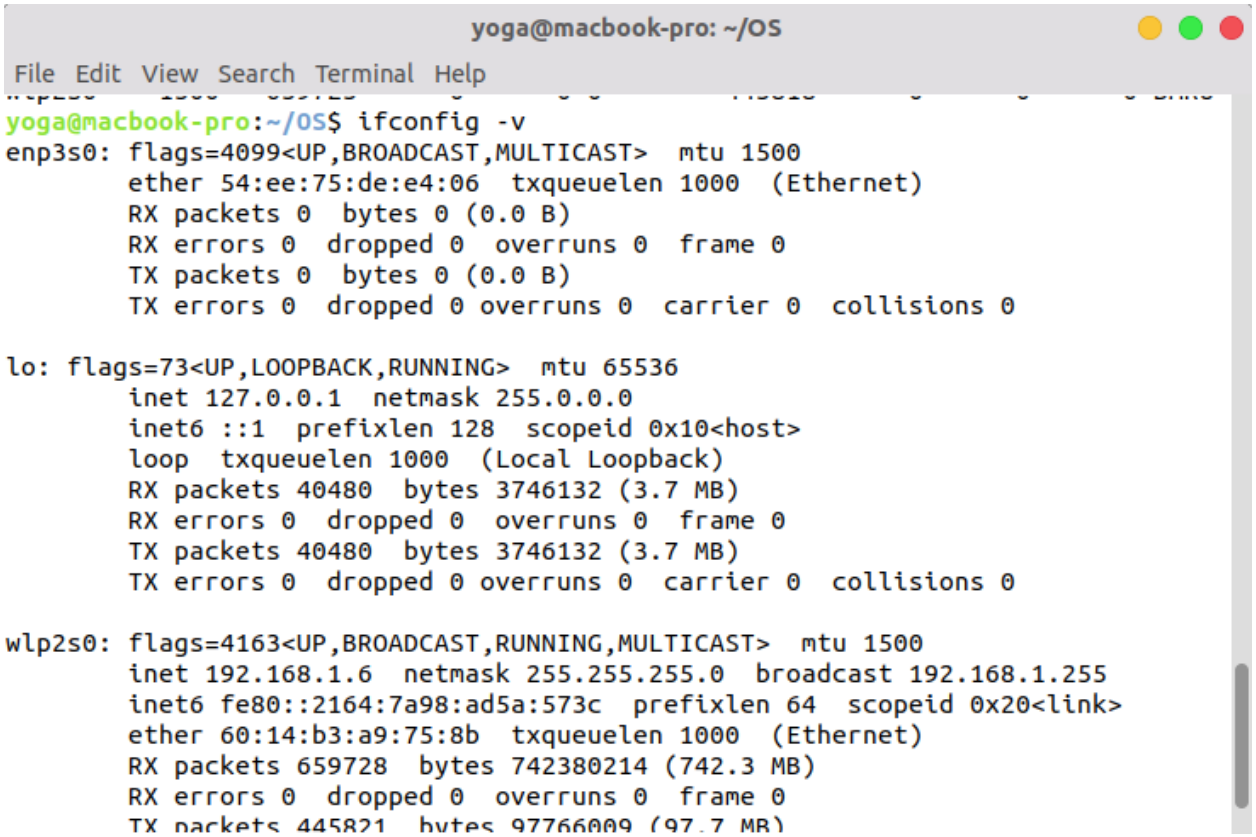
- -a:It is used to display all interfaces available



- -s:Display a shorter version of option “-a”



- -v :Include more details about execution(opens in verbose mode)



- [INTERFACE]://Note this requires no OPTION to be included
-
- “INTERFACE” UP:This option is used to activate the driver for the given interface
- “INTERFACE” DOWN:This option is used to de-activate the driver for the given interface
- “INTERFACE” add addr/prefixlen:This option is used to assign IPv6 address to an interface.
- “INTERFACE” del addr/prefixlen:This option is used to remove an IPv6 address to an interface.
- [-]arp:This option is used to to enable/disable the use of ARP protocol

24)chmod command:

Description:

It is used to change the access mode of a file

Syntax:

- chmod [OPTION].... MODE[,MODE].....FILENAME…
- chmod [OPTION]... OCTAL-MODE FILENAME..
- chmod [REFERENCES][OPERATOR][MODES] FILENAME….

[OPTION]:

- -f :Suppress error messages
- -R:Change files and directories respectively

[OCTAL-MODE]:

Represented in 3 three bits:xyz(And each of the bit is converted in octal and each bit from msb to lsb represents read,write and execute permissions with 1 representing inclusion and 0 for not included)

x:User

y:Group

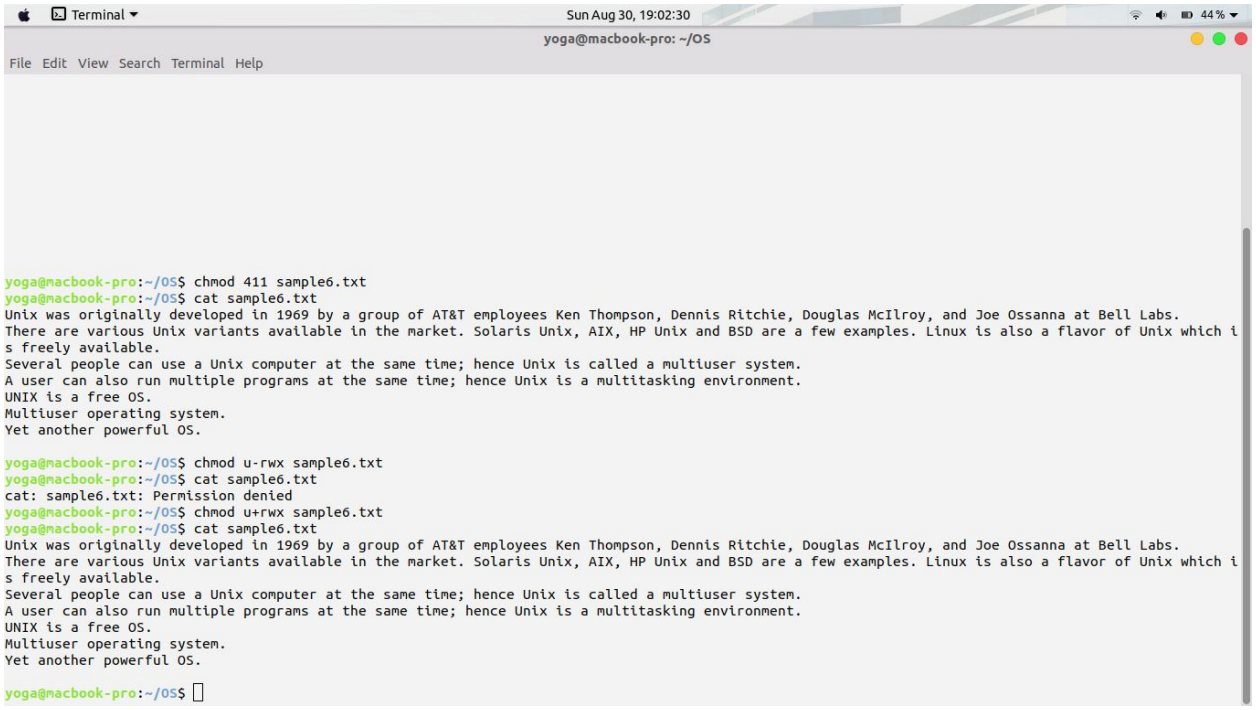
z:Other

[REFERENCE MODE]:

- u:Stands for user
- g:Stands for group
- o:users who are neither the file's owner nor members of the file's group
- a :all three of the above users

[OPERATOR]:

- +:Adds the specified modes
- -:Removes the specified modes
- =:The modes specified are to be made the exact modes for the specified classes



25)Free command:

Description:

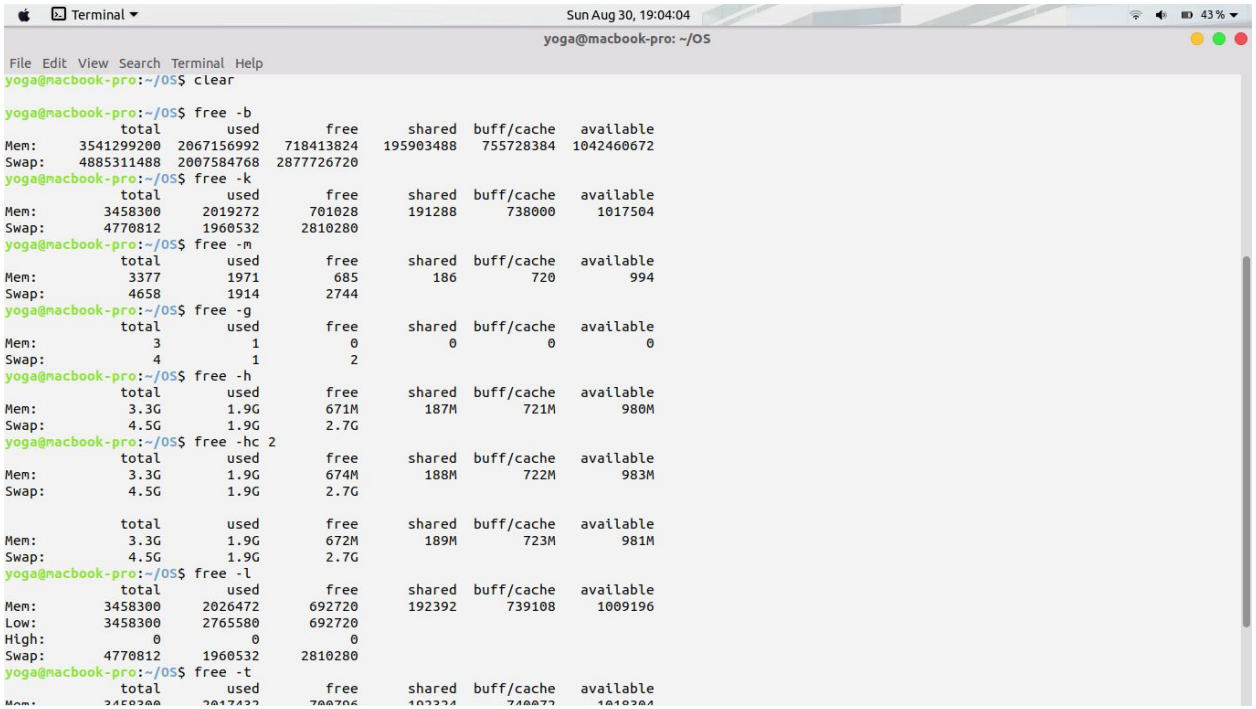
This command is used to display the total amount of free space available along with amount of memory used and swap memory in the system and also buffers used by the kernel.

Syntax:

free [OPTION]

[OPTION]:

- -b: Displays the memory in bytes
- -k/-m/-g/--tera:It Displays the amount of memory in kb/mb/gb/tb
- -h:Shows output in shortest three digit unit and also display the units like B(bytes),K(Kilos)
- -c,- -count:It Displays the Output c number of of times
- -l,--lohi:Display detailed low and high memory statistics
- -t,--total:Displays output along with additional columns showing column total



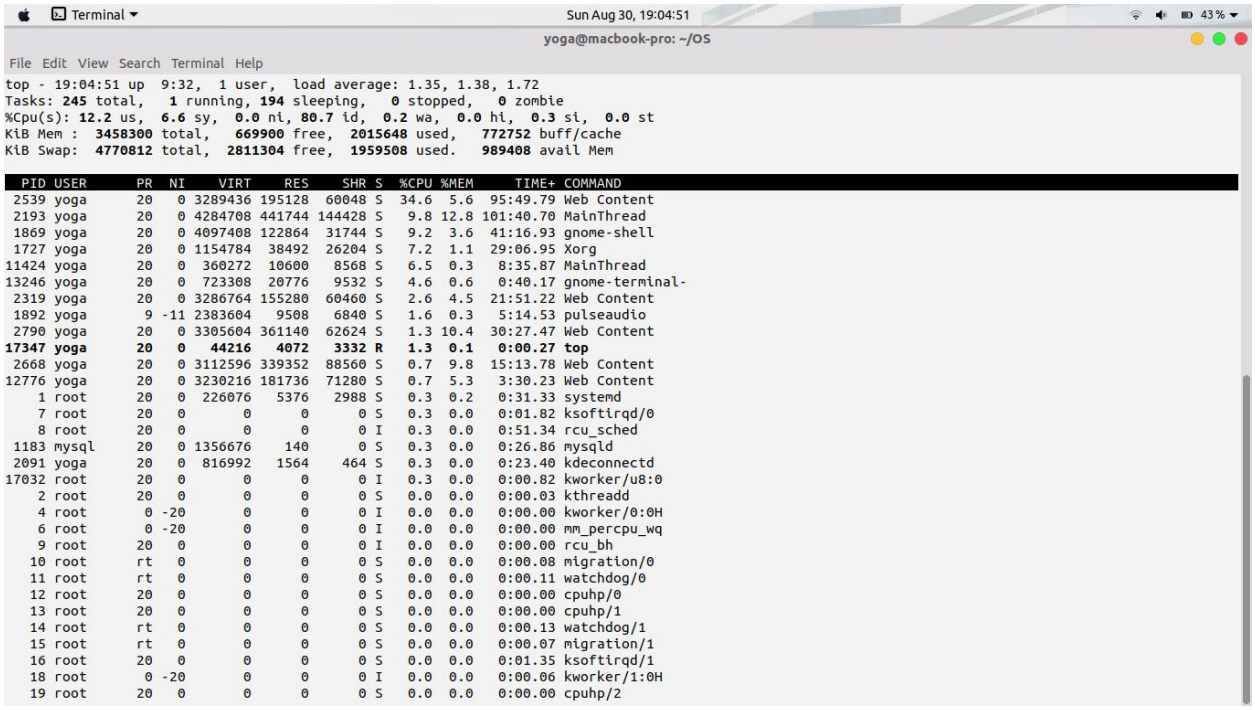
26)top command:

Description:

It Provides a real-time view of the running system i.e It shows the summary of the information of the system and the list of processes or threads which are currently managed by the Linux Kernel

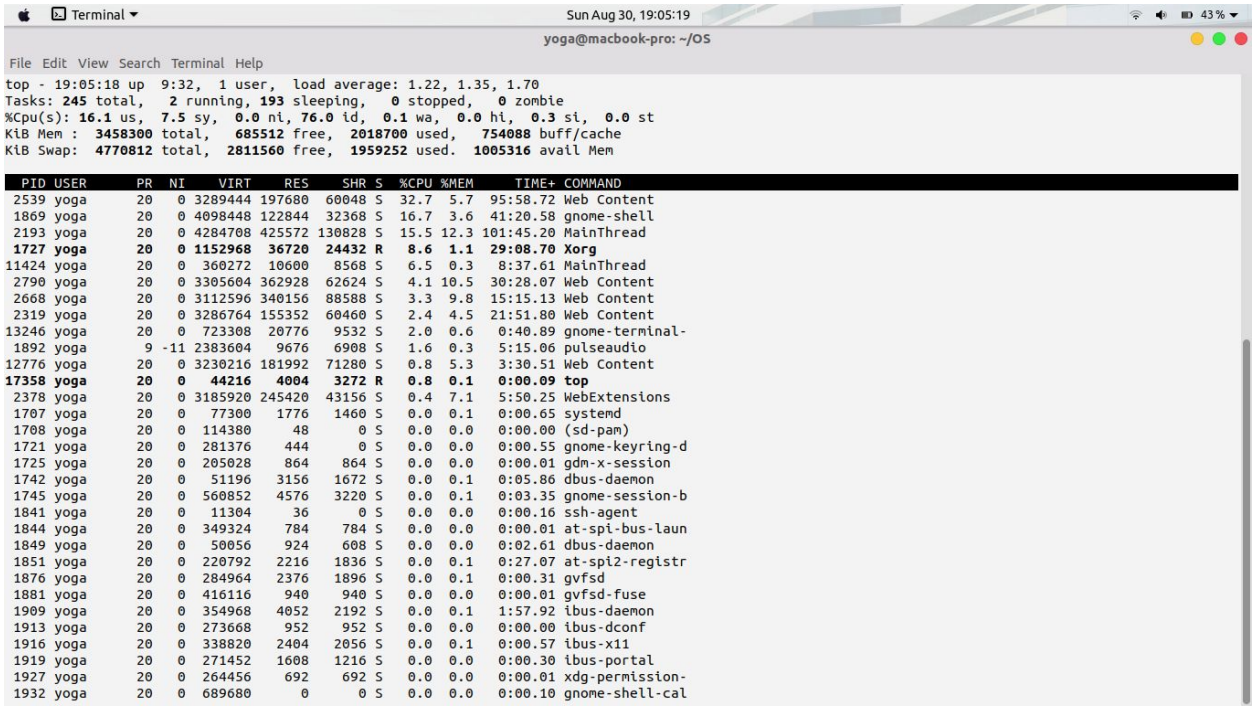
Syntax:

- top [OPTIONS]//No Options are required by default

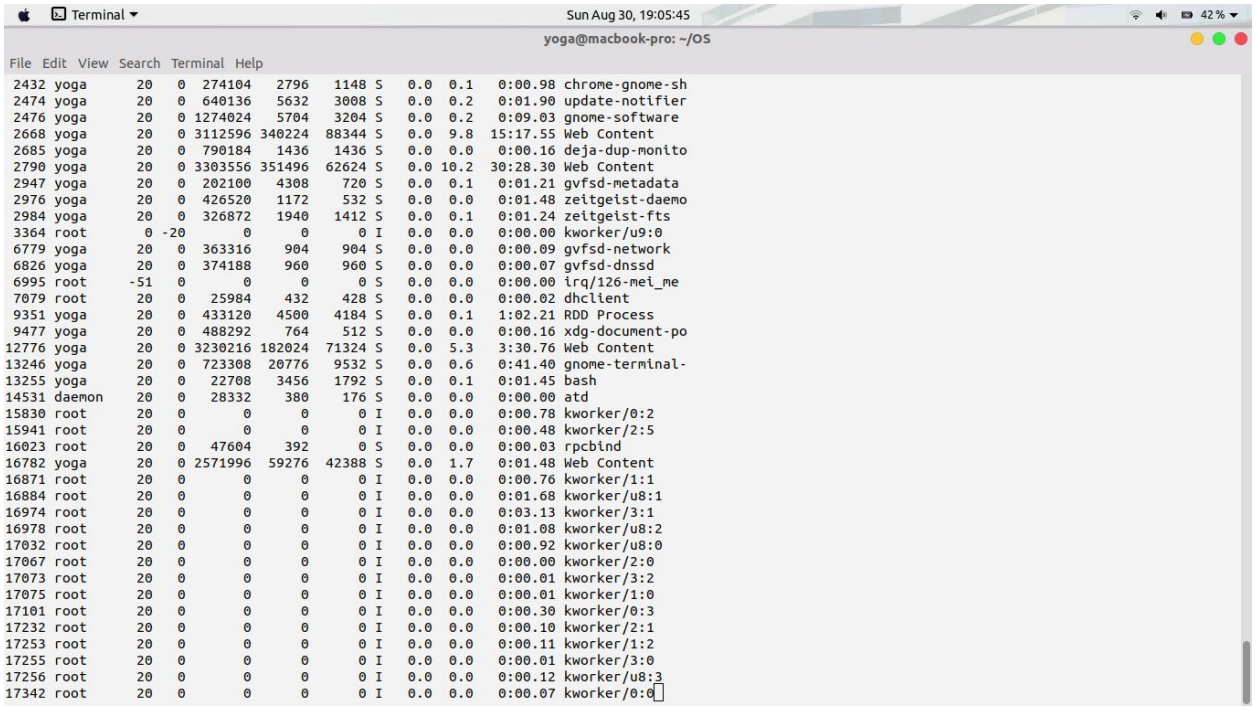


[OPTION]:

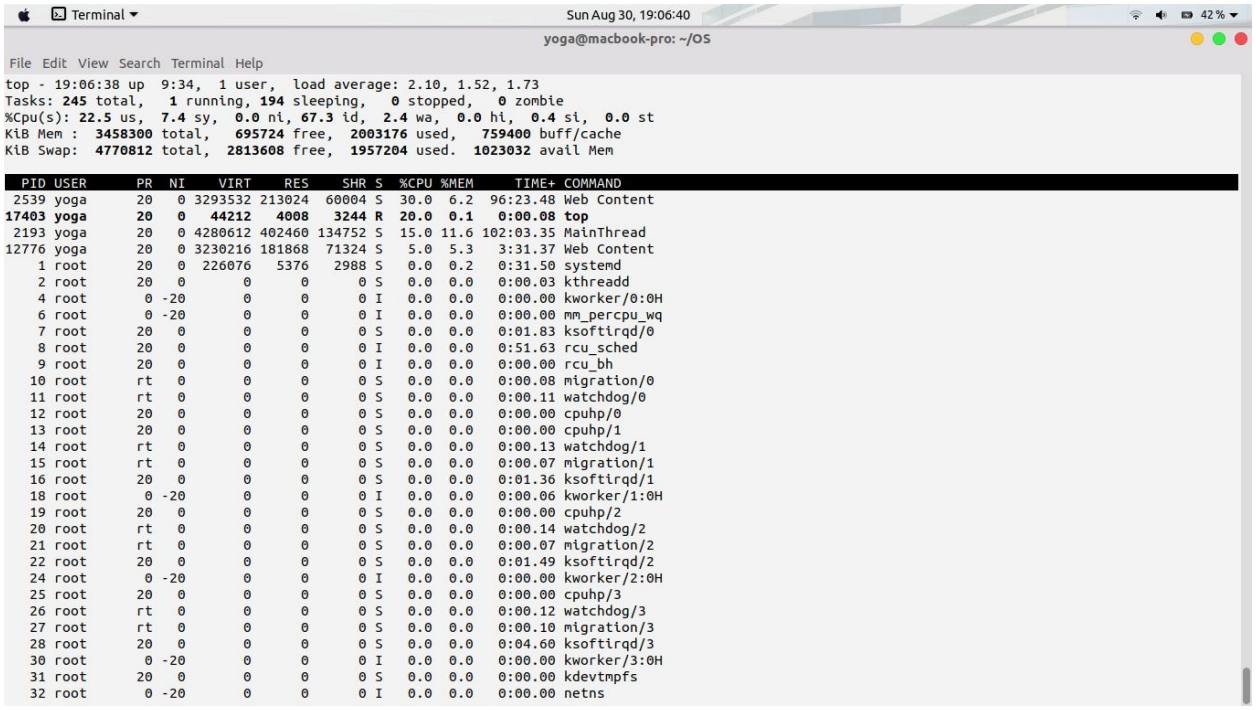
- -u [PROCESSNAME]:Displays specific User Process



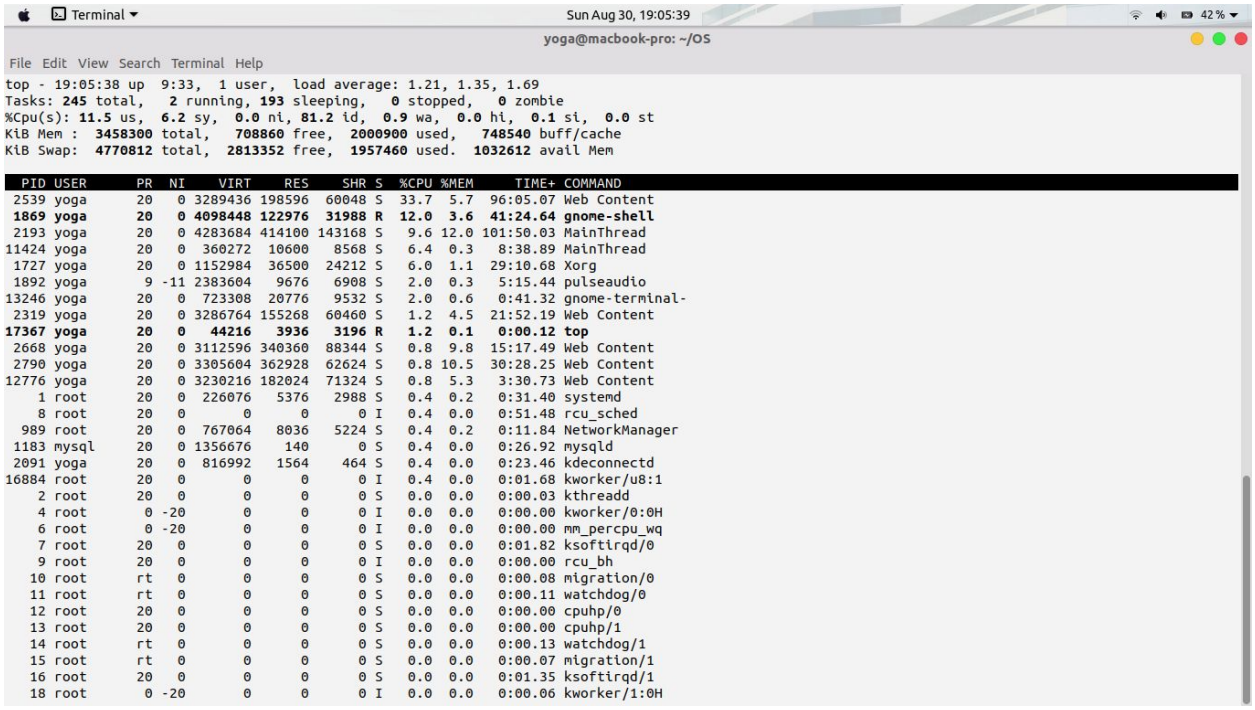
- -b: Sends output from top to file or any other program//Opens in Batch mode



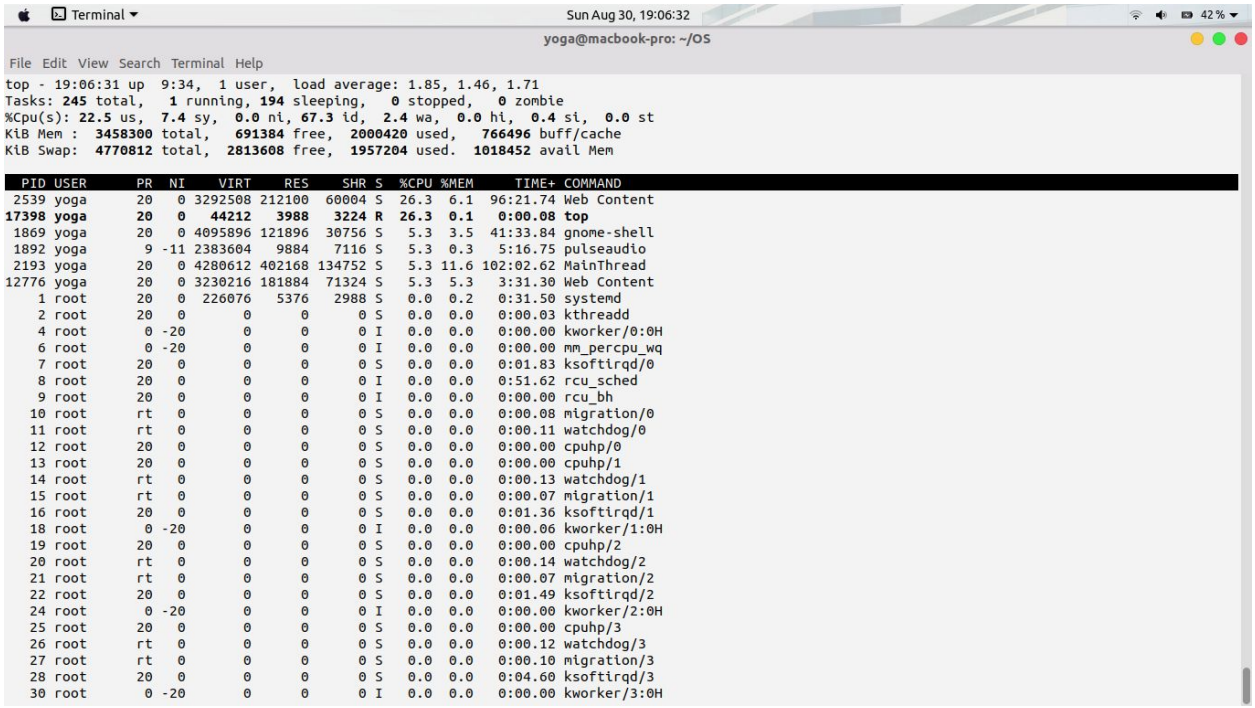
- -s:Opens top in Secure mode



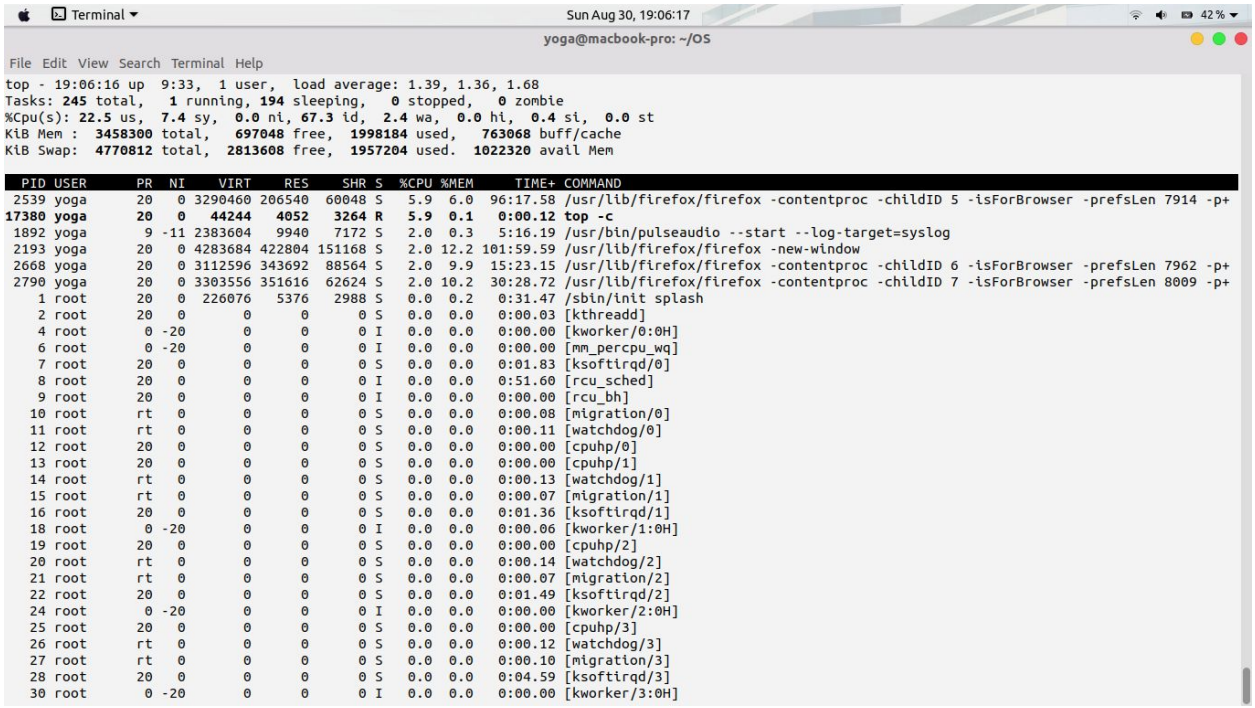
- -c:Starts top with last closed state



- -d seconds.tenths: Informs delay time between screen updates



- -n number:Stops after n number of iterations



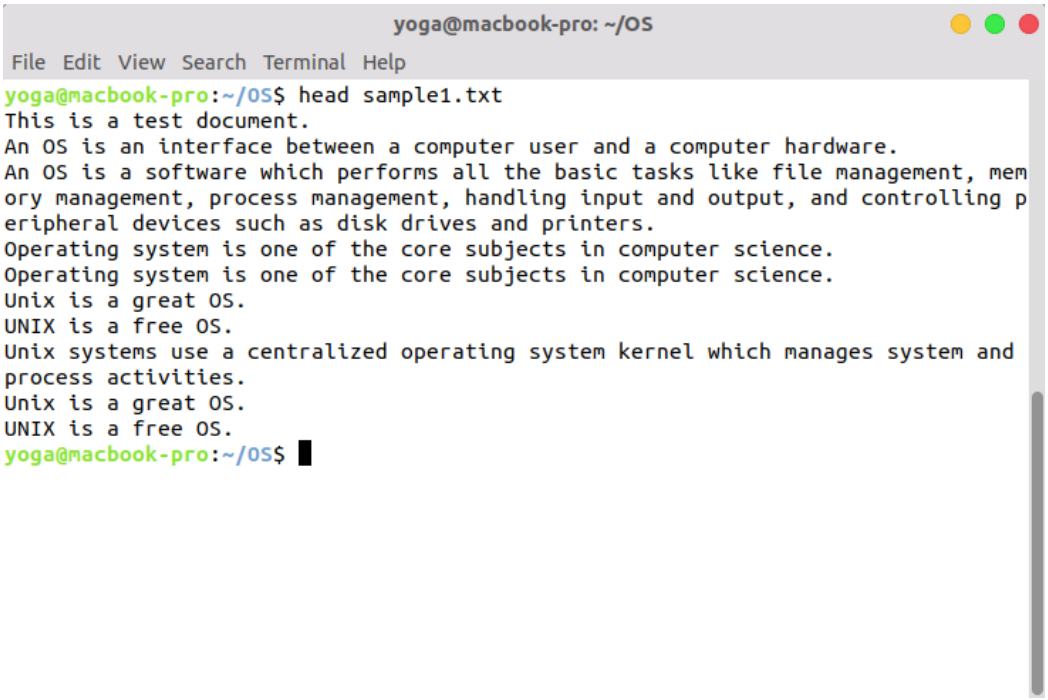
27)Head command:

Description:

It is used to print top N number of data of the given input

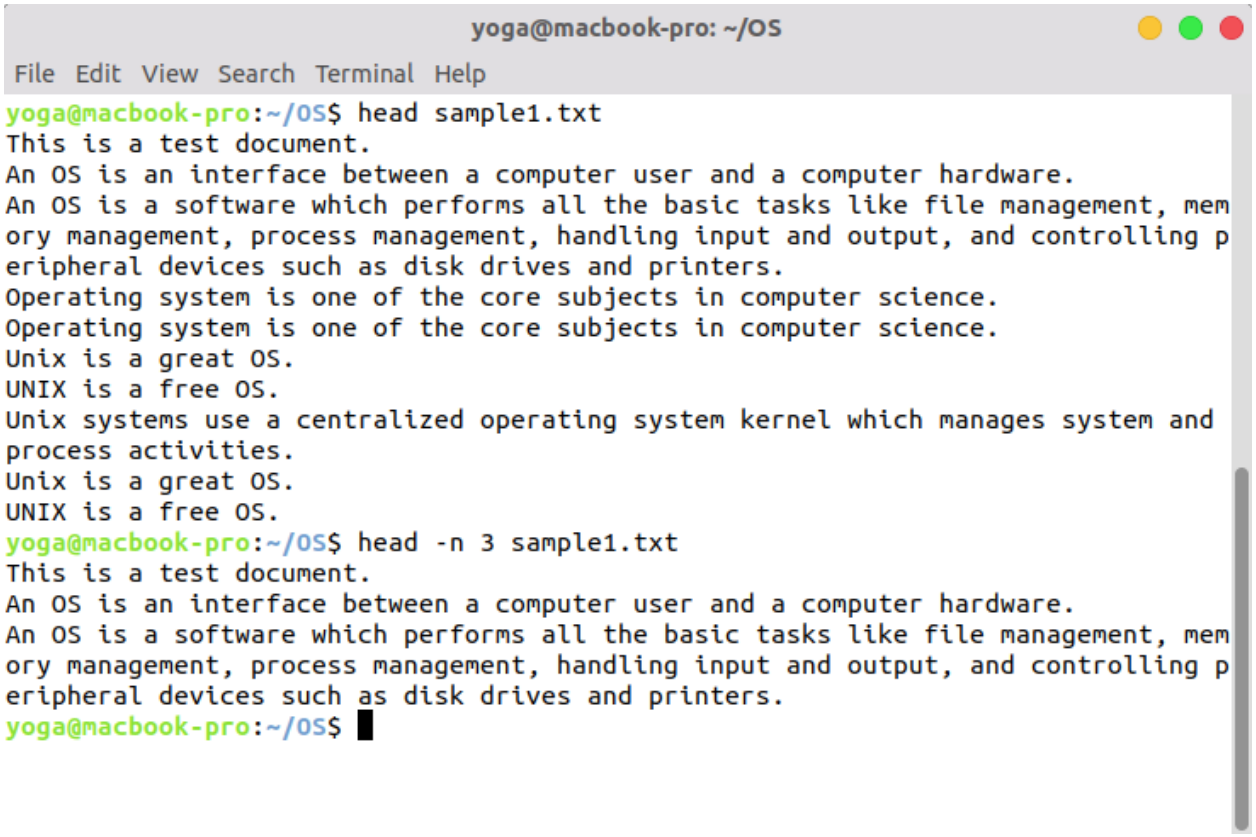
Syntax:

head [OPTION]..[FILE]...

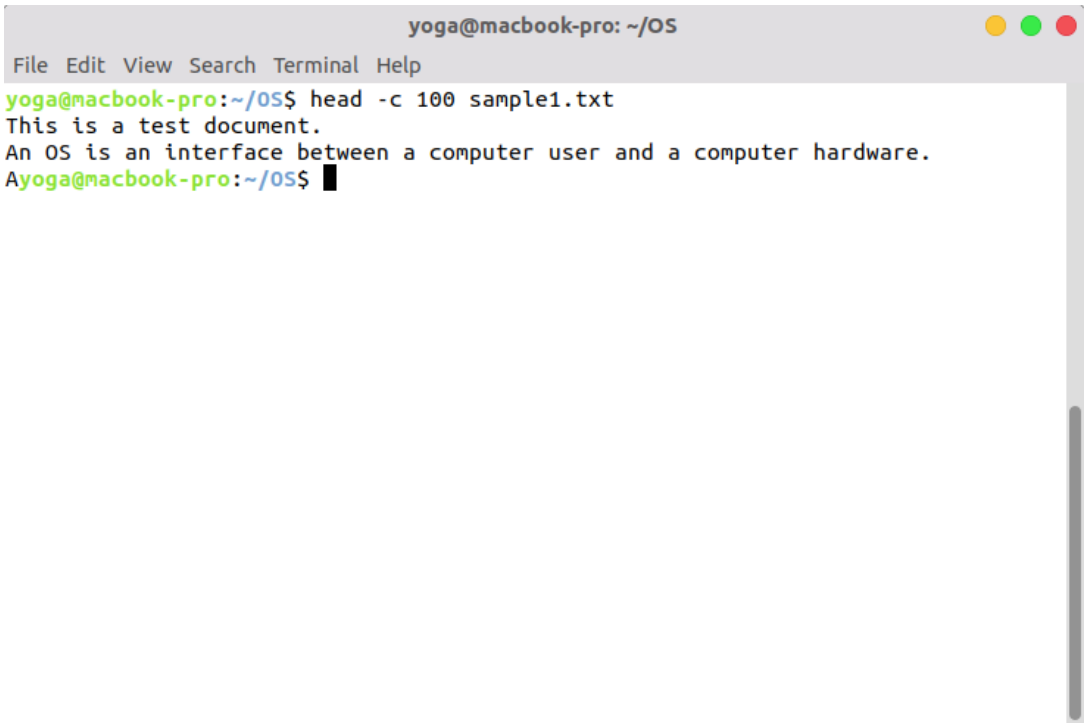


[OPTION]

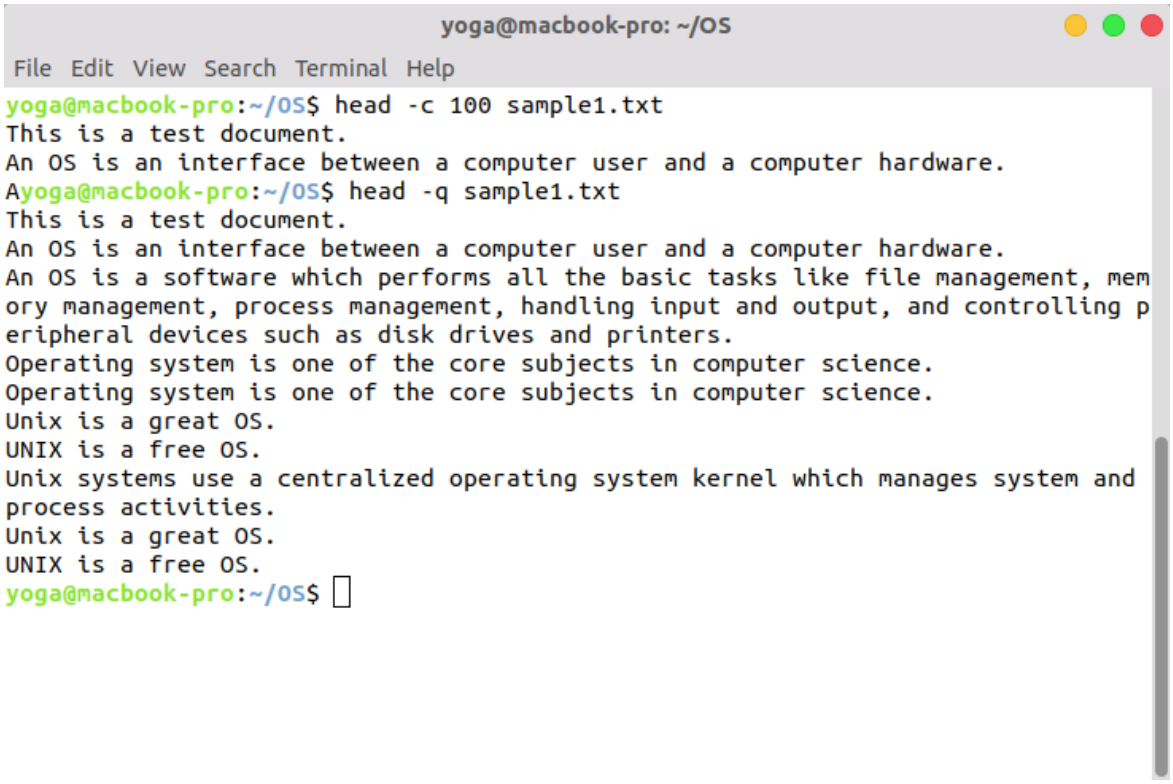
- -n num:Prints the first ‘num’ lines of a file.Num is a mandatory argument .



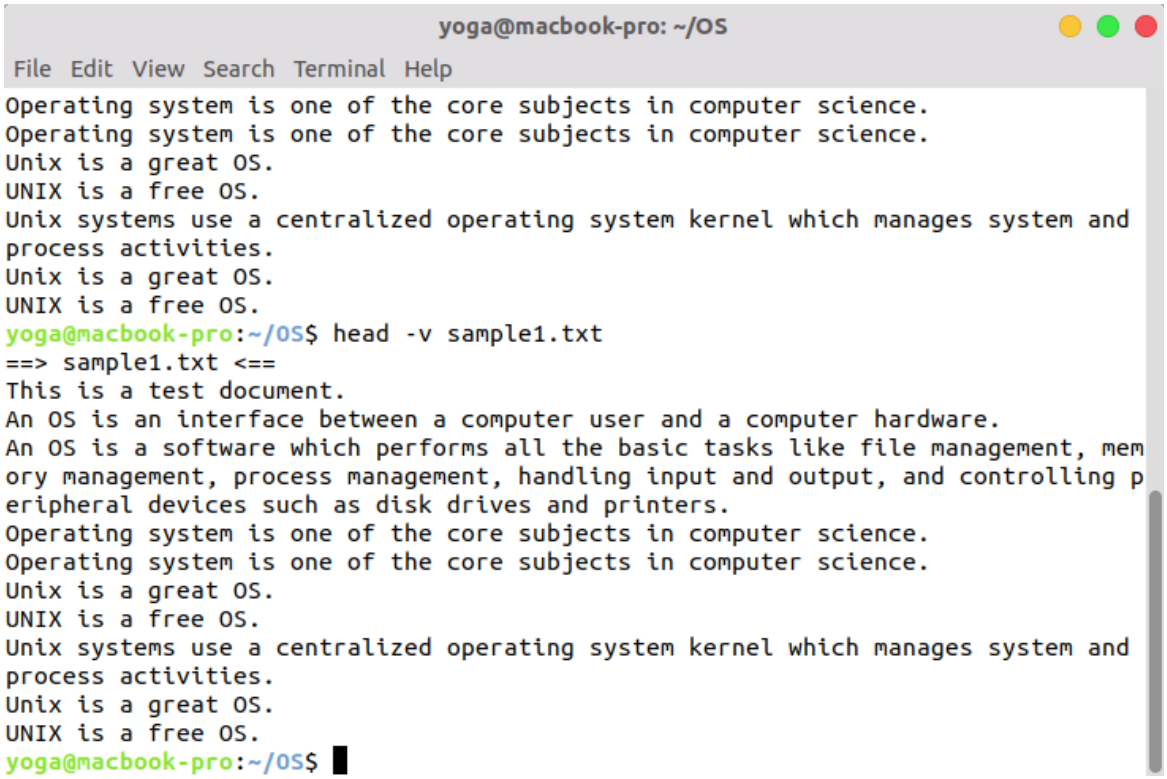
- -c num:Prints the first ‘num’ bytes from the file specified



- -q:Used to print without giving file names as headers



- -v:Used to print output with headers giving file names



- -z:Used to print output with line delimiter as NULL instead of newline

28)Tail command:

Description:

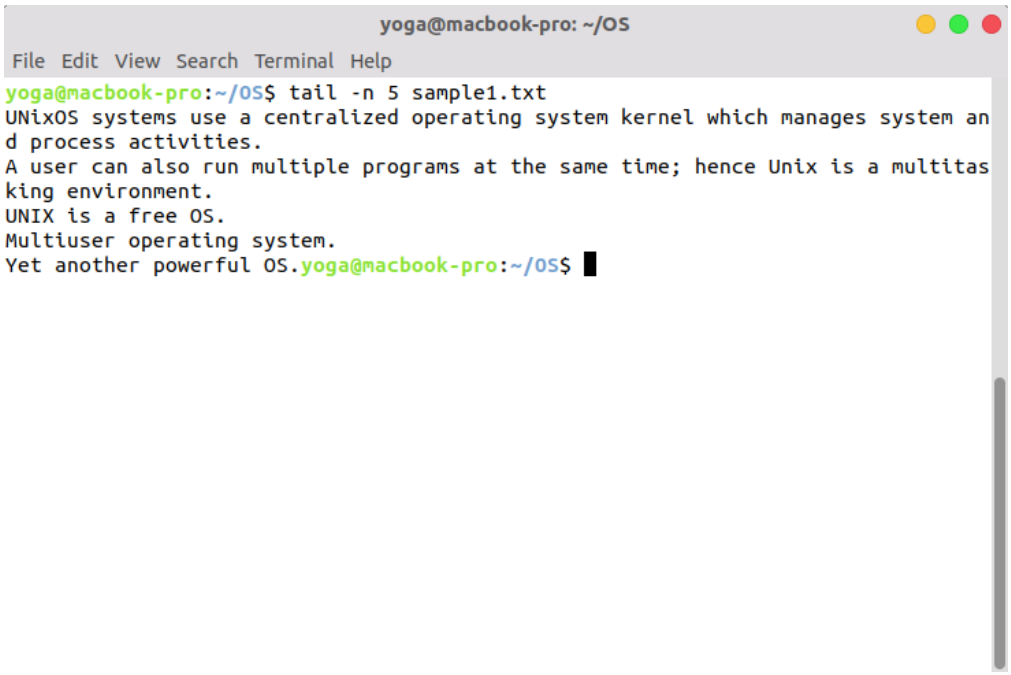
It is used to print last N number of data of the given input

Syntax:

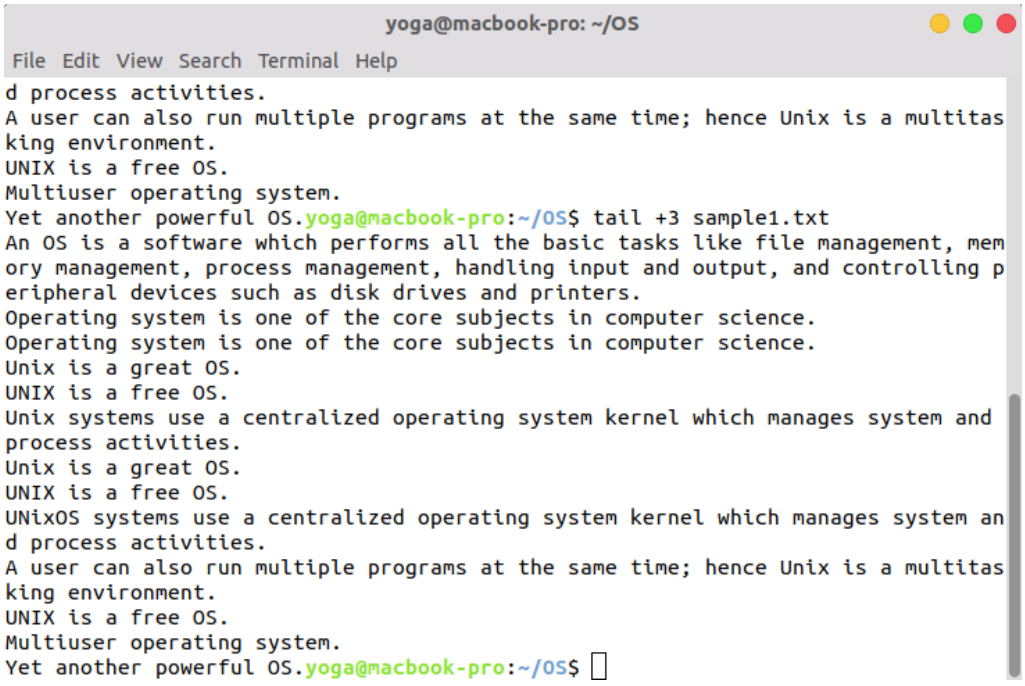
tail [OPTION]..[FILE]...

[OPTION]

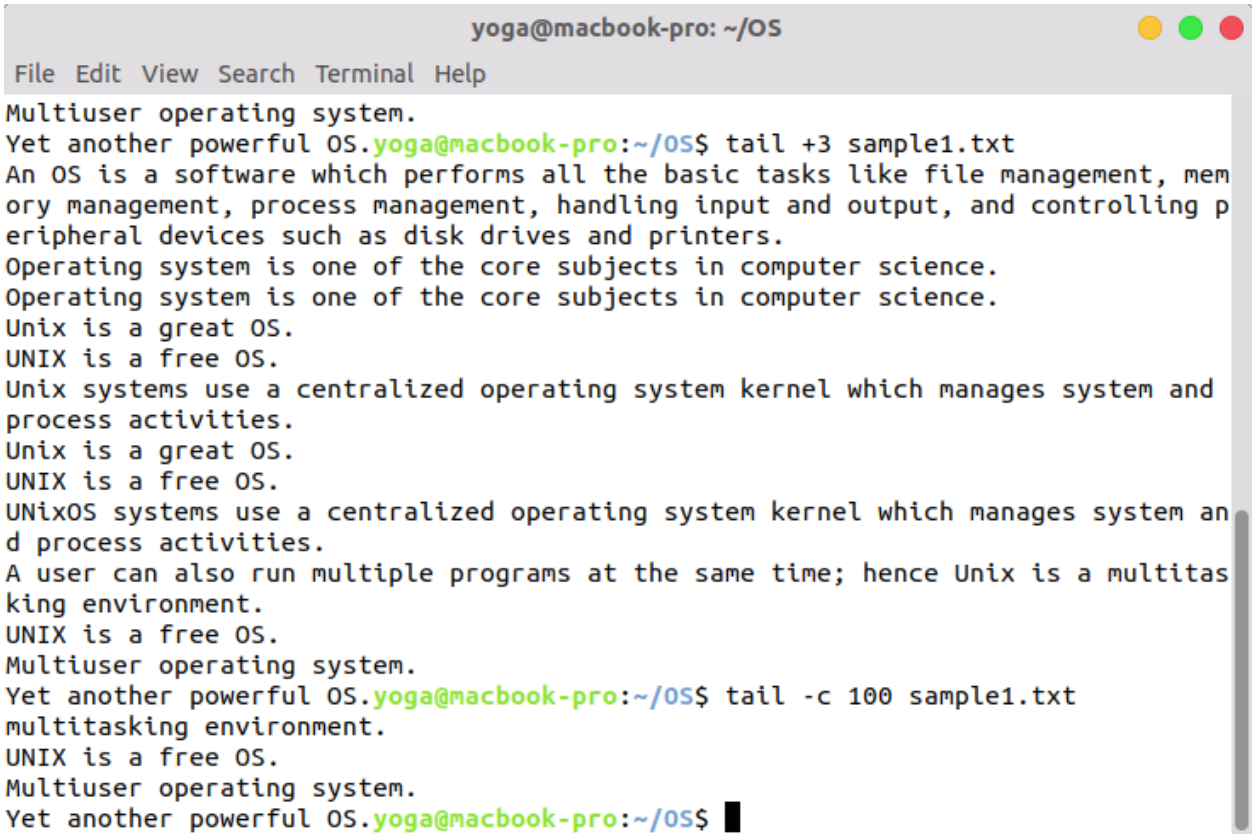
- -n num:Prints the last 'num' lines of a file.Num is a mandatory argument .



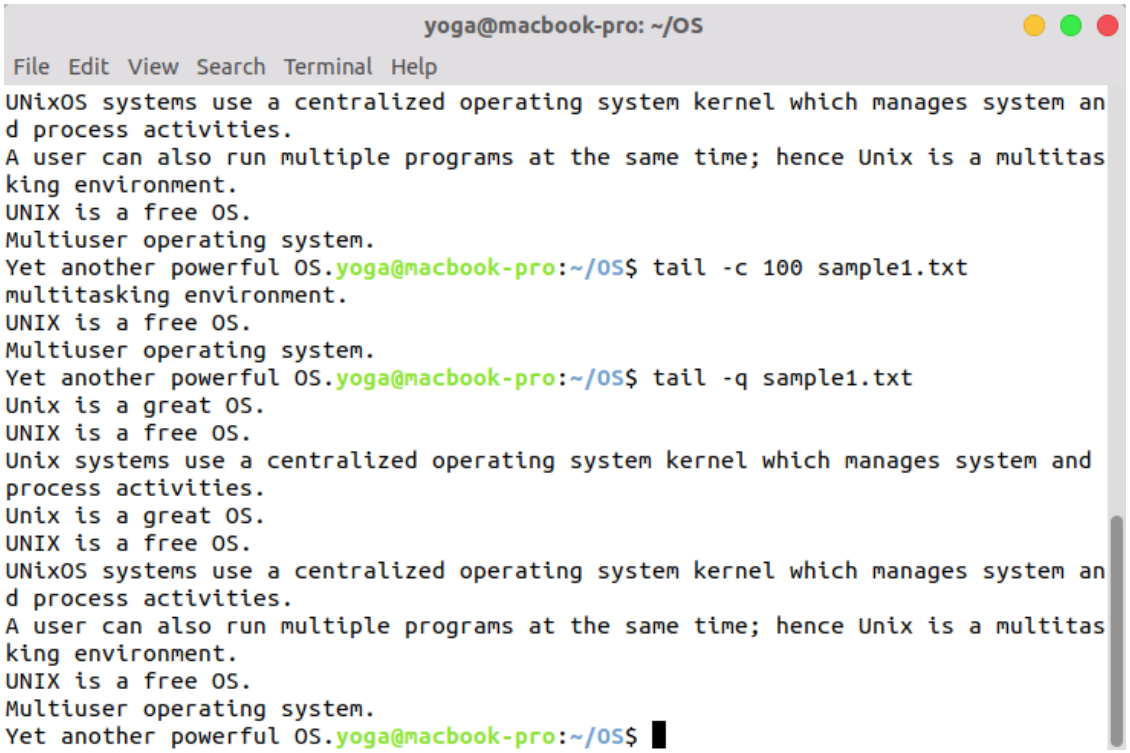
- +num:Prints the range of lines from num to end of the file



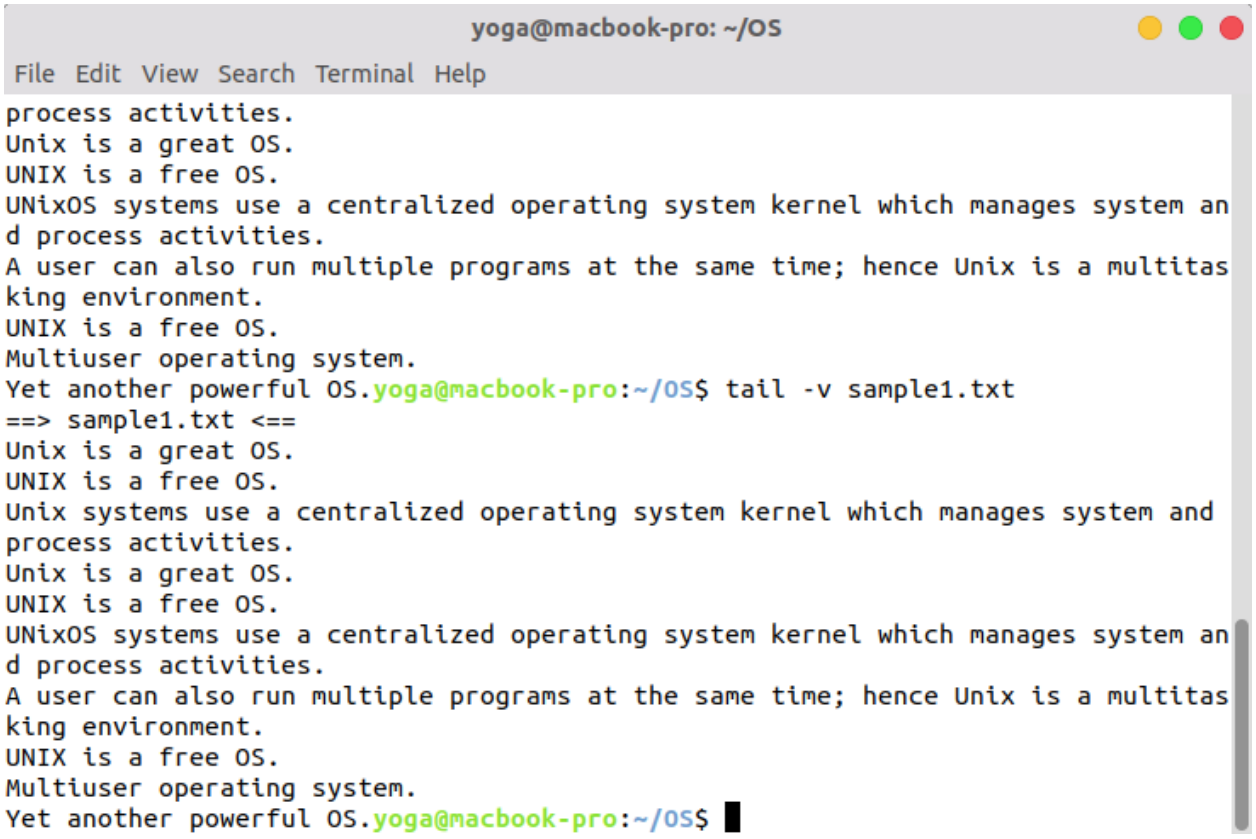
- -c num:Prints the last ‘num’ bytes from the file specified(Exception if num is given as ‘+num’ like +26 then it skips num bytes from starting of the file and prints the rest)



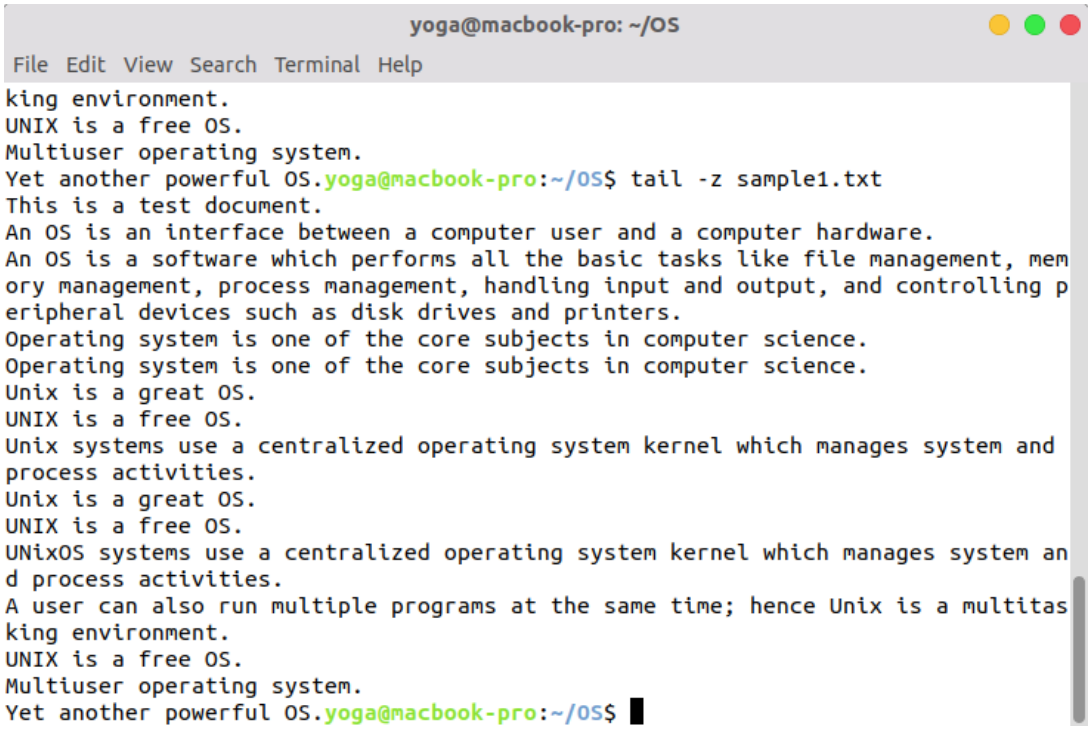
- -q:Used to print without giving file names as headers



- -v:Used to print output with headers giving file names



- -z:Used to print output with line delimiter as NULL instead of newline



- --retry :keep trying to open a file if it is inaccessible

- -f:It is used to display the last ten lines of the log file written by many Unix program.Use interrupt key(ctrl+c) to abort

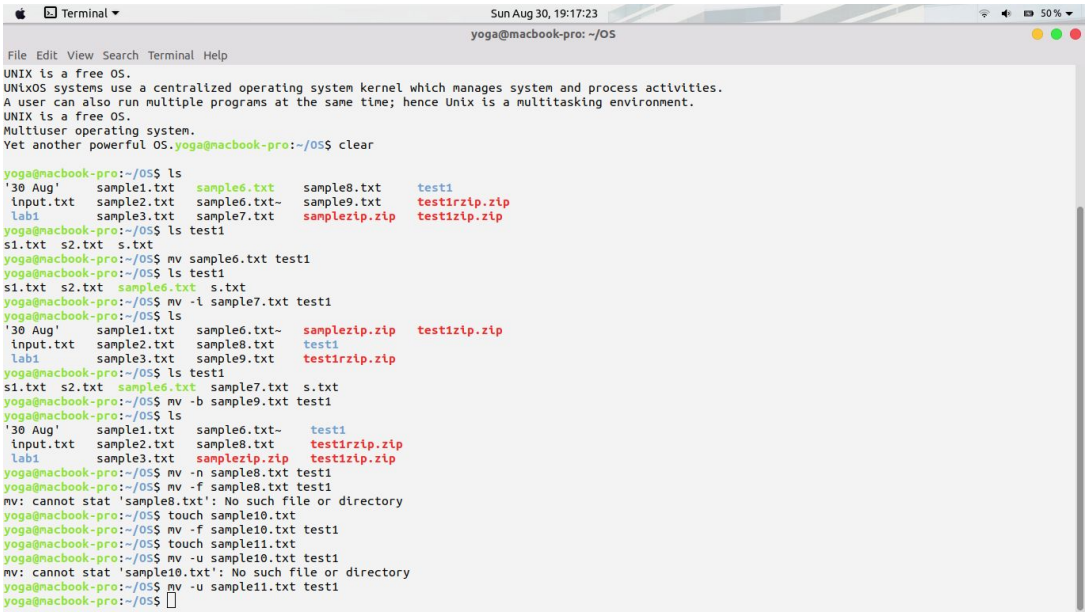
29)mv command:

Description:

It is used to move one or more files or directories from one directory to another in file system
It can also be used to rename a file or folder

Syntax:

- mv [OPTION] source destination //Overwrites the destination file if it exists ,else the destination file will be created
- [OPTION]:
- -i (interactive):With this option enabled ,it warns the user before moving the files and only when
- 'y' is entered the process is executed.(Does not work if file does not exist)
- -b(backup):With this option enabled ,it creates a backup file of the destination file in the same folder with different format(previous format with '~' character appended to it)
- -n:This option prevents an existing file from being overwritten
- -f(force):This option has to be enabled if the user does not have write permissions for the destination file .Thereby when enabled ,the destination
- file is forcefully overwritten after confirmation(Overrides minor protection)
- -T:Treat Destination as a normal file
- -u:Move only when the source file is newer than the destination file or when the destination file is missing



30)passwd command:

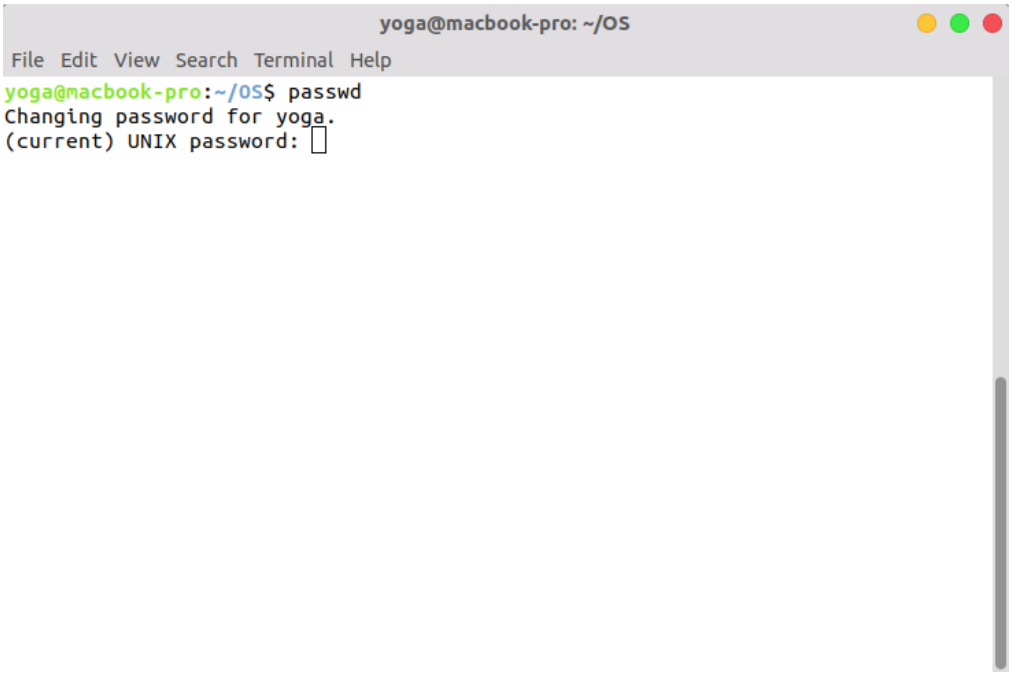
Description:

This Command is used to change the user account passwords.Only the root user has the privilege to change the password for any user on the system,while a normal user can change the password for their account.

Syntax:

passwd [OPTION] [username]

sudo passwd root //used to invoke root privileges



[OPTION]:

- -d,-delete:This option deletes the user password and makes the account password-less
- -e,-expire:This option immediately expires the account password and forces the user to change password on their next login
- -i,--inactive INACTIVE_DAYS:This option will disable the user's account if the user has had an expired password for "INACTIVE" days.
- -n,--mindays MIN_DAYS:Change the minimum no of days for which user can't change the password
- -q,-quiet:This option is used for quiet mode
- -S,-status:Shows the password status of the user
- -u:unlocks the password for the account
- -w,-warndays WARN_DAYS:Used to change the number of days before the password is set to expire and to display the warning for expiring password
- -x,-maxdays MAX_DAYS:Sets the maximum no of days for which the password will be valid.

31)Tar command:

Description:

It is used to create compressed or uncompressed Archive files and also maintain and modify them

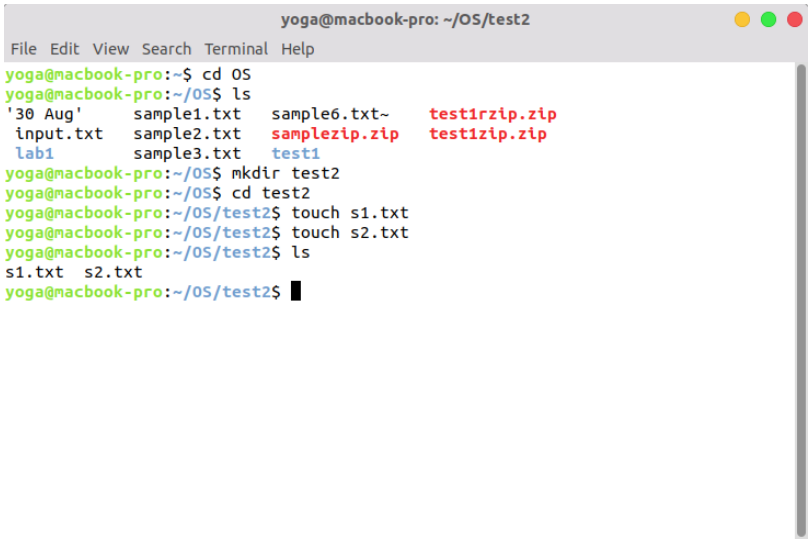
Syntax:

tar [OPTIONS] [archive-filename] [FILES_LIST]

//in files list * can be used for example *.txt adds all .txt files into tar archive

[OPTION]:

- -f : Used to create archive with given filename
- -v : Displays Verbose Information
- -A : Concatenates the archive files
- -z : This option enables tar file is created using gzip
- -j : filter archive tar file using tbzip
- -W : Verify a archive file
- -cvf:Used to Creates Archive
- -xvf:Used to extract the archive
- -t :Used to display or list files in archived file
- -u/-rf : This option archives and adds to an existing archive file



32)uname command:

Description: This command is used to display the information about the system

Syntax:

uname [OPTION]

[OPTION]:

- -a:It prints all the system Information(Kernel name, network node hostname, kernel release date, kernel version, machine hardware name, hardware platform, operating system)
- -s:It prints the kernel name
- -n:It prints the hostname of the network node
- -r:Prints the kernel release date
- -v:Prints the version of the current kernel
- -m:Prints the machine hardware name
- -p:Prints the type of the processor
- -i:Prints the platform of the hardware
- -o:Prints the name of the operating system

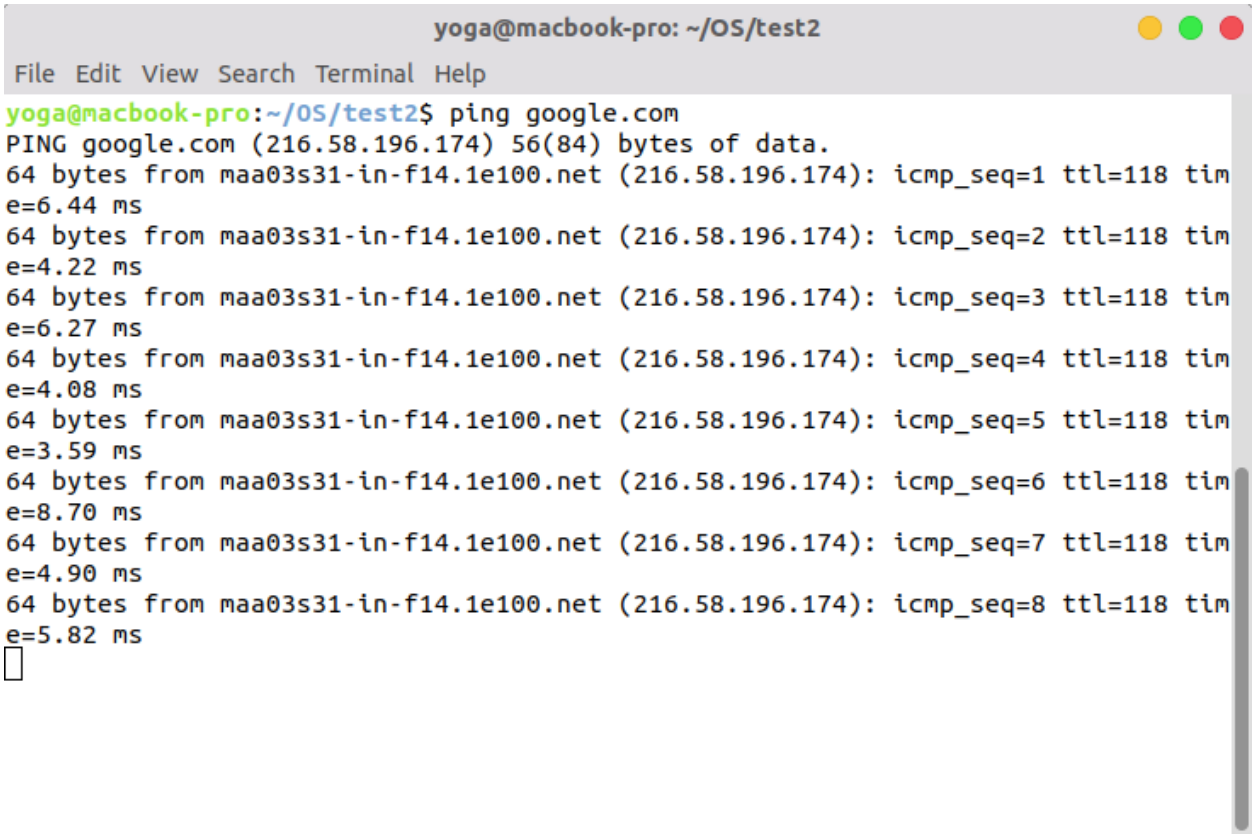
33)Ping command:

Description:

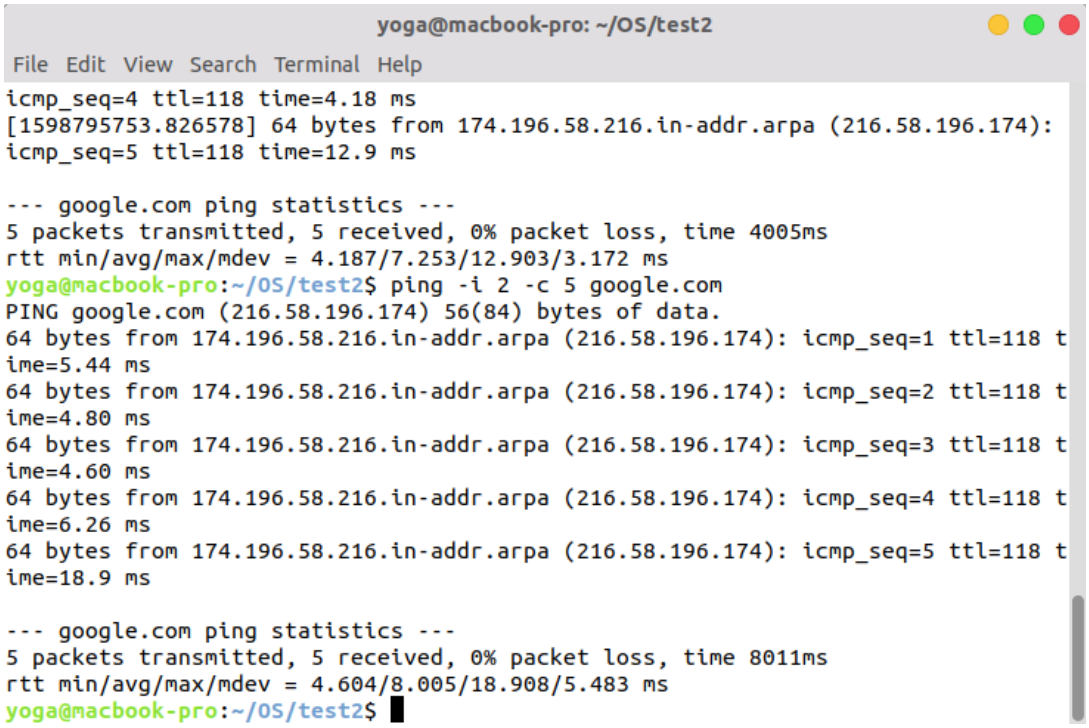
It is used to check the network connectivity between host and server/host.This command takes as input the IP address or the URL.

Syntax:

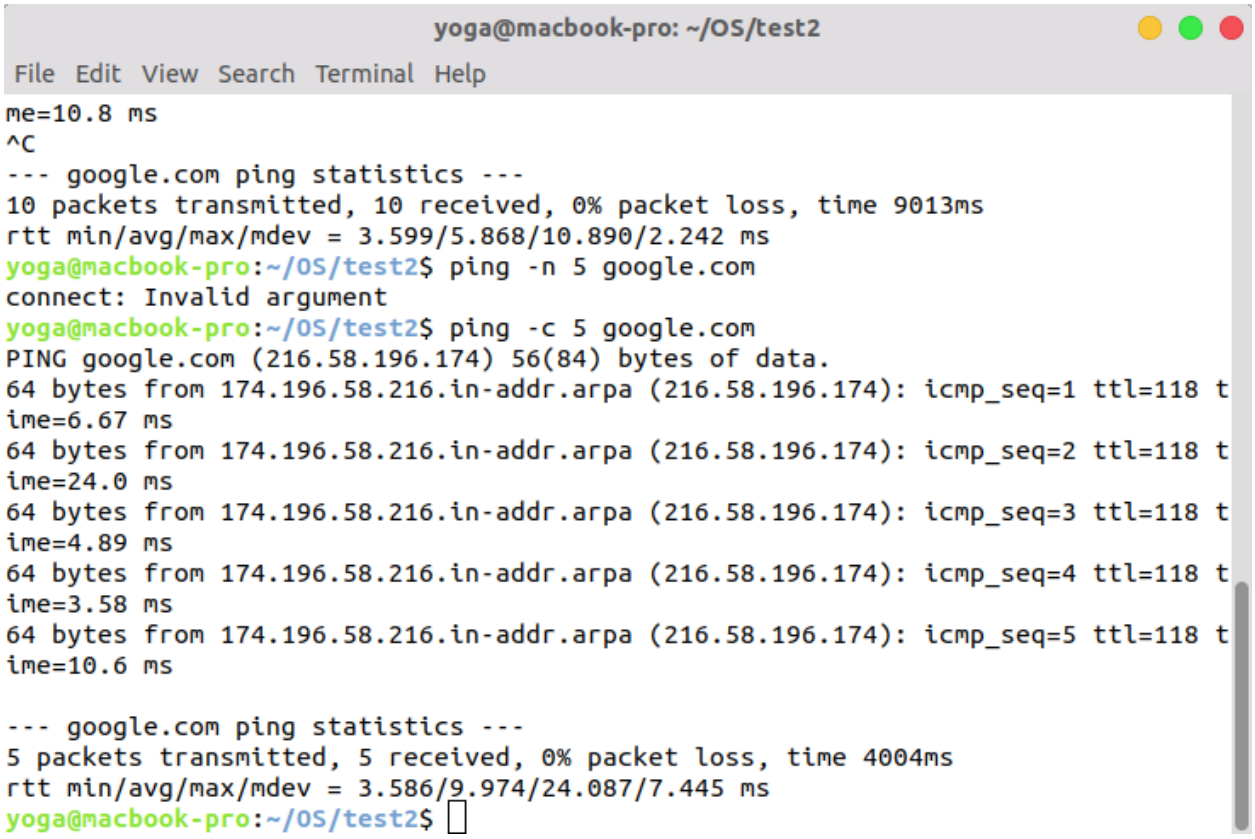
- ping url/IP Address



- ping -c n url/IP Address //To ping n times

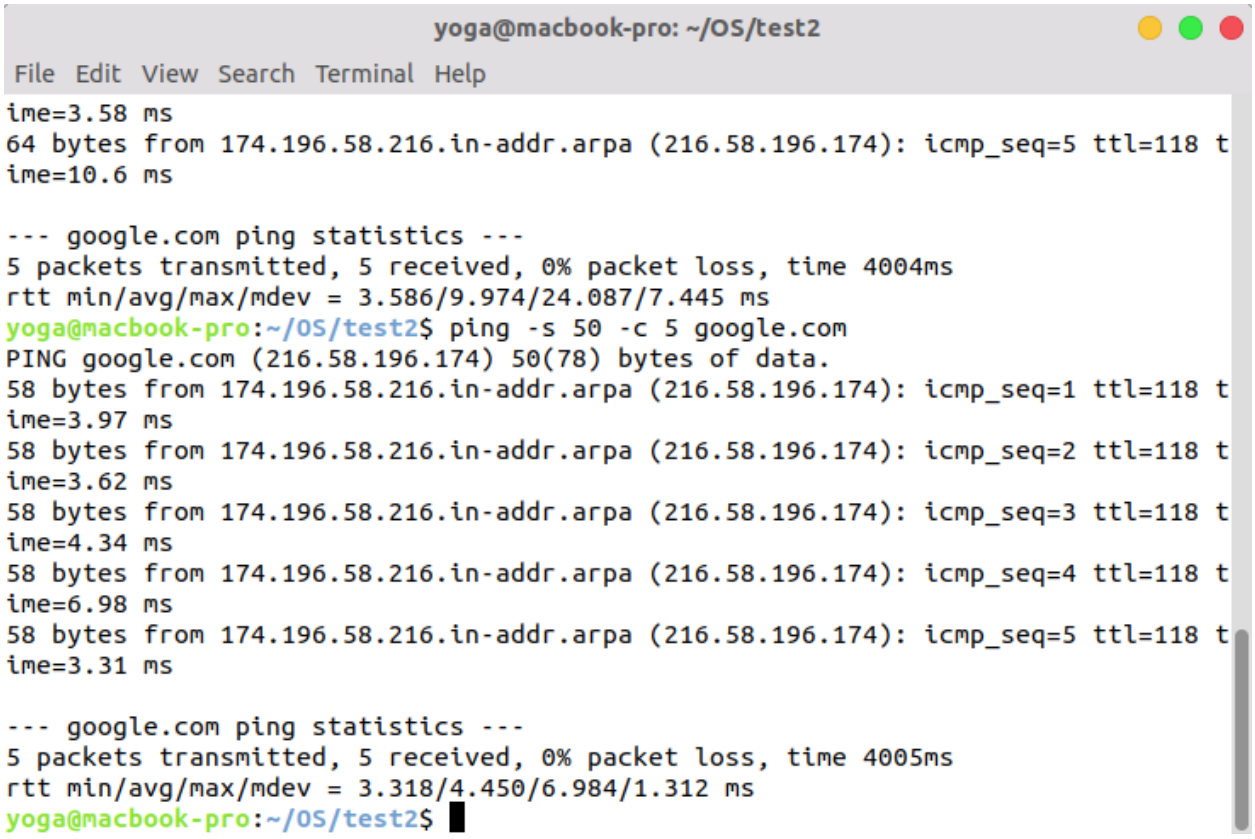


- ping -s default sized packets sent to light and heavy packet by using -s option

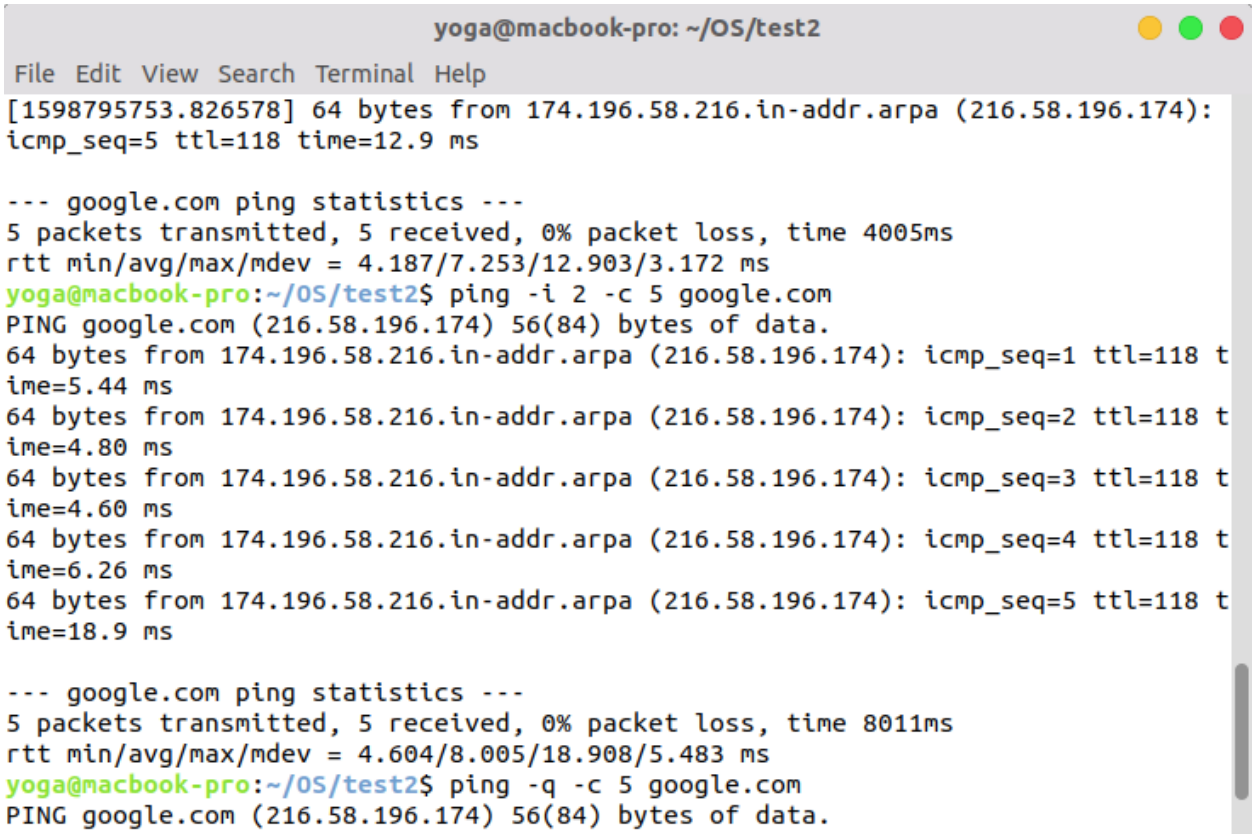


[OPTION]:

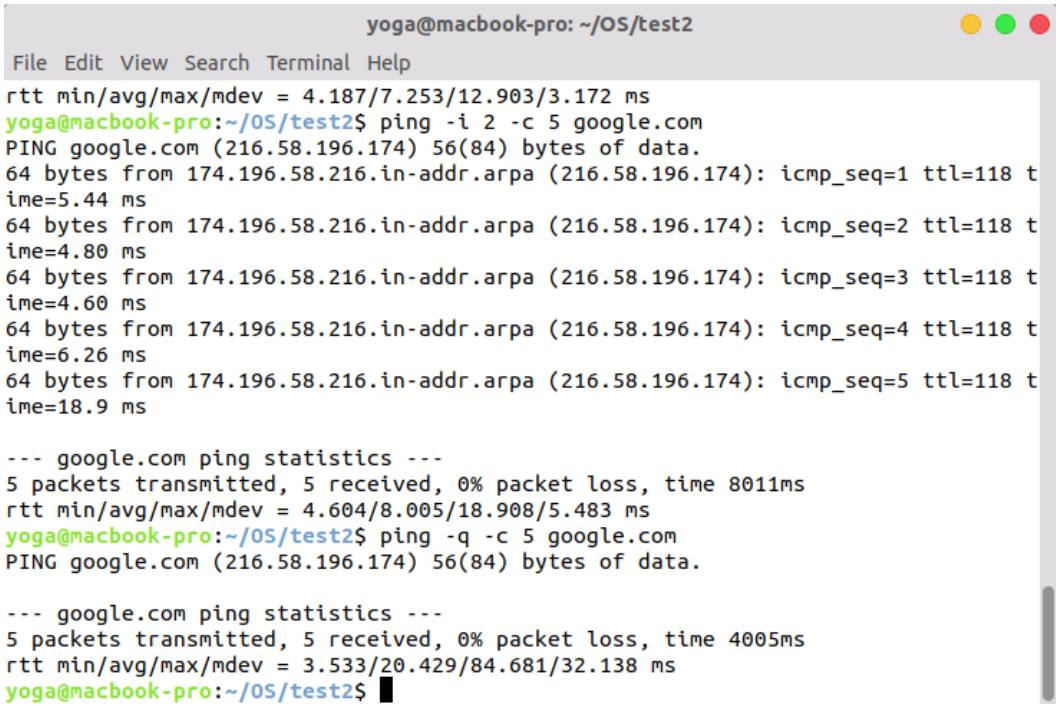
- -4:To use IPv4
- -6:To use IPv6
- -a :For audible ping
- -b:Allows pinging a broadcast address
- -c count:Stops after sending “count” ECHO_REQUEST packets
- -D :print timestamp before each line


yoga@macbook-pro: ~/OS/test2
File Edit View Search Terminal Help
ime=3.58 ms
64 bytes from 174.196.58.216.in-addr.arpa (216.58.196.174): icmp_seq=5 ttl=118 t
ime=10.6 ms
--- google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4004ms
rtt min/avg/max/mdev = 3.586/9.974/24.087/7.445 ms
yoga@macbook-pro:~/OS/test2$ ping -s 50 -c 5 google.com
PING google.com (216.58.196.174) 50(78) bytes of data.
58 bytes from 174.196.58.216.in-addr.arpa (216.58.196.174): icmp_seq=1 ttl=118 t
ime=3.97 ms
58 bytes from 174.196.58.216.in-addr.arpa (216.58.196.174): icmp_seq=2 ttl=118 t
ime=3.62 ms
58 bytes from 174.196.58.216.in-addr.arpa (216.58.196.174): icmp_seq=3 ttl=118 t
ime=4.34 ms
58 bytes from 174.196.58.216.in-addr.arpa (216.58.196.174): icmp_seq=4 ttl=118 t
ime=6.98 ms
58 bytes from 174.196.58.216.in-addr.arpa (216.58.196.174): icmp_seq=5 ttl=118 t
ime=3.31 ms
--- google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 3.318/4.450/6.984/1.312 ms
yoga@macbook-pro:~/OS/test2$

- -i interval:Waits for “interval” seconds before sending each packet



- -q:Display summary lines at startup time and when finished



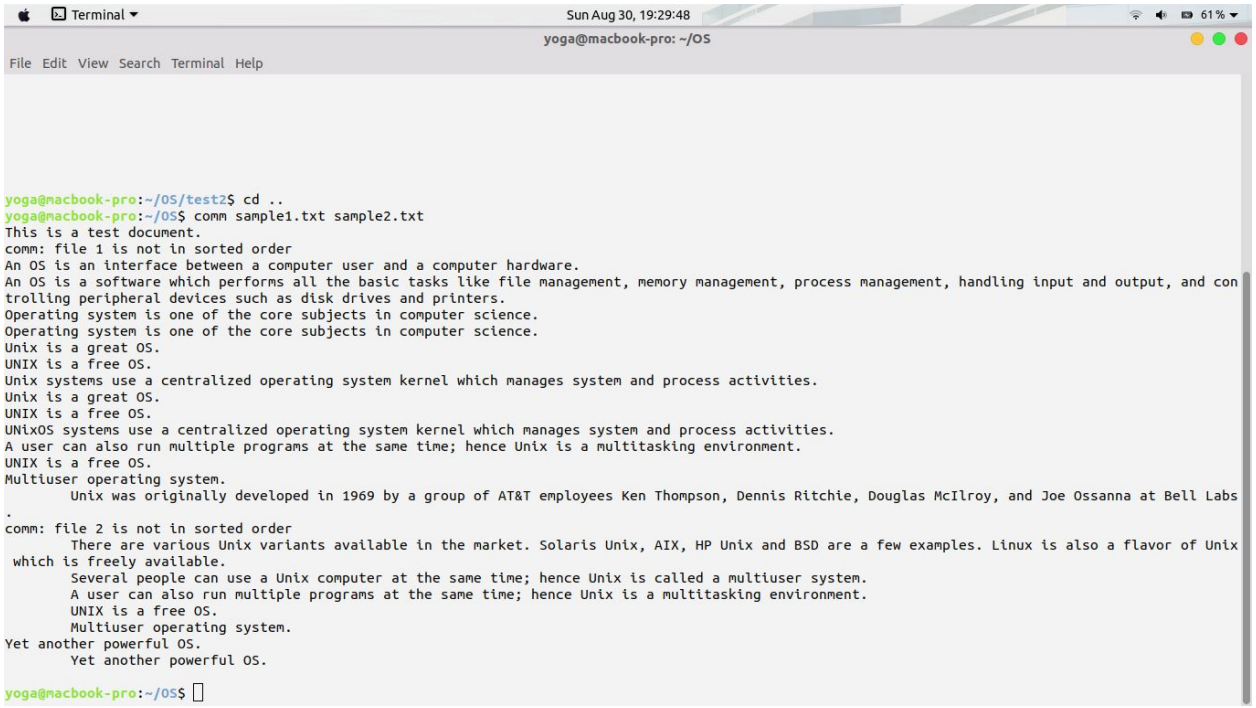
34)comm command:

Description:

Comm compare two sorted files line by line and write to standard output

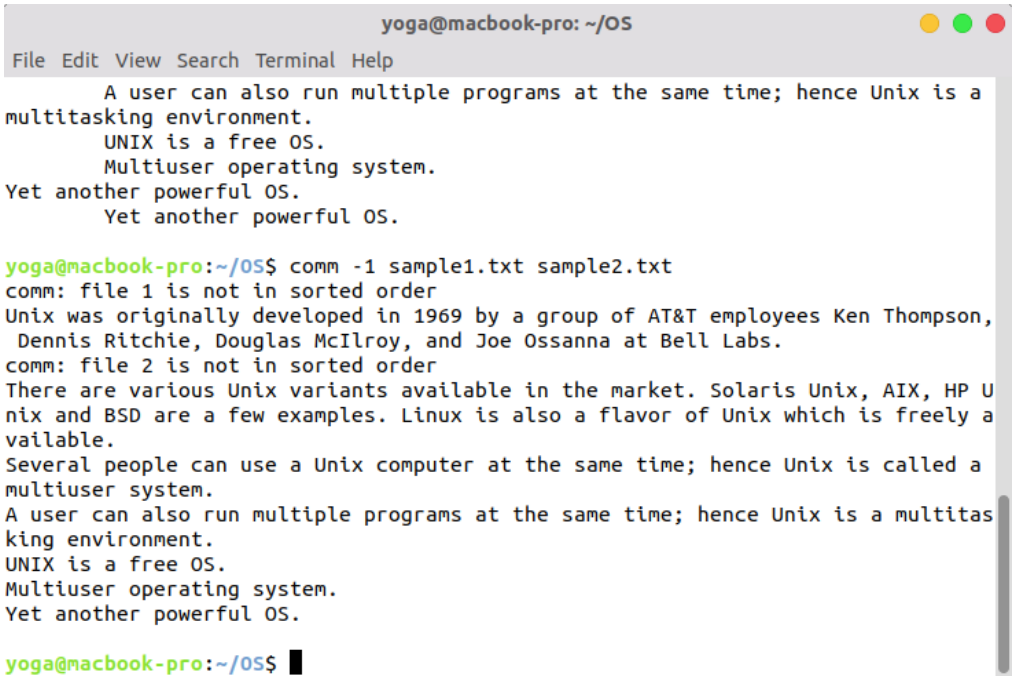
Syntax:

comm [OPTION] FILE1 FILE2//can be used without option given



[OPTION]:

- -1:Suppress Lines unique to first file



- -2:Suppress Lines unique to second file

```
yoga@macbook-pro: ~/OS
File  Edit  View  Search  Terminal  Help
yoga@macbook-pro:~/OS$ comm -2 sample1.txt sample2.txt
This is a test document.
comm: file 1 is not in sorted order
An OS is an interface between a computer user and a computer hardware.
An OS is a software which performs all the basic tasks like file management, mem
ory management, process management, handling input and output, and controlling p
eripheral devices such as disk drives and printers.
Operating system is one of the core subjects in computer science.
Operating system is one of the core subjects in computer science.
Unix is a great OS.
UNIX is a free OS.
Unix systems use a centralized operating system kernel which manages system and
process activities.
Unix is a great OS.
UNIX is a free OS.
UNixOS systems use a centralized operating system kernel which manages system an
d process activities.
A user can also run multiple programs at the same time; hence Unix is a multitas
king environment.
UNIX is a free OS.
Multiuser operating system.
comm: file 2 is not in sorted order
Yet another powerful OS.
yoga@macbook-pro:~/OS$
```

- -3:Suppress Lines unique to third file

```
yoga@macbook-pro: ~/OS
File  Edit  View  Search  Terminal  Help
Unix is a great OS.
UNIX is a free OS.
UNixOS systems use a centralized operating system kernel which manages system and process activities.
A user can also run multiple programs at the same time; hence Unix is a multitasking environment.
UNIX is a free OS.
Multiuser operating system.
comm: file 2 is not in sorted order
Yet another powerful OS.
yoga@macbook-pro:~/OS$ comm -3 sample1.txt sample2.txt
This is a test document.
comm: file 1 is not in sorted order
An OS is an interface between a computer user and a computer hardware.
An OS is a software which performs all the basic tasks like file management, memory management, process management, handling input and output, and con
trolling peripheral devices such as disk drives and printers.
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UNixOS systems use a centralized operating system kernel which manages system and process activities.
A user can also run multiple programs at the same time; hence Unix is a multitasking environment.
UNIX is a free OS.
Multiuser operating system.
        Unix was originally developed in 1969 by a group of AT&T employees Ken Thompson, Dennis Ritchie, Douglas McIlroy, and Joe Ossanna at Bell Labs
.
comm: file 2 is not in sorted order
        There are various Unix variants available in the market. Solaris Unix, AIX, HP Unix and BSD are a few examples. Linux is also a flavor of Unix
 which is freely available.
        Several people can use a Unix computer at the same time; hence Unix is called a multiuser system.
        A user can also run multiple programs at the same time; hence Unix is a multitasking environment.
        UNIX is a free OS.
        Multiuser operating system.
Yet another powerful OS.
        Yet another powerful OS.

yoga@macbook-pro:~/OS$
```
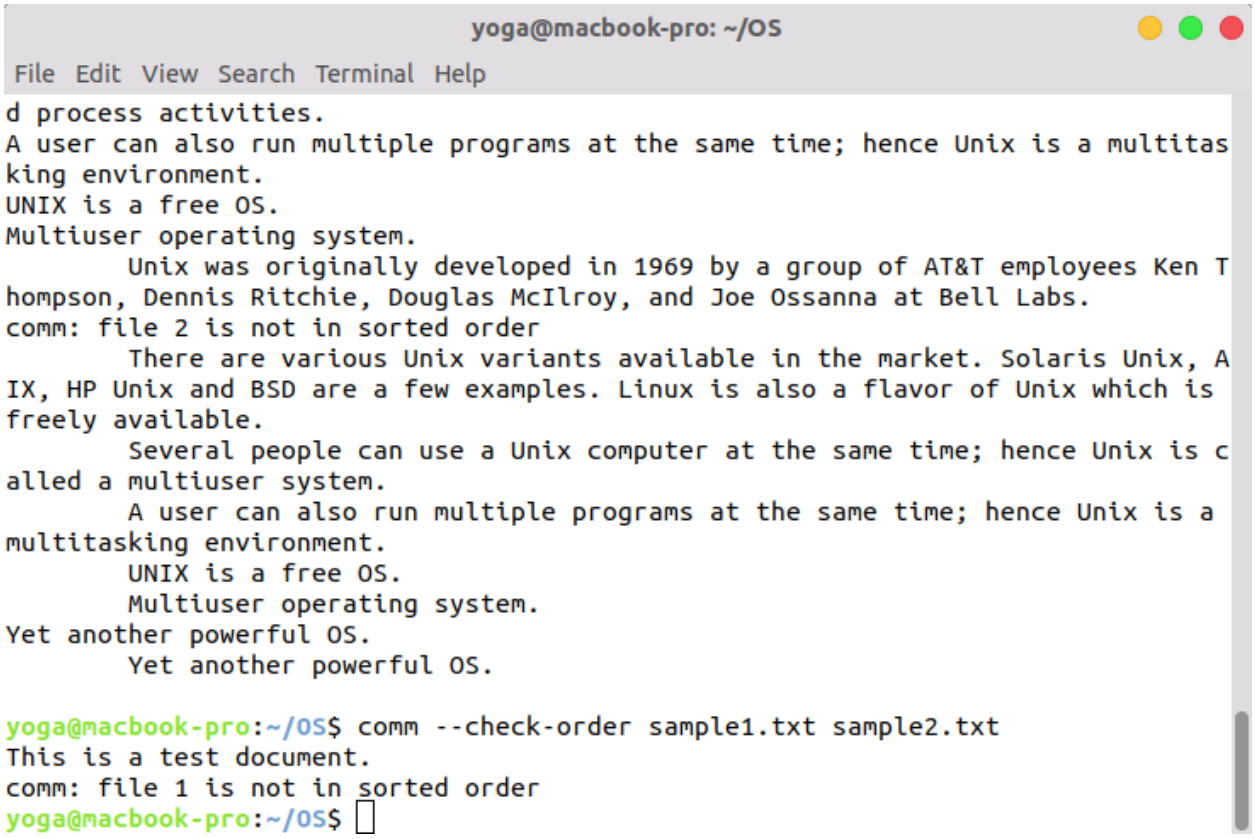
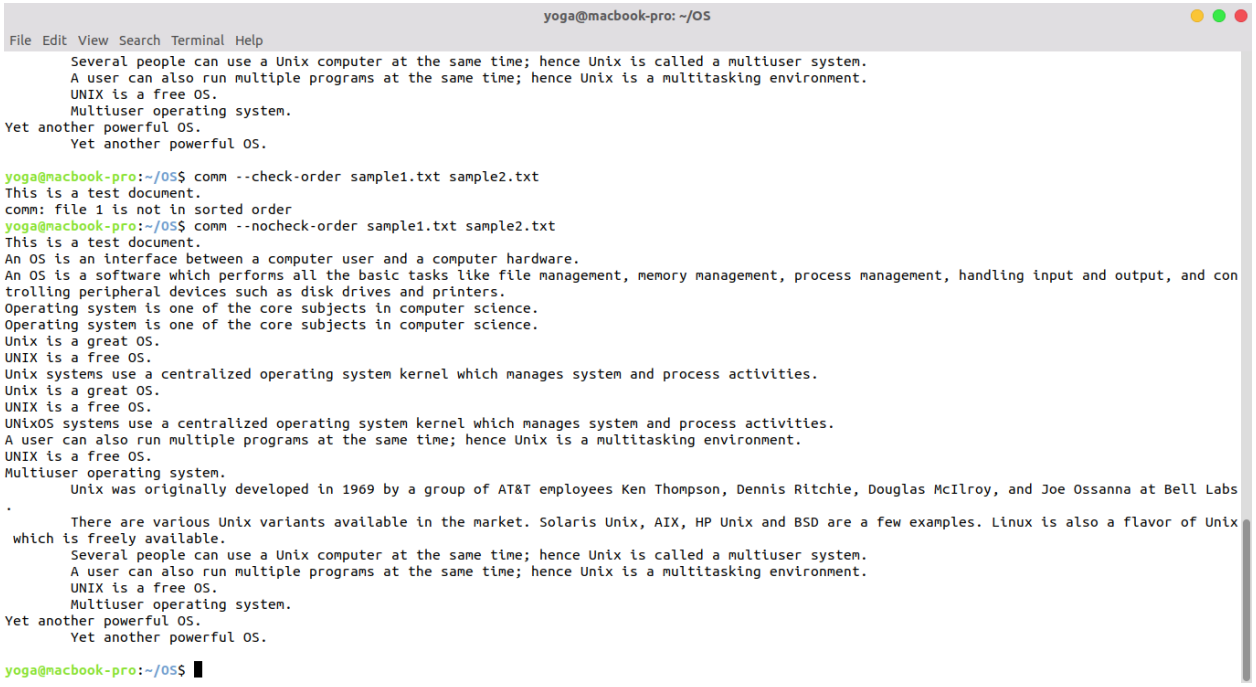
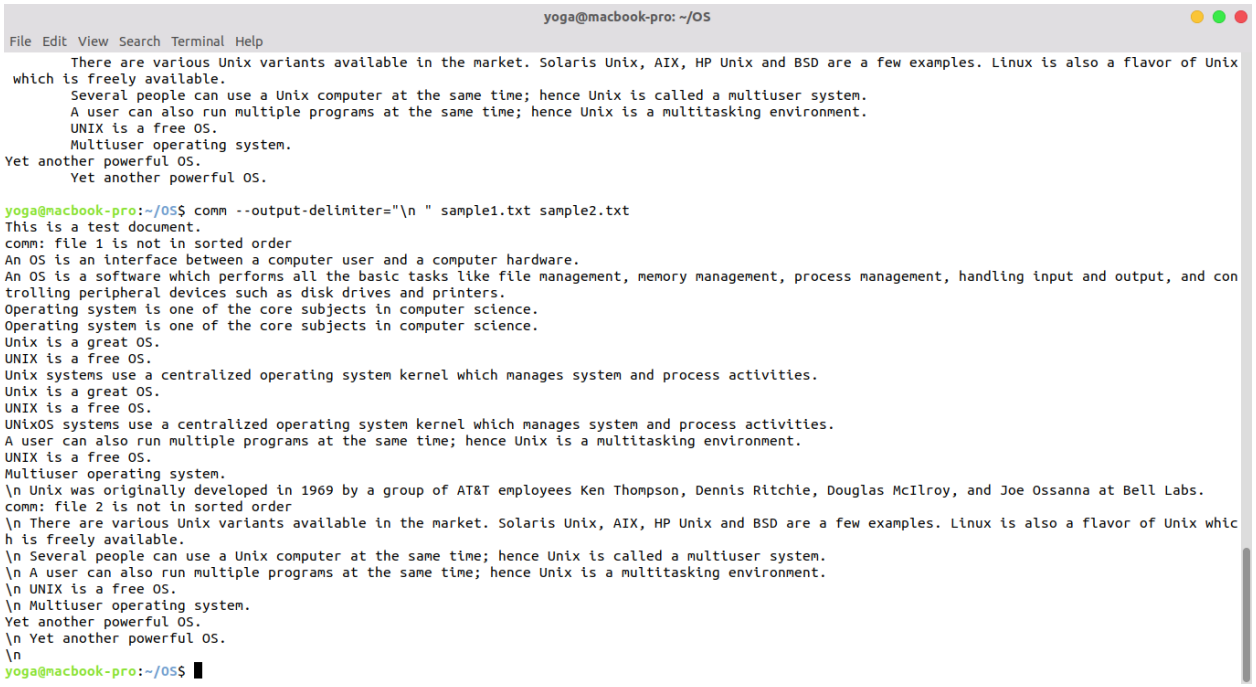

- --check-order :checks whether that the input is correctly sorted, even if all input lines are pairable.



- --nocheck-order :does not check whether the input is correctly sorted or not



- --output-delimiter=STR :separate columns with string “STR”



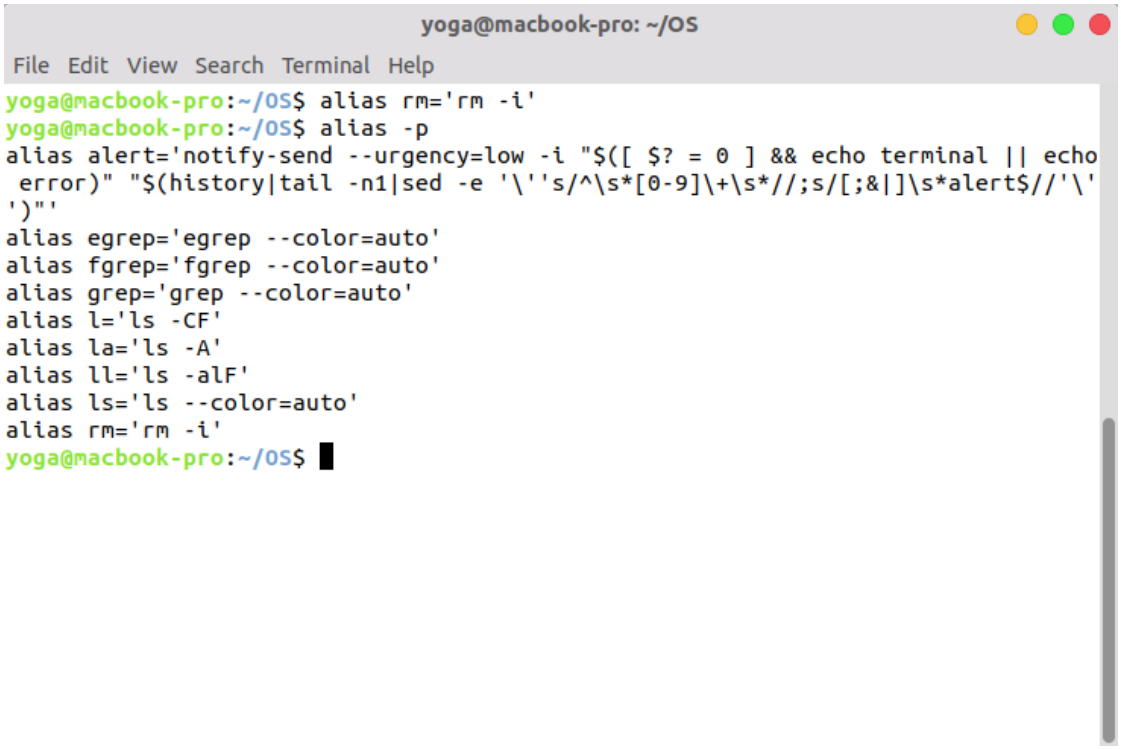
35)alias command:

Description:

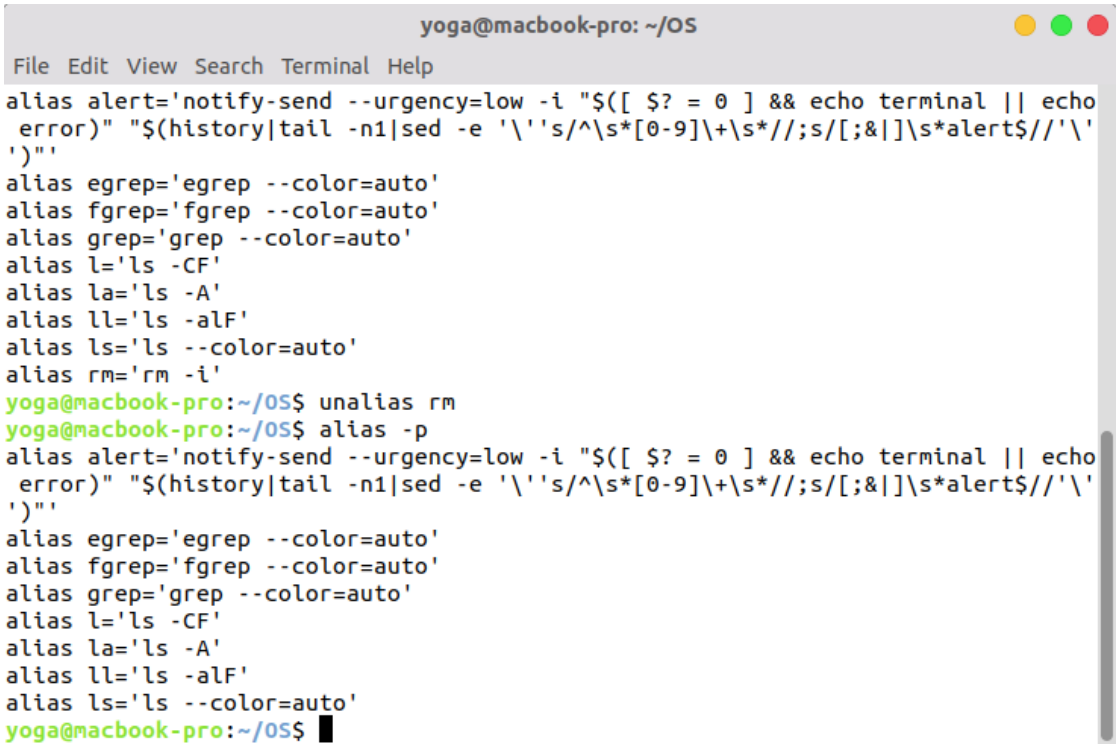
This command instructs the shell to replace one string with another string while executing the commands.

Syntax:

- alias [-p] [name[=value]...]//value can be a string for Ex: alias rm=’rm -i’
- alias name= ”value” //creates an alias



- unalias[alias name] // Removing an alias



[OPTION]

- -p:Displays all defined aliases in reusable format

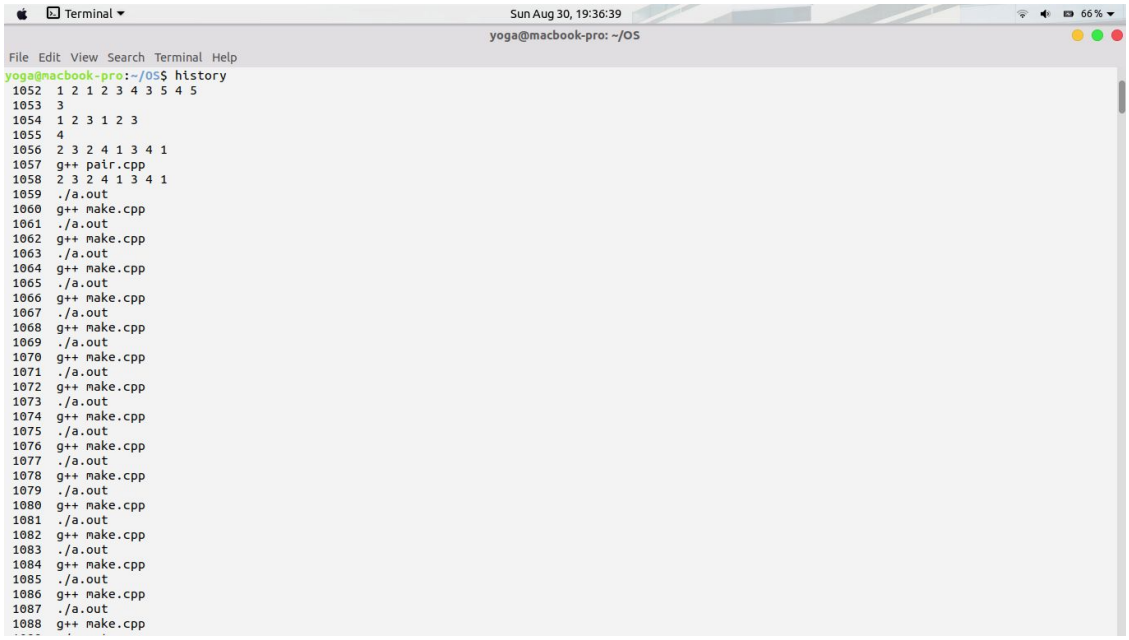
36)history command:

Description:

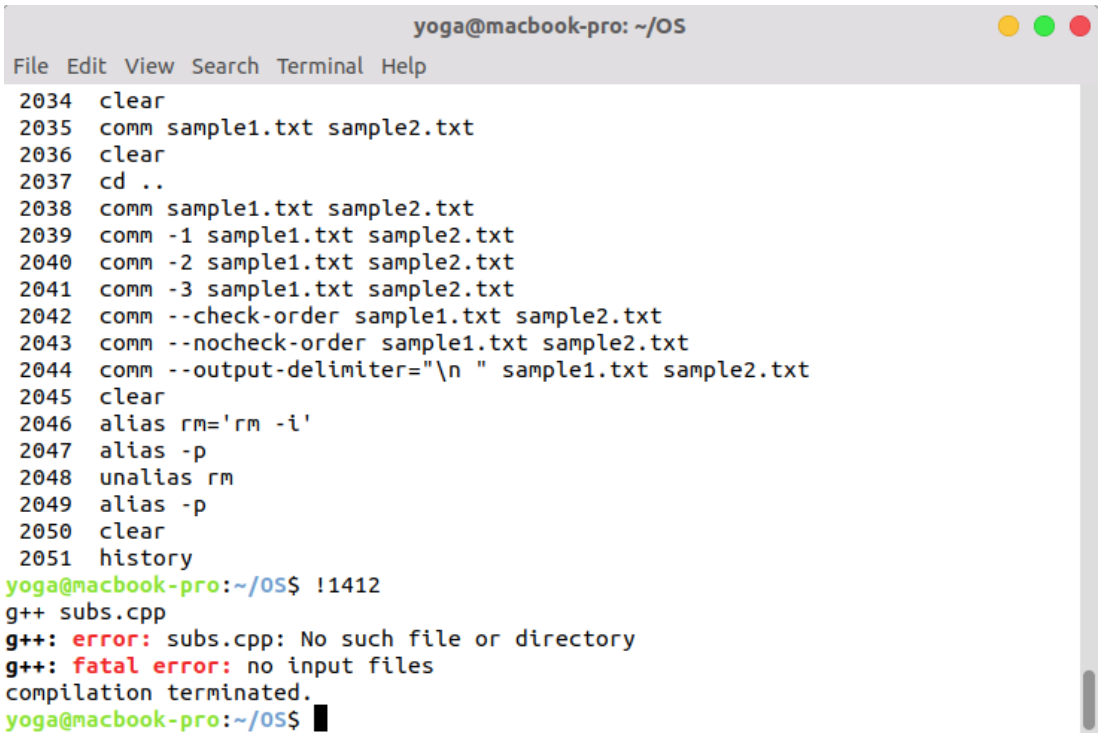
This command is used to view the previously executed command.

Syntax:

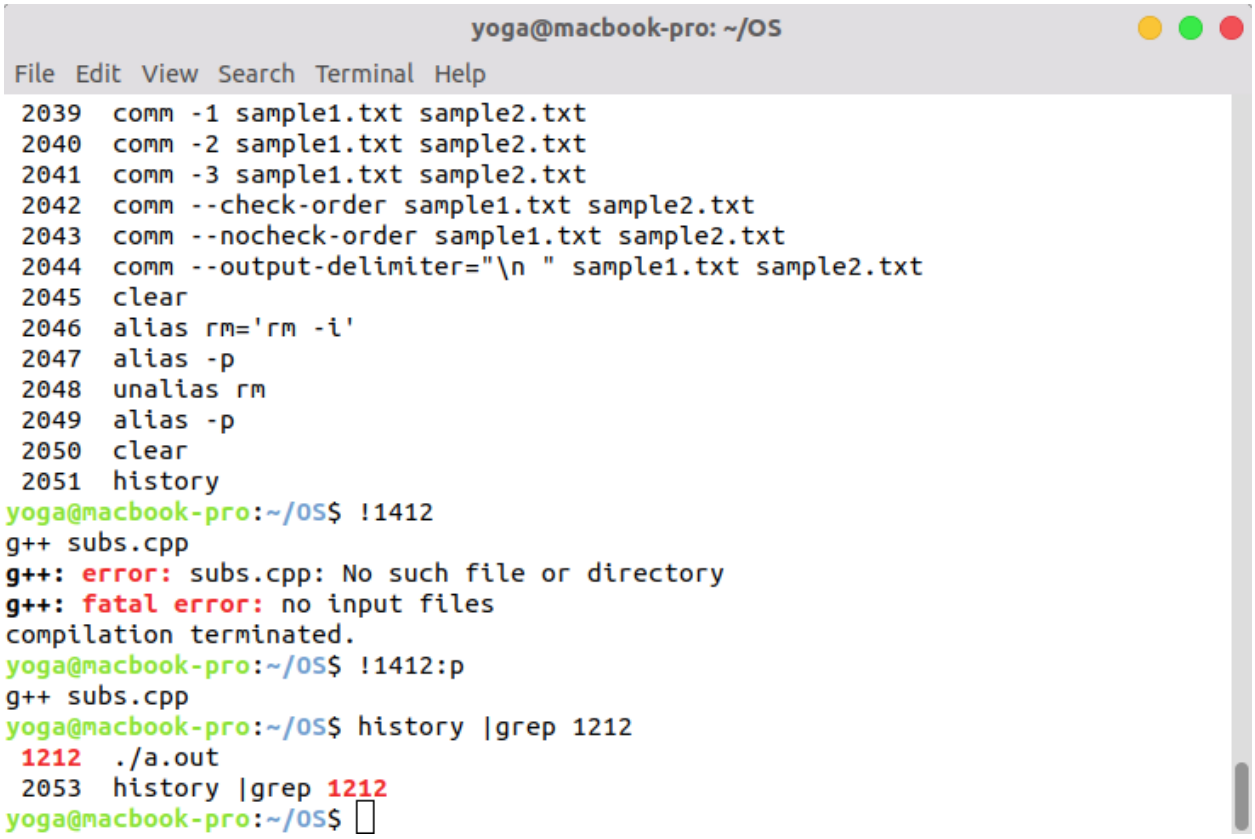
- history [OPTIONS]//without options displays all the previous commands



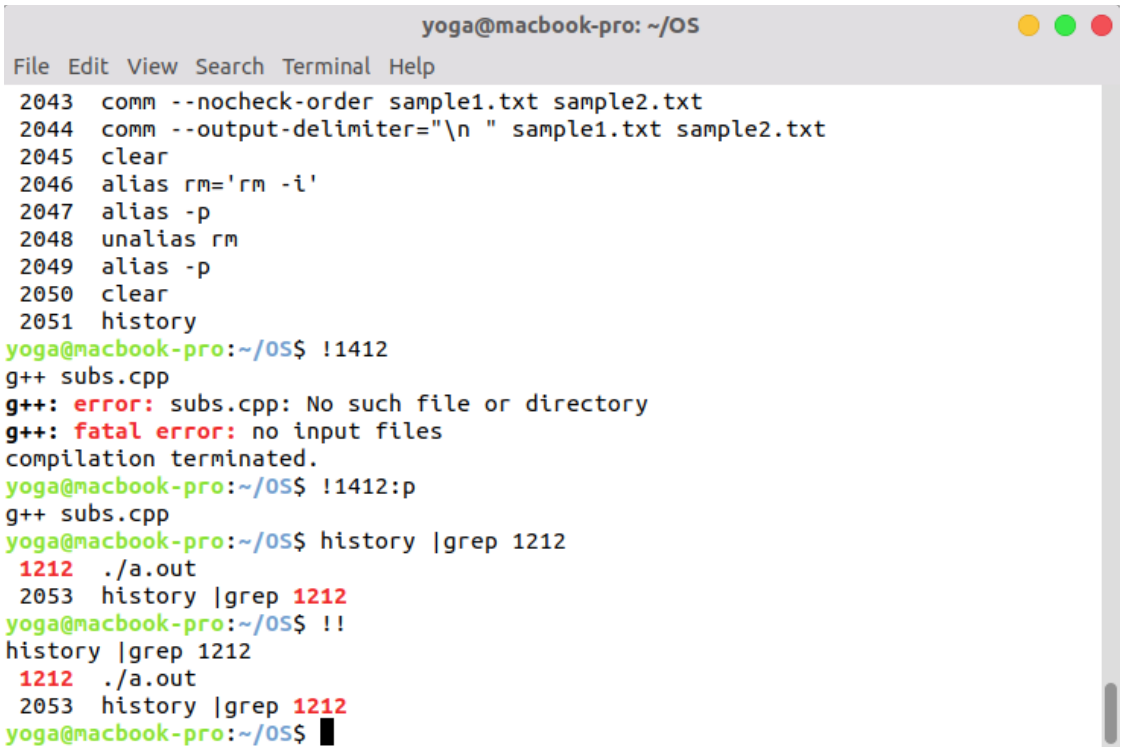
- !event-number //The mentioned event number is called



- !event-number:p //Prints before executing
- history | grep PATTERN //To allow usage along with grep

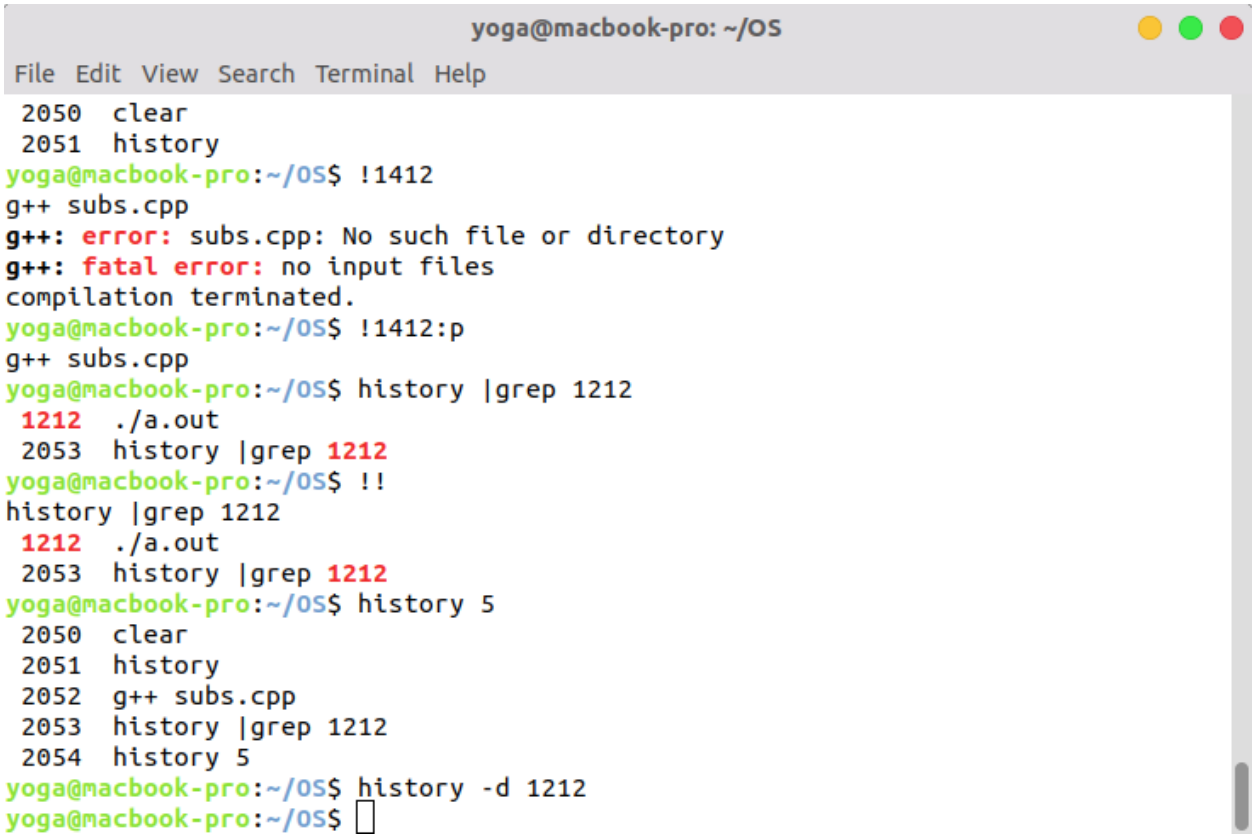


- !! //To display the most recent command

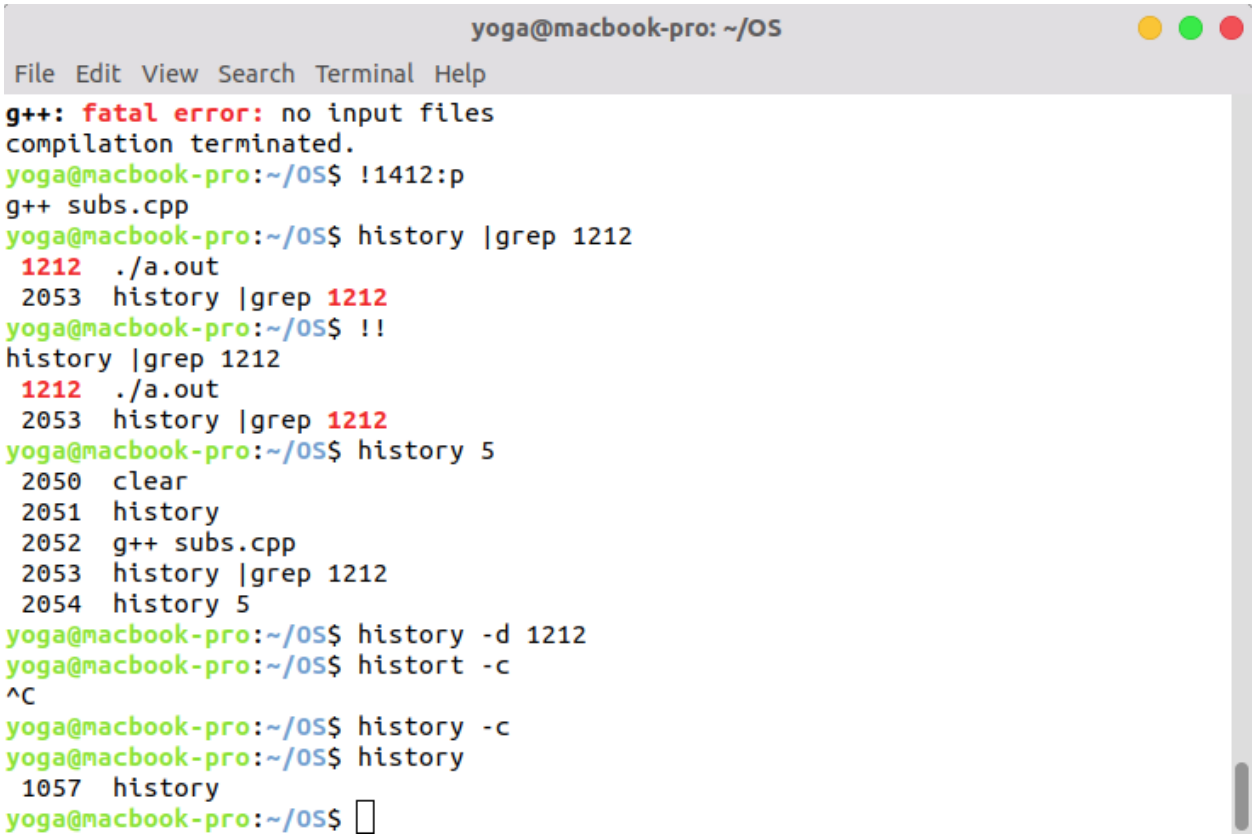


[OPTION]

- n:To show n number of previously executed commands



- -d event-number:This Option is used to remove “event_number” from history
- -c:To remove entire history



37)traceroute command:

Description:

This command is used to print the route that a packet takes to reach the host.

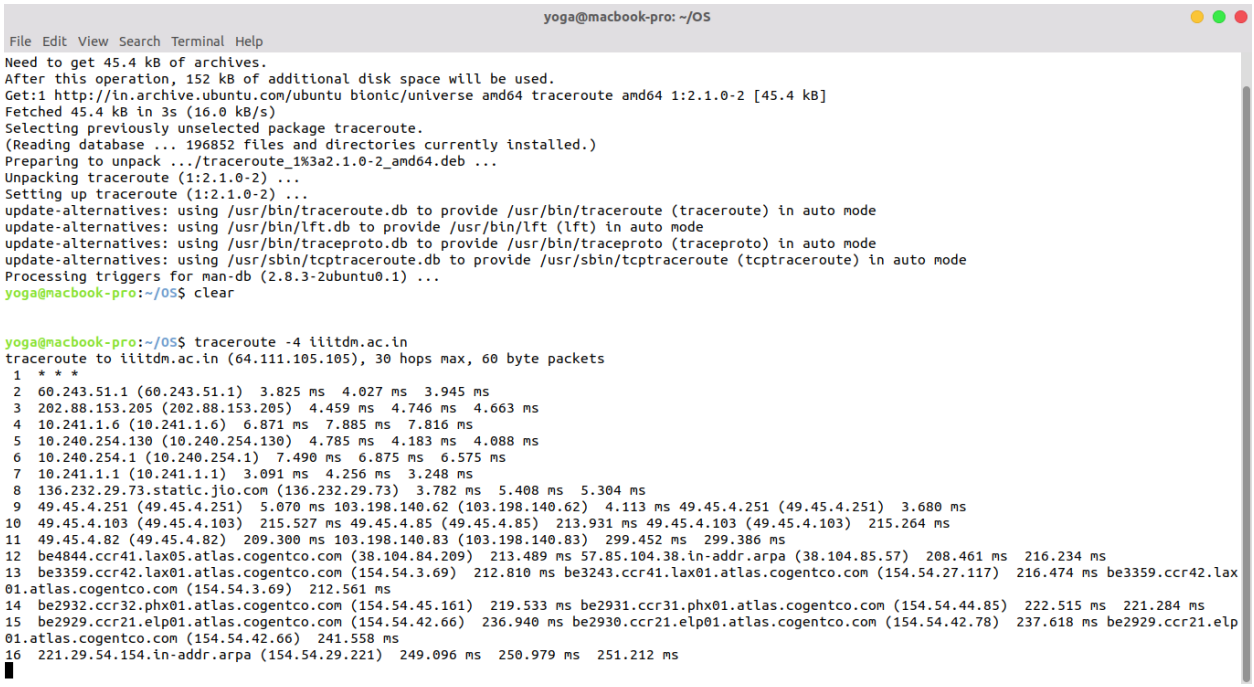
Syntax:

traceroute [OPTION] host_Address [pathlength]

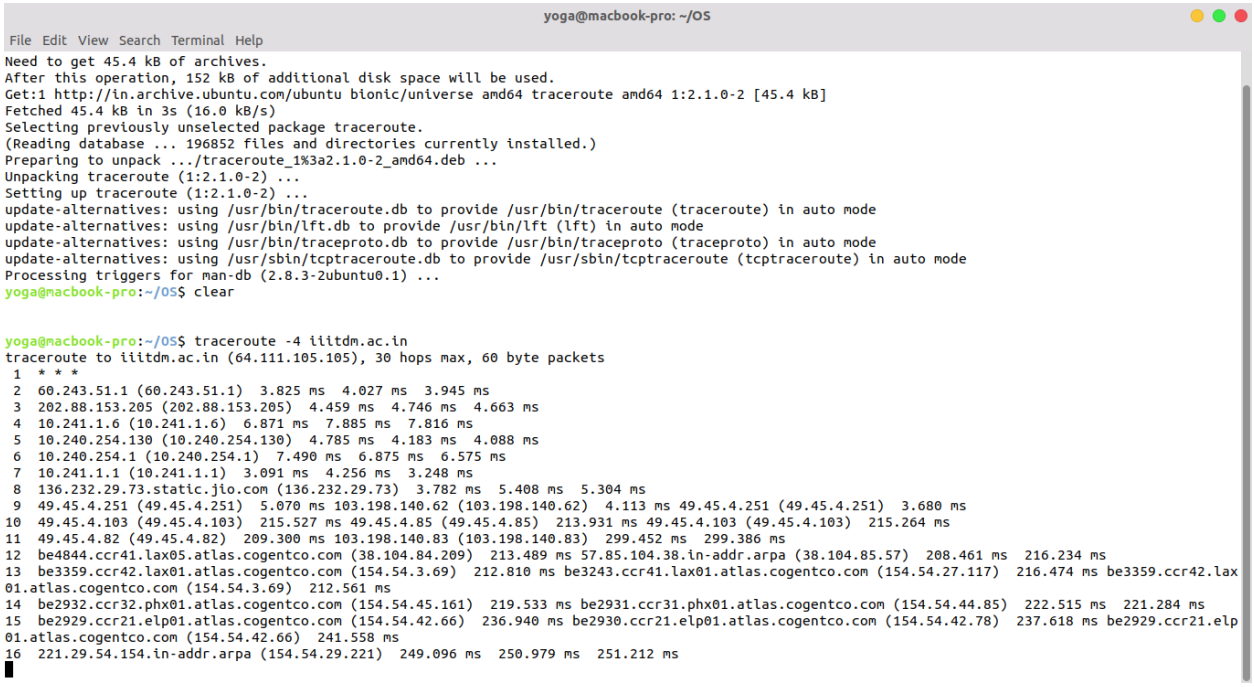
traceroute host_Address n//This Syntax sets the packet length to n

[OPTION]

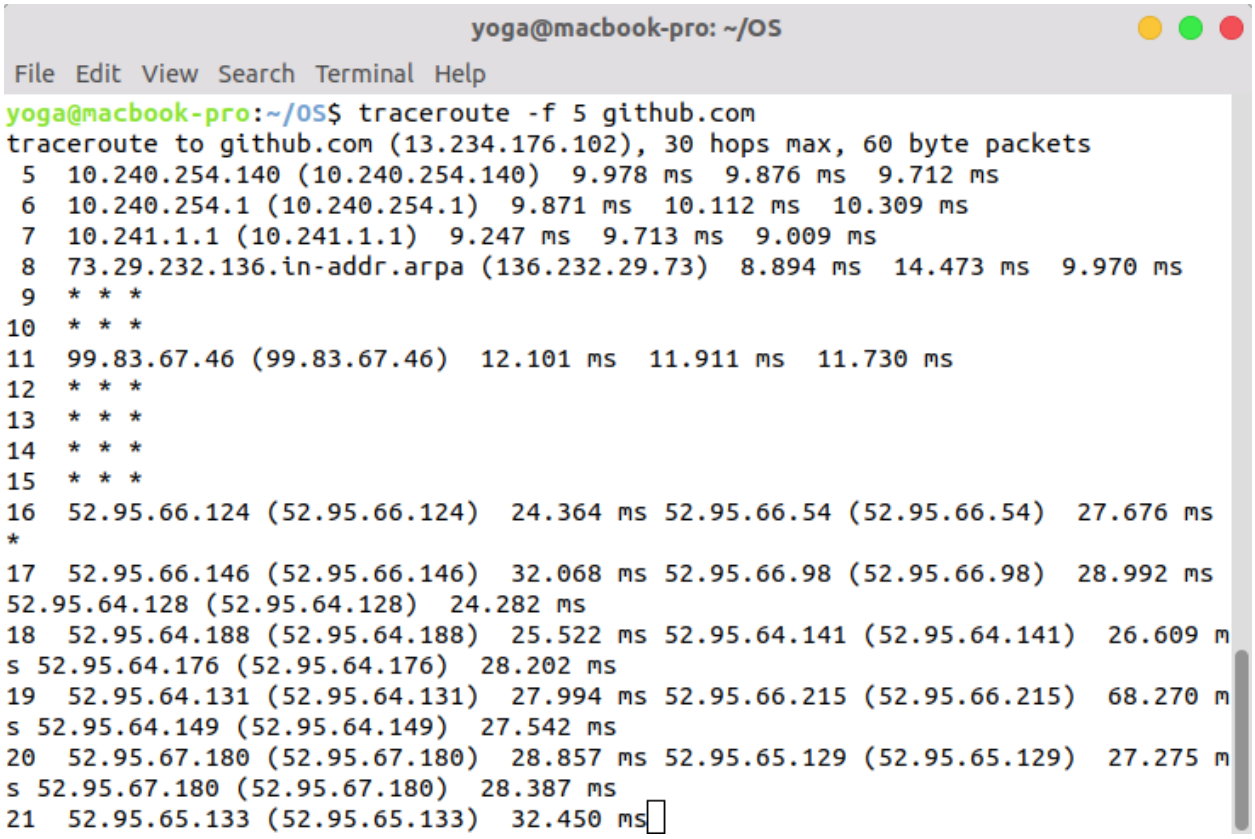
- -4 :This Option uses ip version IPv4



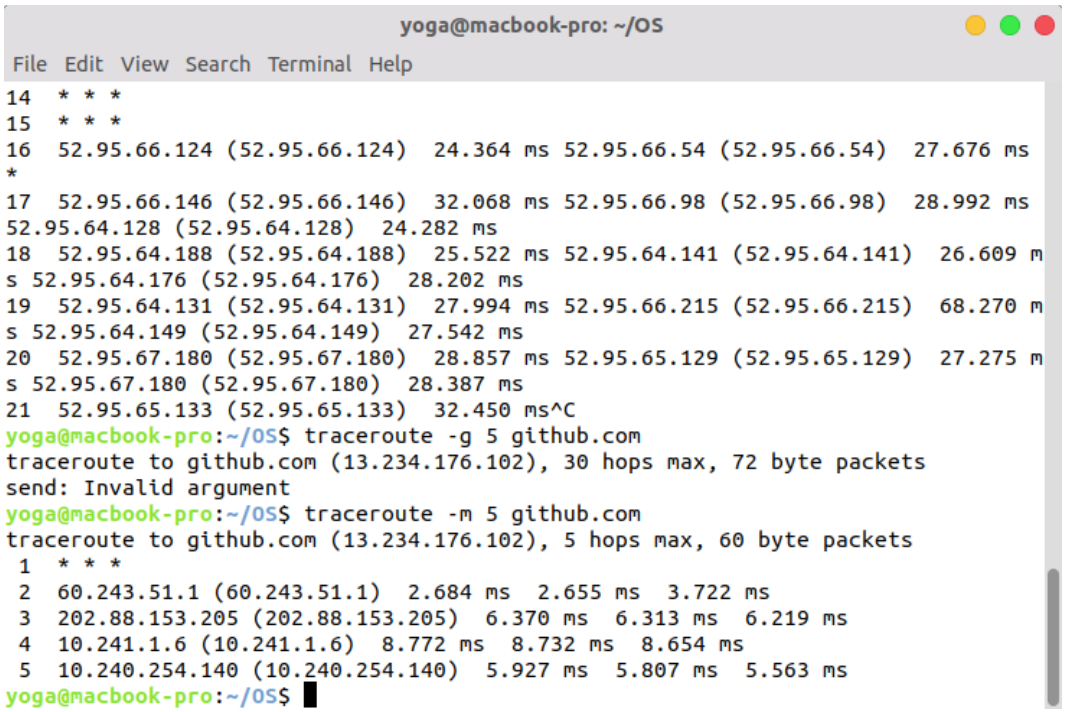
- -6:This Option uses ip verizon IPv6
- -F:This Option does not fragment packet



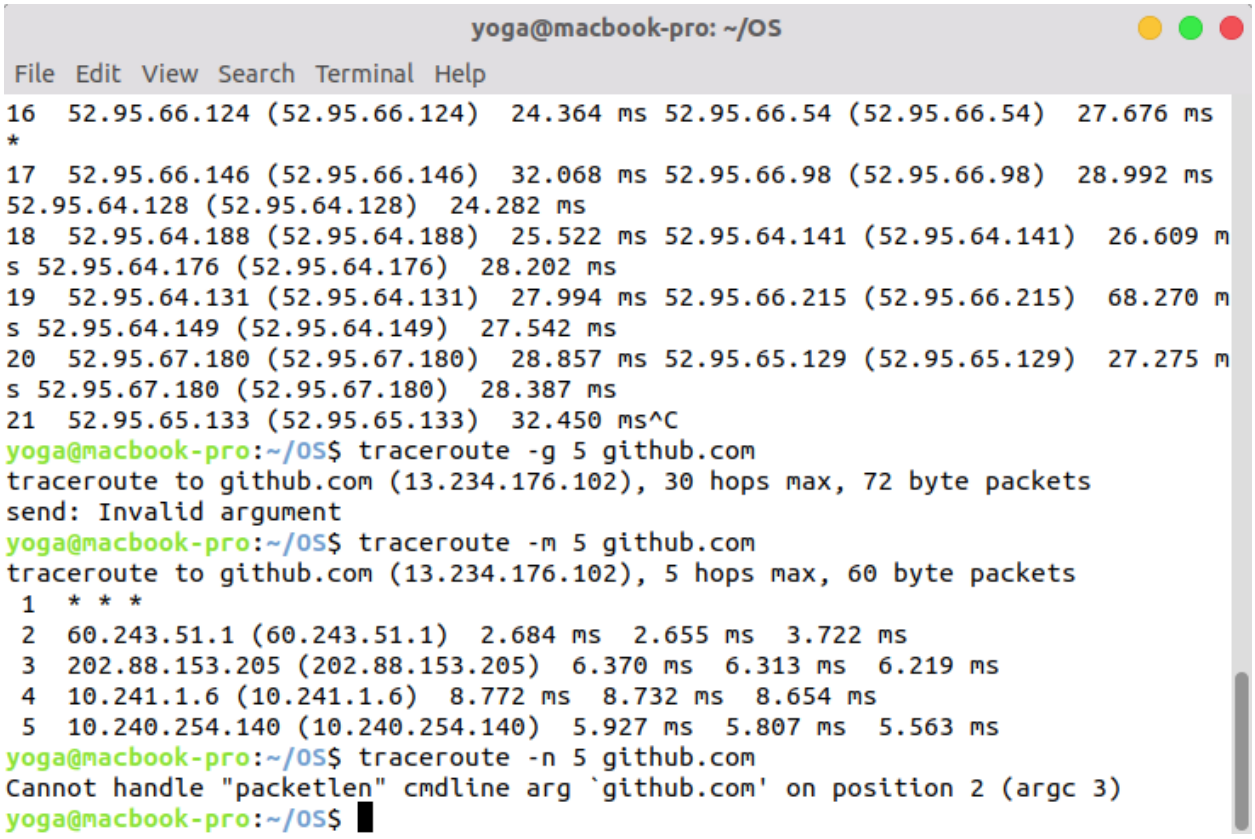
- -f num:This Option display the hops from n instead of 1



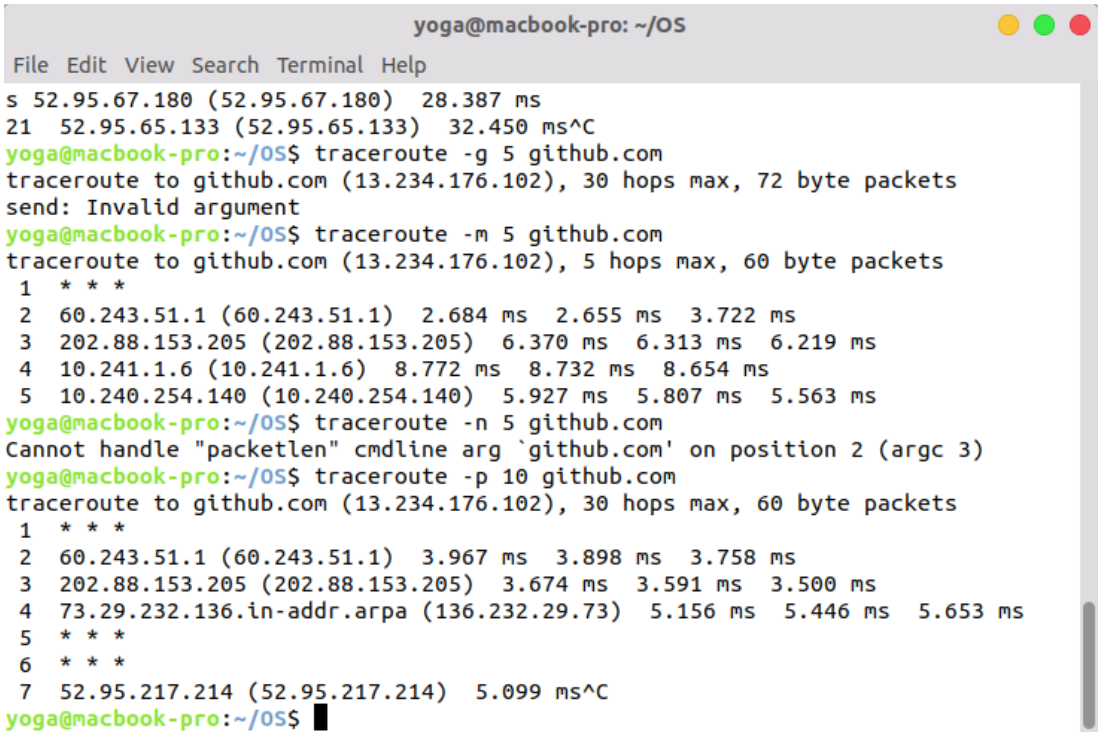
- -g gate:Route the packet through gate
- -m num:This option sets the max no of hops as num



- -n:Does not resolve IP address to their domain names



- -p port:This option allows destination port to be used

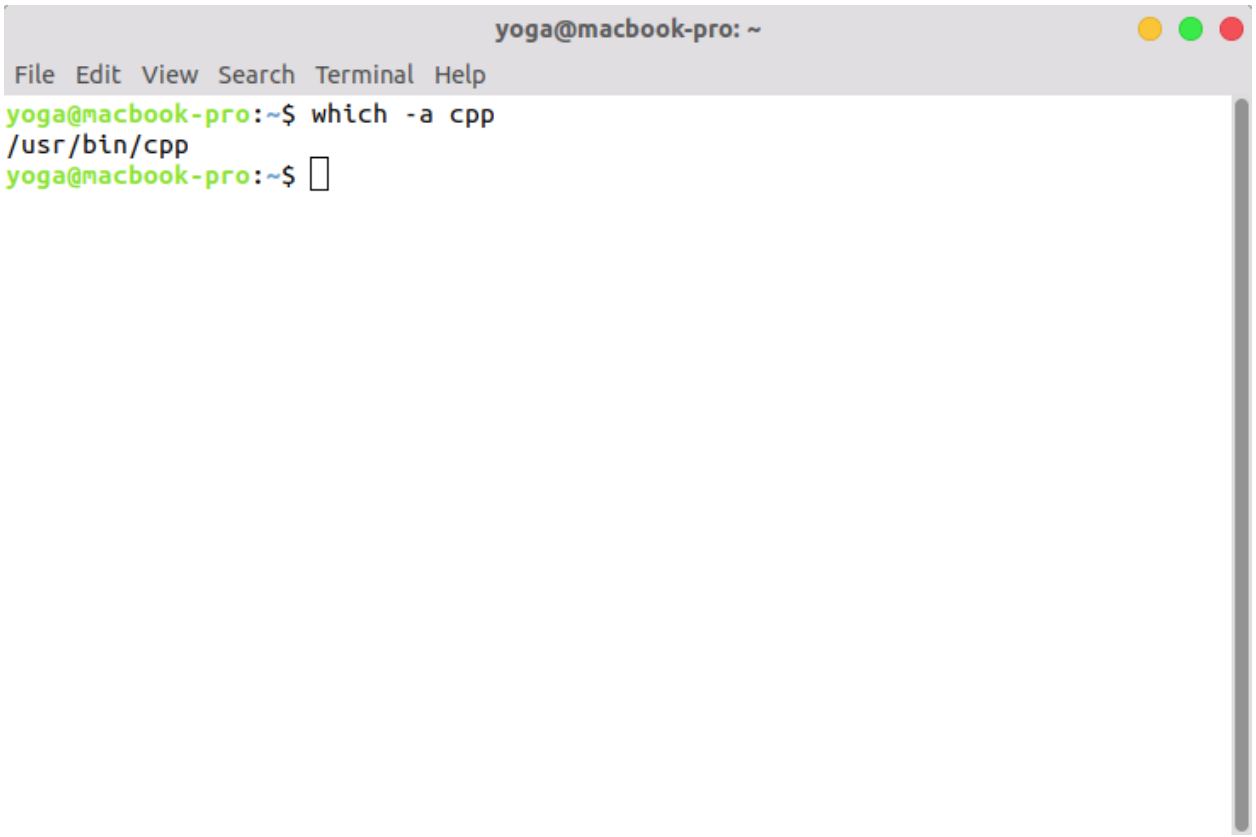


38)which command:

Description:
It is used to locate the executable file associated with the given command by searching it in the path environment variable.
Follows values are returned:
0 : If all specified commands are found and executable.
1 : If one or more specified commands is nonexistent or not executable.
2 : If an invalid option is specified.

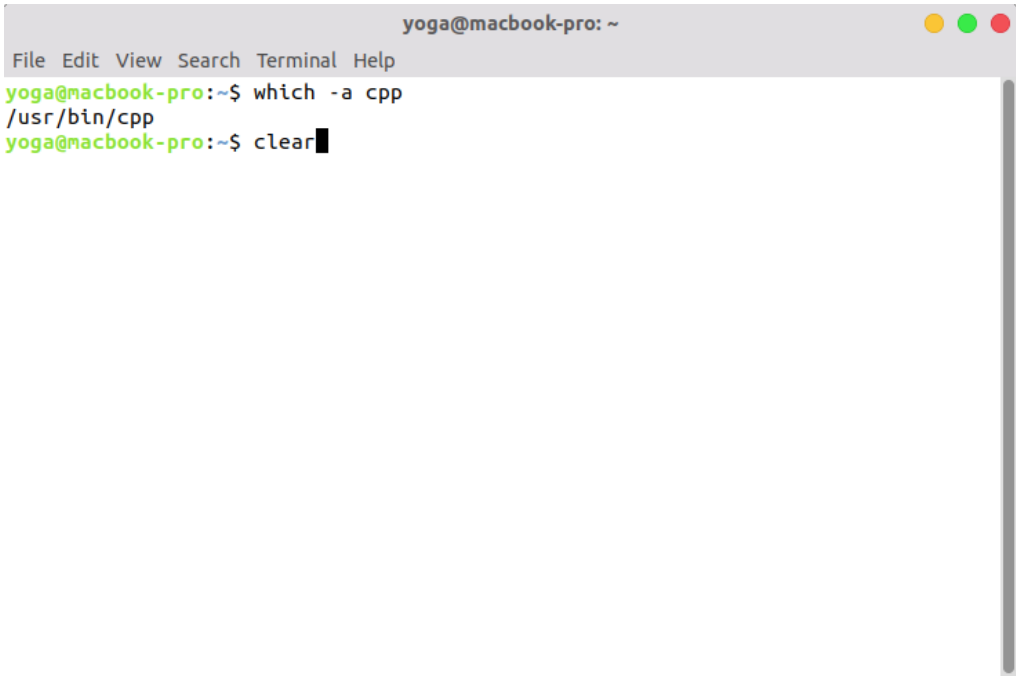
Syntax:
which [FILENAME1] [FILENAME2]....
[OPTION]

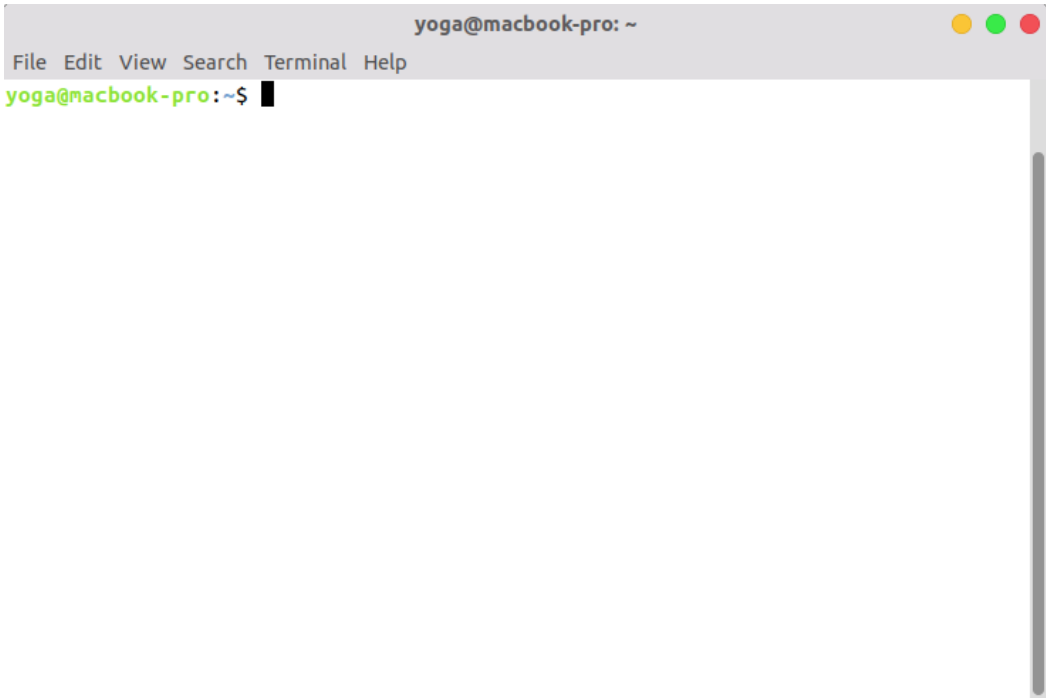
- -a:Displays all matching pathnames of each argument



39)Clear command:
Description:
This command is used to clear the terminal screen.
//NOTE:This command ignores any command line argument present
Syntax:
clear
[OPTION]

- -T:It is used to indicate the type of terminal.Normally the default terminal type is taken from the environment variable TERM
- -x: Does not attempt to clear the terminal's scrollback buffer using the extended “E3” capability.





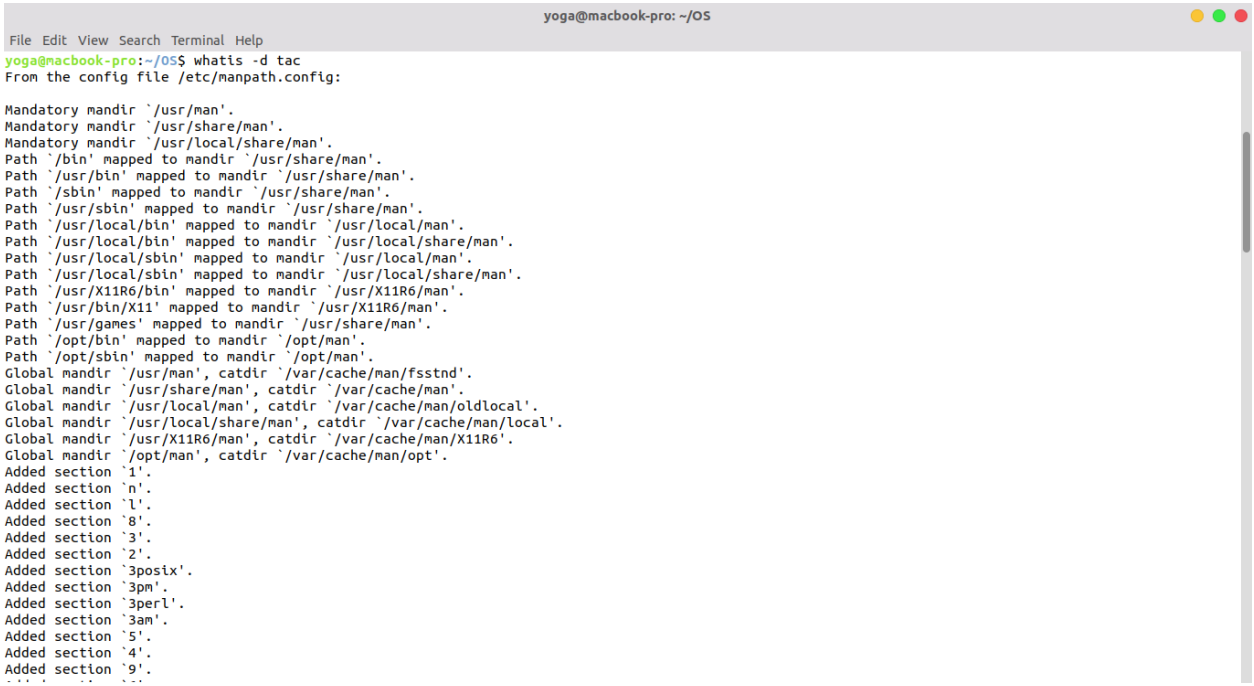
40)whatis command:

Description:

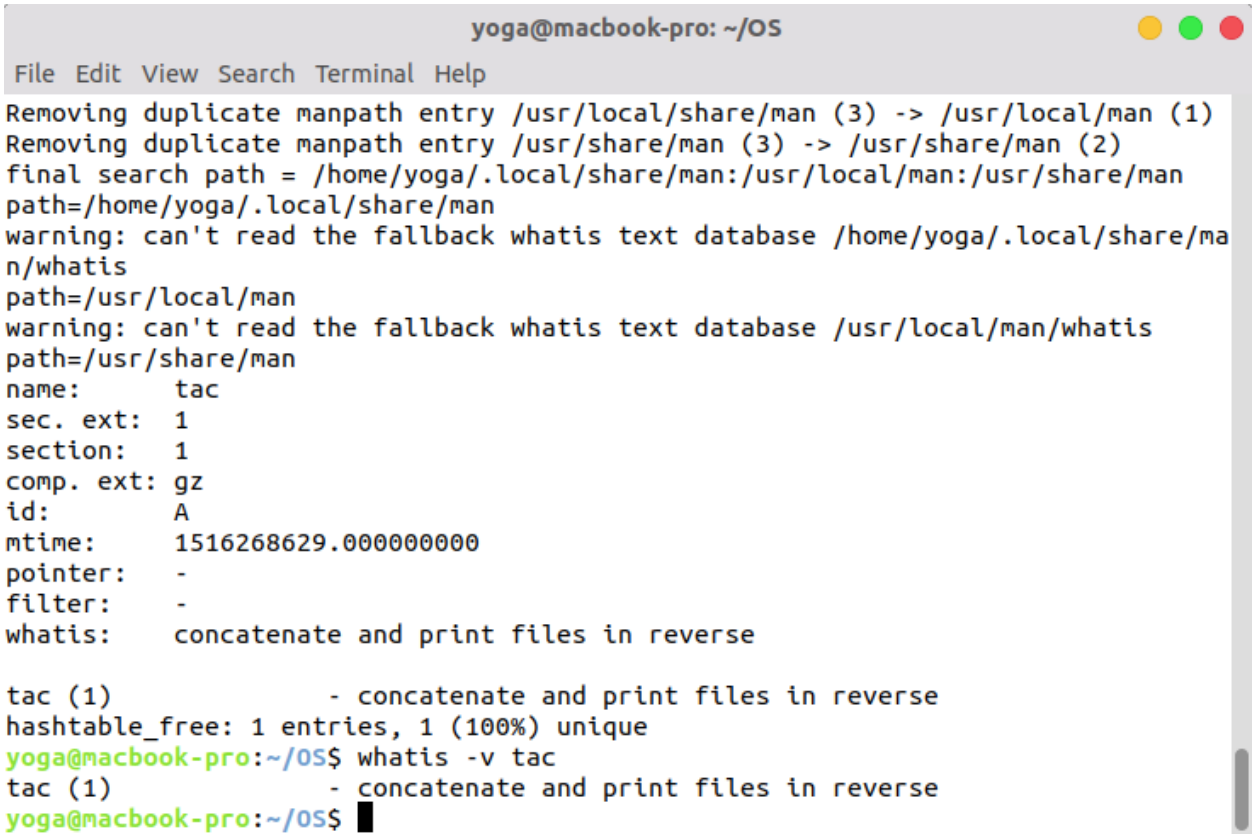
This command in Linux is used to get a one-line manual page

descriptions.
This command search for the manual pages names and show the manual page description of the specified filename or argument.
Syntax:
whatis [OPTIONS] KEYWORD//KEYWORD involves commands like
[OPTION]:

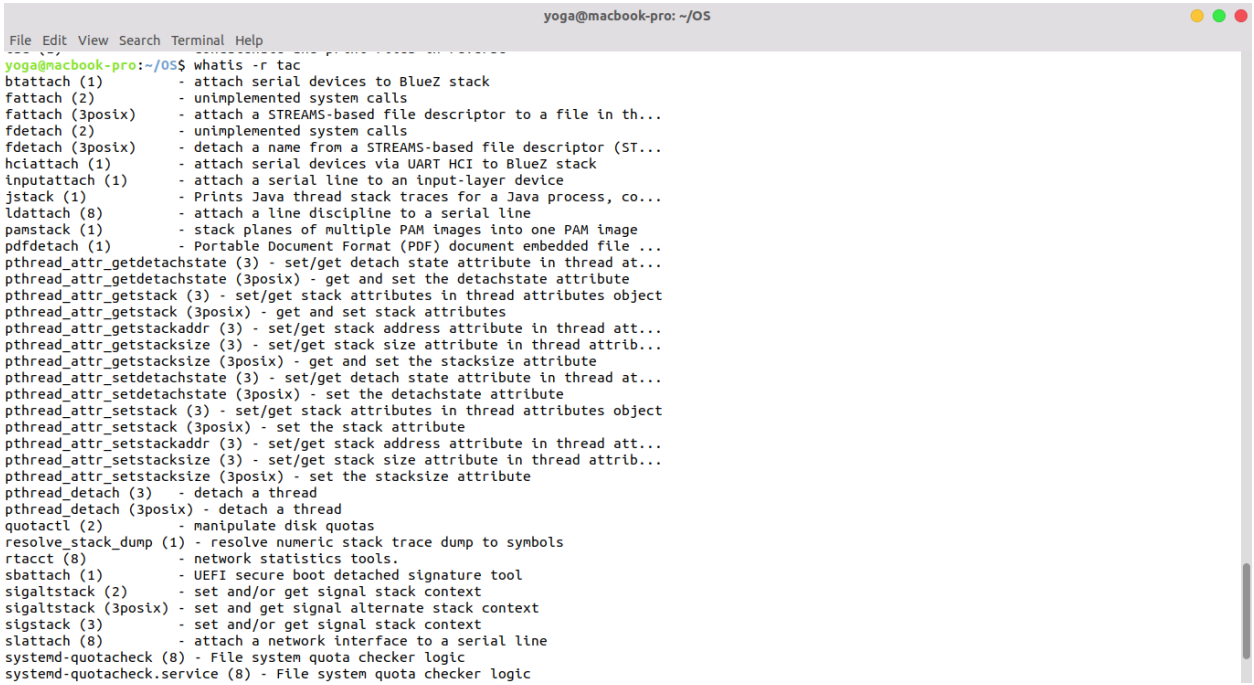
- -d:This option prints the debugging information.



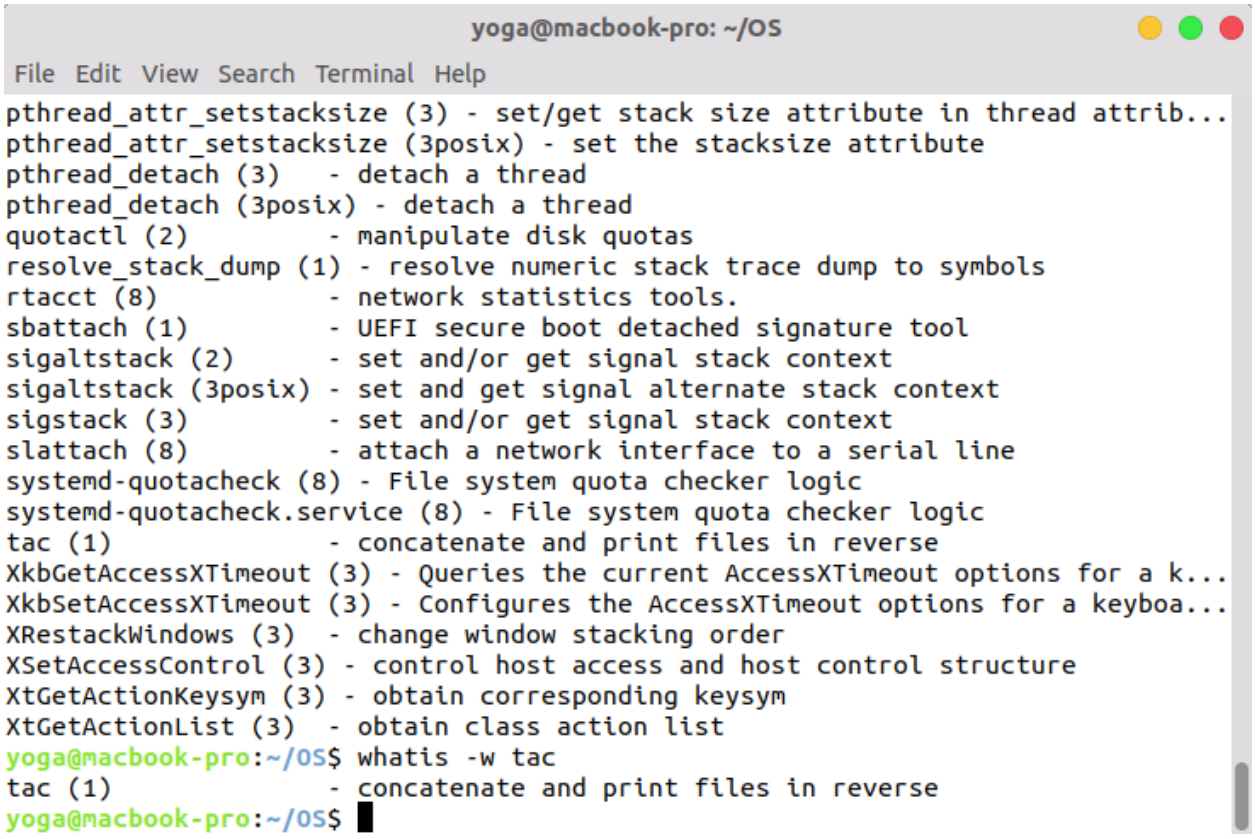
- -v:This option displays verbose warning messages



- -r:This option interprets each of the name as a regular expression.If any part of the page involves that name,then it will be a match and display all such files.



- -w:This option take each name as a pattern containing shell style wildcards.In this option a match will happen if it matches the entire page name



- -l:This option does not trim output to the terminal width .
- -C:This option uses the user configuration file rather than the default file in
- ~/.manpath
- -m:This option is used to access any other operating system's manual page name

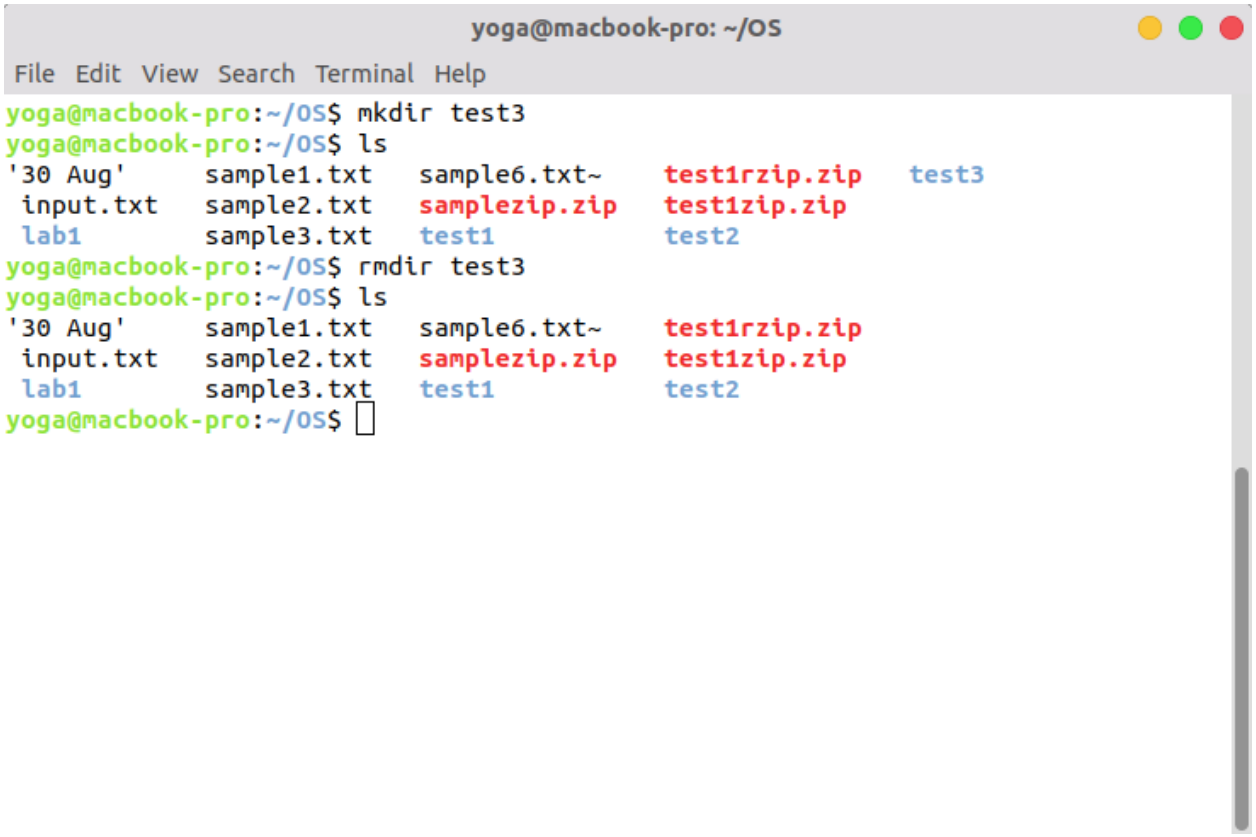
41)rmdir command:

Description:

This command is used to remove an empty directories from the filesystem in Linux.

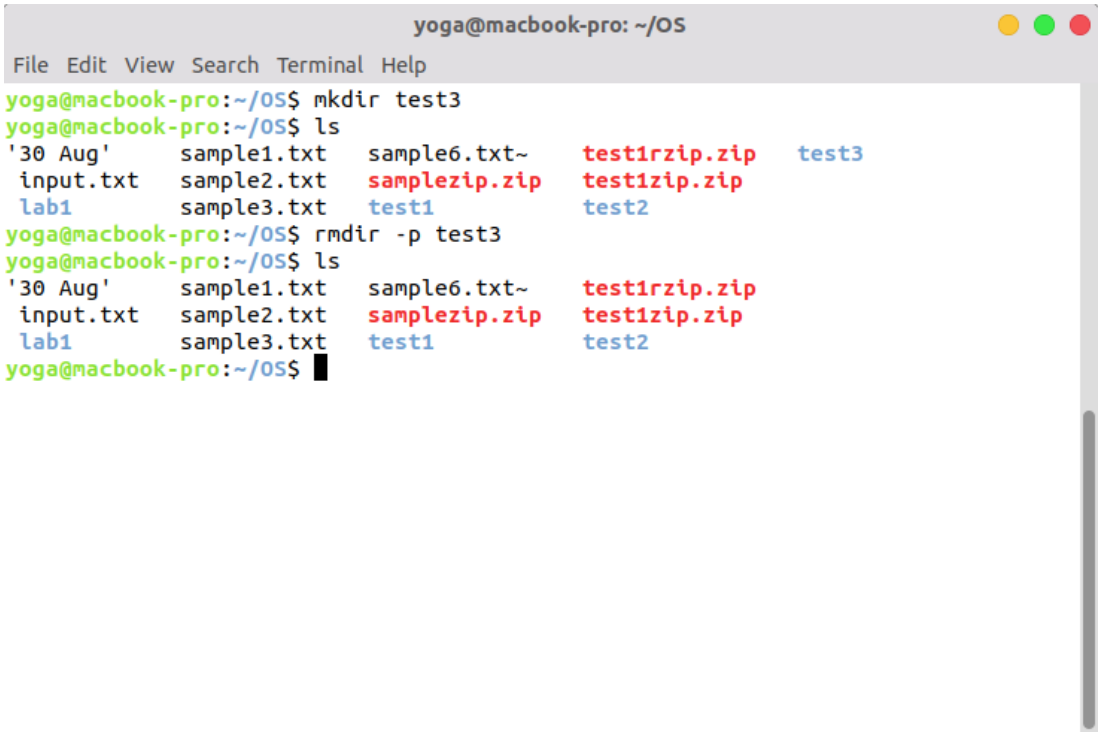
Syntax:

rmdir [OPTION] …[DIRECTORY]//Mandatory Arguments involve rmdir and Directory name

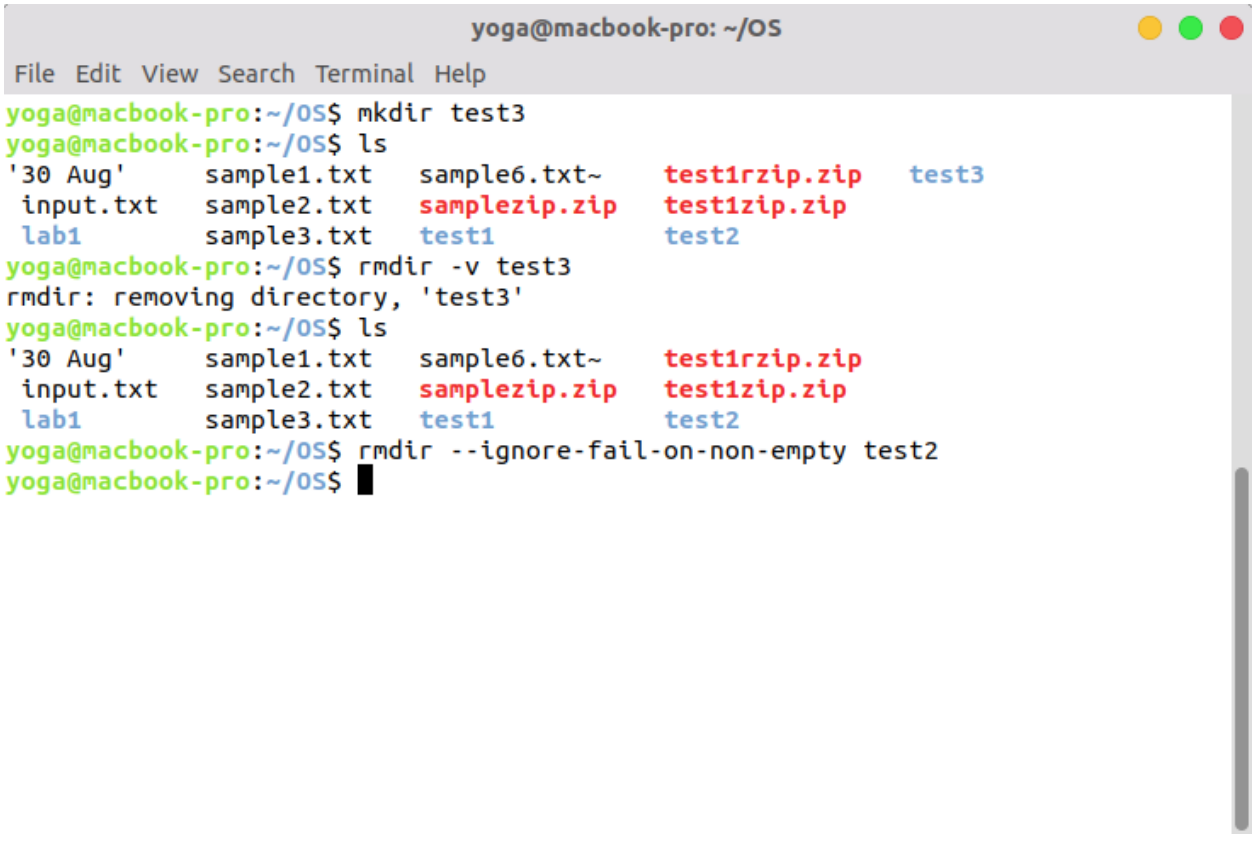


[OPTION]:

- -p:This Options enables directory argument to be treated as a pathname of which all components will be removed ,if they are already empty.



- -v:Displays verbose information for every directory being processed.
- rmdir –ignore-fail-on-non-empty: This option does not report a failure which occurs due to a directory being non-empty.



42)echo command:

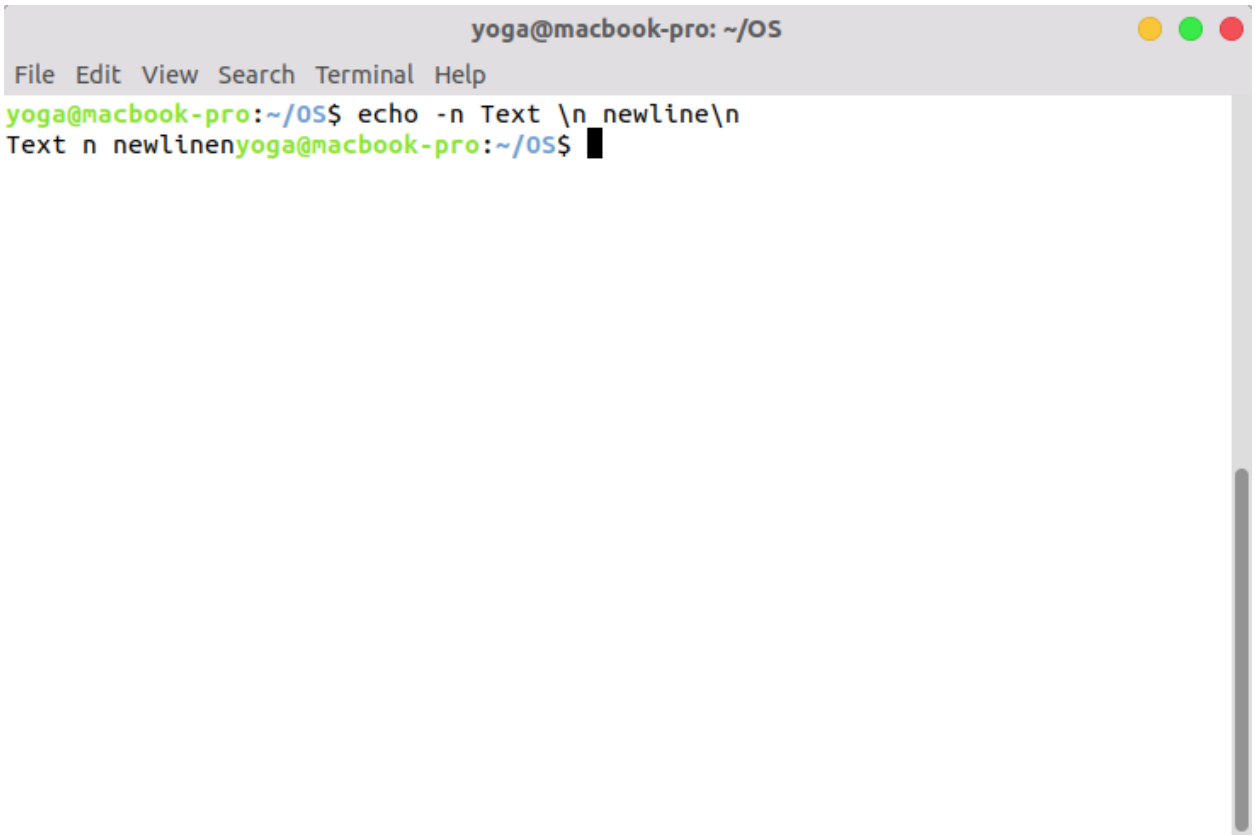
Description:

It is used to display line of text/string that are passed as an argument.

Syntax:

echo [OPTION] [string]

echo * //Prints all files/folders in the directory



[OPTION]:

- -n:This option is used to omit echoing trailing newline
- -e:This option Enables the interpretation of backslash escapes

Ex:echo -e “abcde [n] fgh”

[n] Available n options with -e enabled:

->\b:It removes all the spaces in between the text.

->\c:Suppress trailing new line with backspace interpreter ‘-e’ to continue without emitting new line

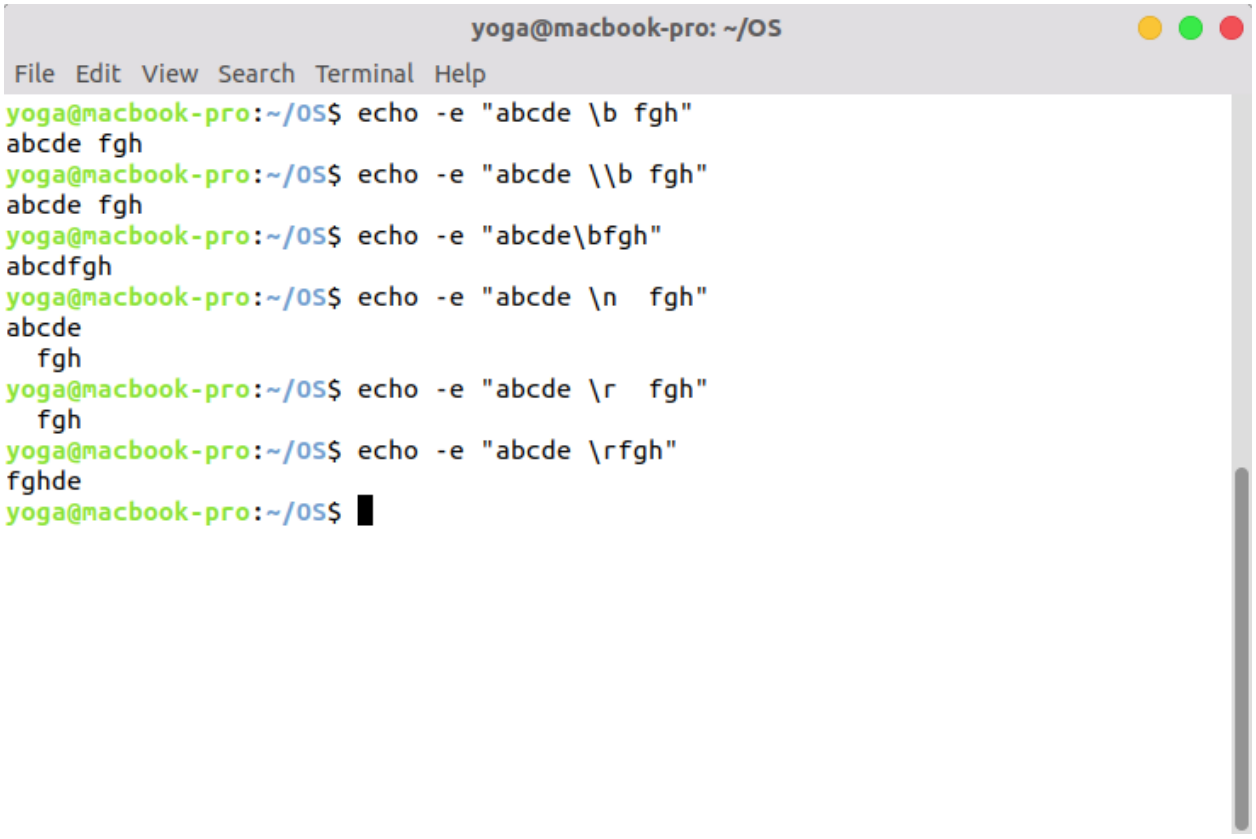
->\n:This option creates new line

->\t:To create tab spaces

->\r:To Display carriage return

->\v:To create vertical tab spaces

->\a:To alert return with backspace interpreter ‘-e’ to to have sound alert



43)cal command:

Description:

This command shows calender of the specific month or year

Syntax:

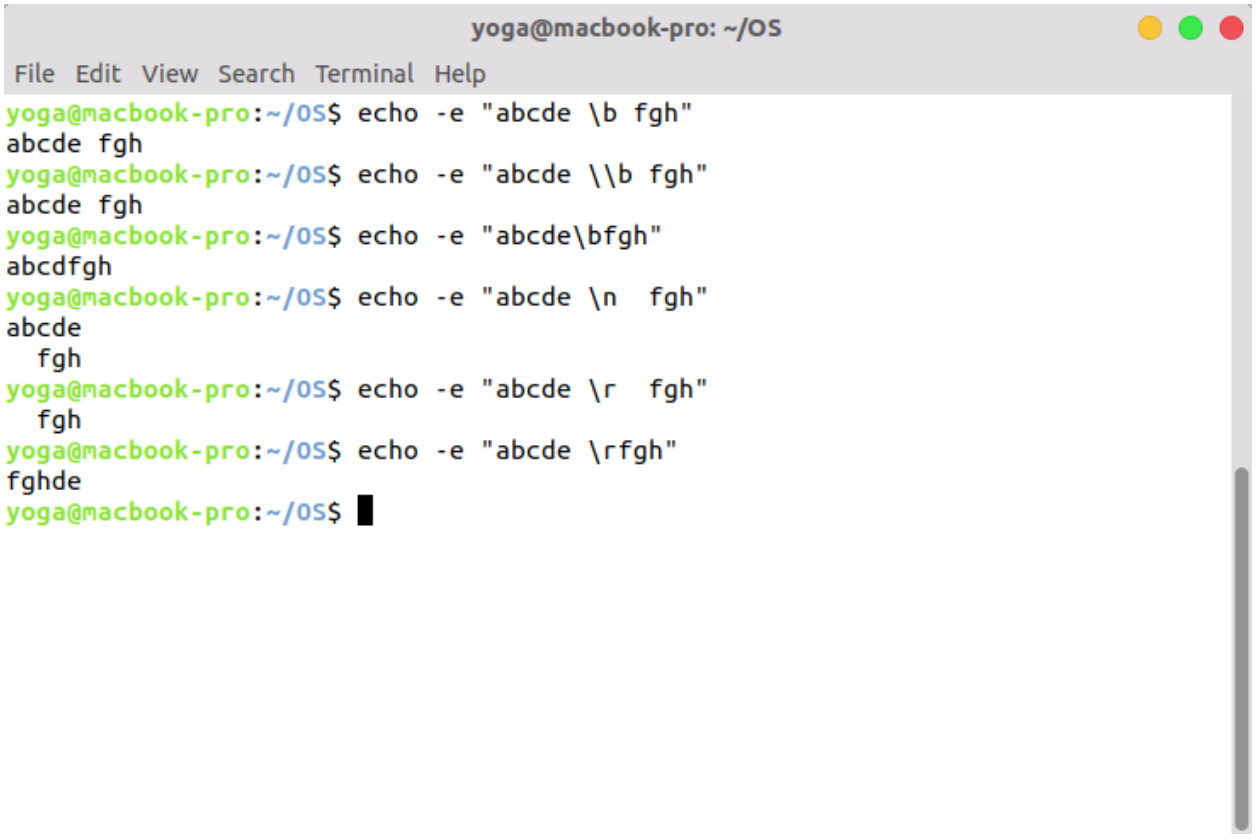
- cal //Shows current month calendar
- cal MM YYYY:Shows the calender of MM month and of year YYYY

```
yoga@macbook-pro: ~/OS
File  Edit  View  Search  Terminal  Help
yoga@macbook-pro:~/OS$ cal
    August 2020
Su Mo Tu We Th Fr Sa
                   1
 2  3  4  5  6  7  8
 9 10 11 12 13 14 15
16 17 18 19 20 21 22
23 24 25 26 27 28 29
30 31
yoga@macbook-pro:~/OS$ cal 08 2021
    August 2021
Su Mo Tu We Th Fr Sa
 1  2  3  4  5  6  7
 8  9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31

yoga@macbook-pro:~/OS$
```

- cal YYYY:Shows the calender of year YYYY

```
Terminal   Sun Aug 30, 20:04:17   80%
yoga@macbook-pro: ~/OS
File  Edit  View  Search  Terminal  Help
yoga@macbook-pro:~/OS$ cal 2020
                               2020
      January               February                March
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
          1  2  3  4                     1      1  2  3  4  5  6  7
 5  6  7  8  9 10 11   2  3  4  5  6  7  8    8  9 10 11 12 13 14
12 13 14 15 16 17 18   9 10 11 12 13 14 15   15 16 17 18 19 20 21
19 20 21 22 23 24 25  16 17 18 19 20 21 22   22 23 24 25 26 27 28
26 27 28 29 30 31     23 24 25 26 27 28 29   29 30 31
                      30 31


       April                  May                   June
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
          1  2  3  4                  1  2      1  2  3  4  5  6
 5  6  7  8  9 10 11   3  4  5  6  7  8  9    7  8  9 10 11 12 13
12 13 14 15 16 17 18  10 11 12 13 14 15 16   14 15 16 17 18 19 20
19 20 21 22 23 24 25  17 18 19 20 21 22 23   21 22 23 24 25 26 27
26 27 28 29 30        24 25 26 27 28 29 30   28 29 30
                      31


        July                 August              September
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
          1  2  3  4                     1         1  2  3  4  5
 5  6  7  8  9 10 11   2  3  4  5  6  7  8    6  7  8  9 10 11 12
12 13 14 15 16 17 18   9 10 11 12 13 14 15   13 14 15 16 17 18 19
19 20 21 22 23 24 25  16 17 18 19 20 21 22   20 21 22 23 24 25 26
26 27 28 29 30 31     23 24 25 26 27 28 29   27 28 29 30
                      30 31


      October              November              December
Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa  Su Mo Tu We Th Fr Sa
             1  2  3   1  2  3  4  5  6  7          1  2  3  4  5
 4  5  6  7  8  9 10   8  9 10 11 12 13 14    6  7  8  9 10 11 12
11 12 13 14 15 16 17  15 16 17 18 19 20 21   13 14 15 16 17 18 19
18 19 20 21 22 23 24  22 23 24 25 26 27 28   20 21 22 23 24 25 26
25 26 27 28 29 30 31  29 30                  27 28 29 30 31

yoga@macbook-pro:~/OS$
```

- cal -3:Displays current month ,previous and next month



44)date command:

Description:

This command is used to display the system date and time. It is also used to set date and time of the system.

Syntax:

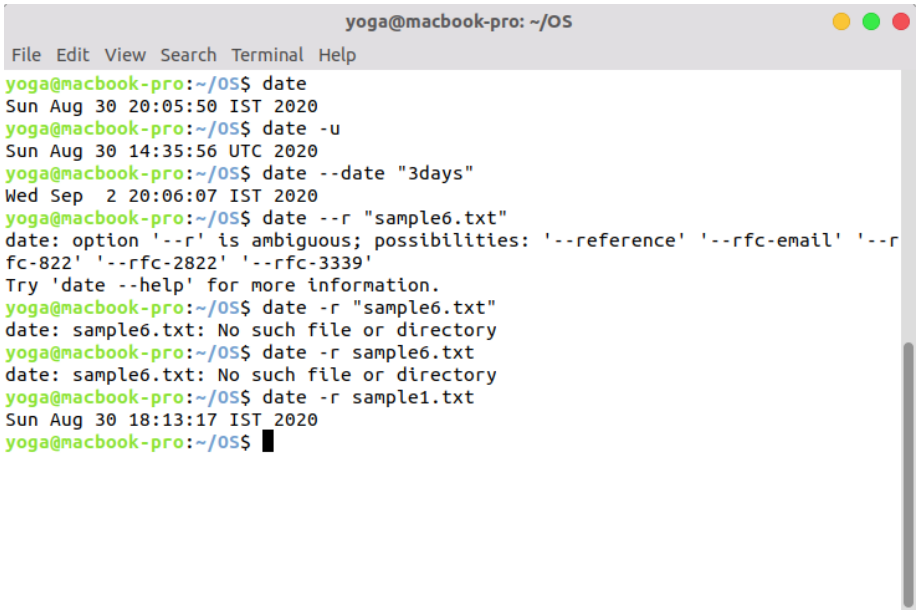
- date //Displays the current date and time.
- date -u //Displays the time in GMT/UTC time zone
- date --date=”string” Displays the given data string in the format of date.

//String can be:”2 days” for date and time after two days

- date --set=”data to be set”//Sets the system date and time
- date --file=filename//This option is used to display the date string present at each line of file in the date and time format
- date -r filename //This option is used to display the last modified timestamp of the file

- date +%[format-option]:Lists the current date according to particular format specifiers
- [FORMAT-OPTION]:
- %D: Display date as mm/dd/yy.
- %d: Display the day of the month
- %a: Displays the name for weekdays

- %A: Displays full weekdays
- %h: Displays month name
- %B: Displays full month name
- %m: Displays the month of year
- %y: Displays last two digits of the year
- %Y: Display four-digit year.
- %T: Display the time in 24 hour format as HH:MM:SS.
- %H: Display the hour.
- %M: Display the minute.
- %S: Display the seconds.



45)dir command:

Description:

This command is used to list the contents of a directory

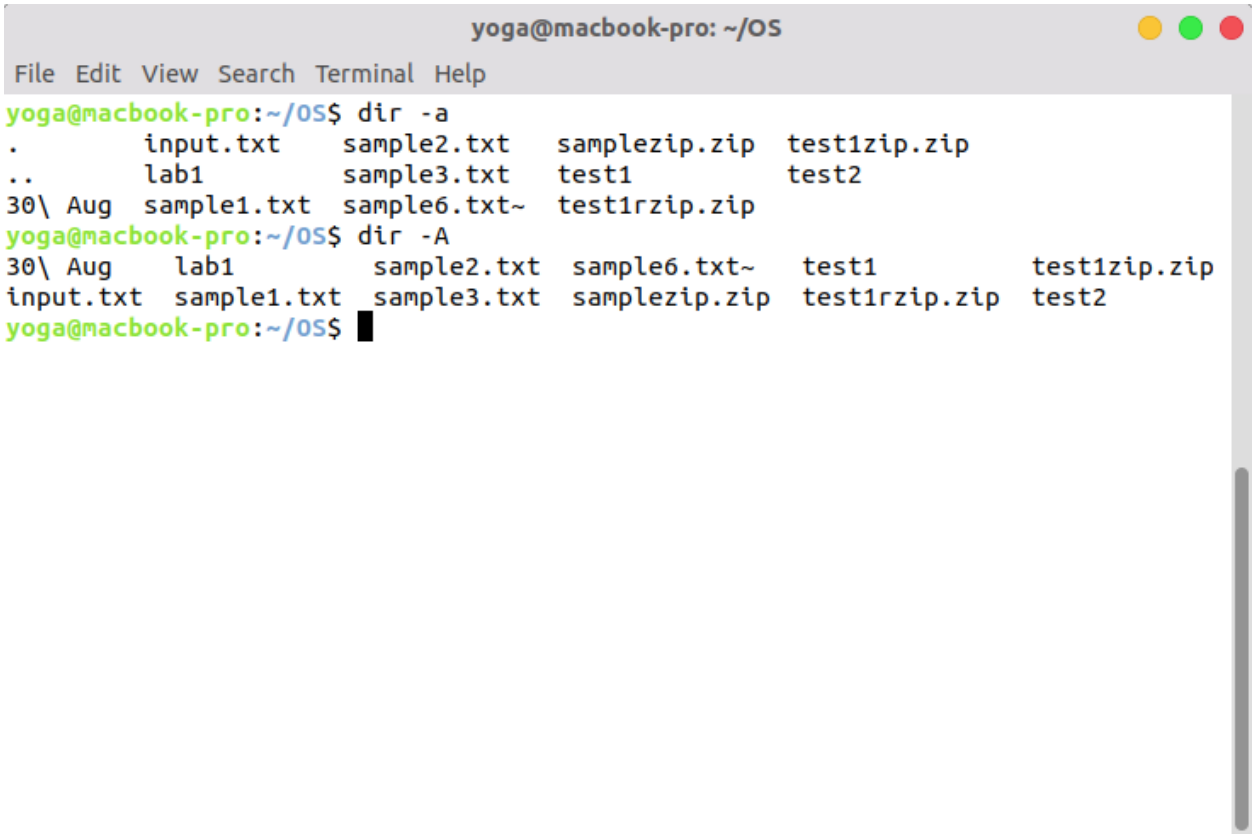
NOTE:dir command differs from ls command in the format of listing contents that is in default listing options I.e it does not display colored output as ls does

Syntax:

dir [OPTION] [FILE]

[OPTION]

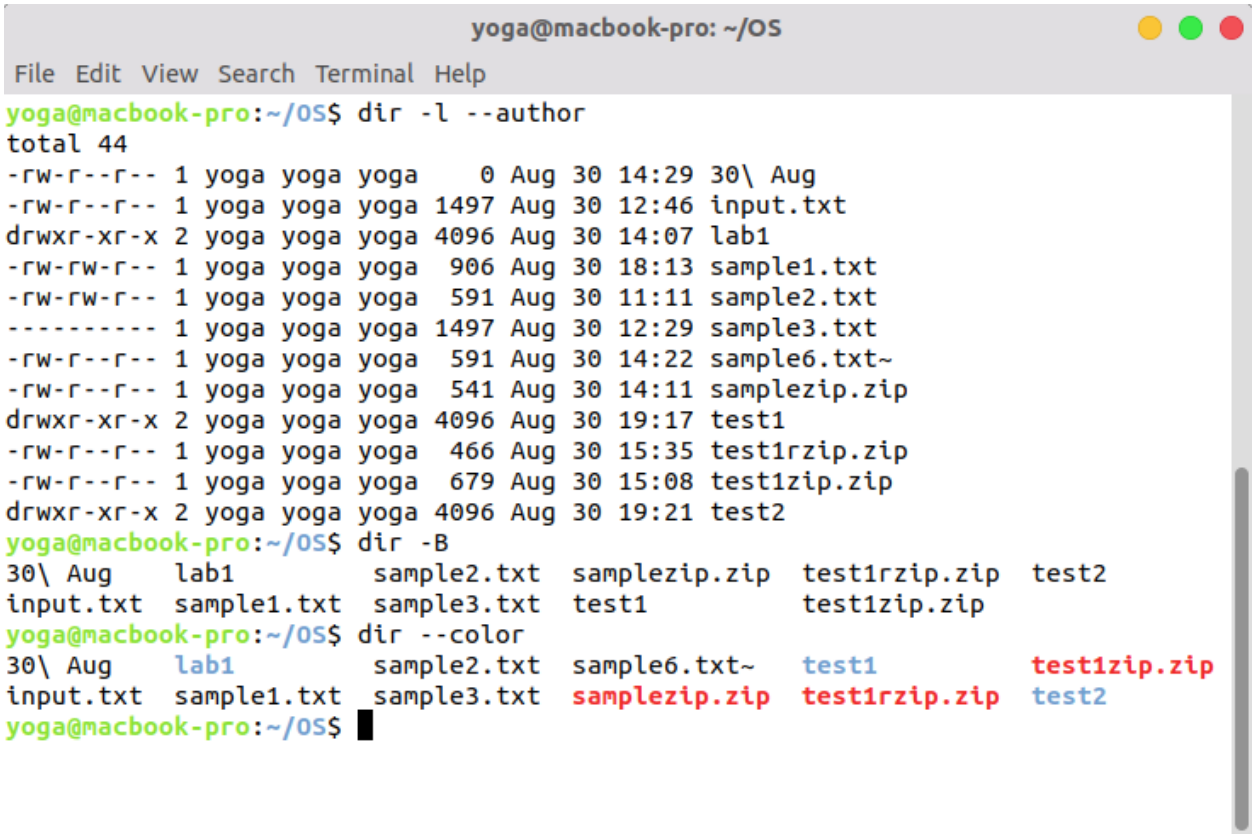
- -a: It display all the hidden files along with two files denoted '.' and '..' which stands for current and previous directory respectively
- -A:Similar to -a option but does not display files of current and previous directory



-l --author :Displays author of all the files.

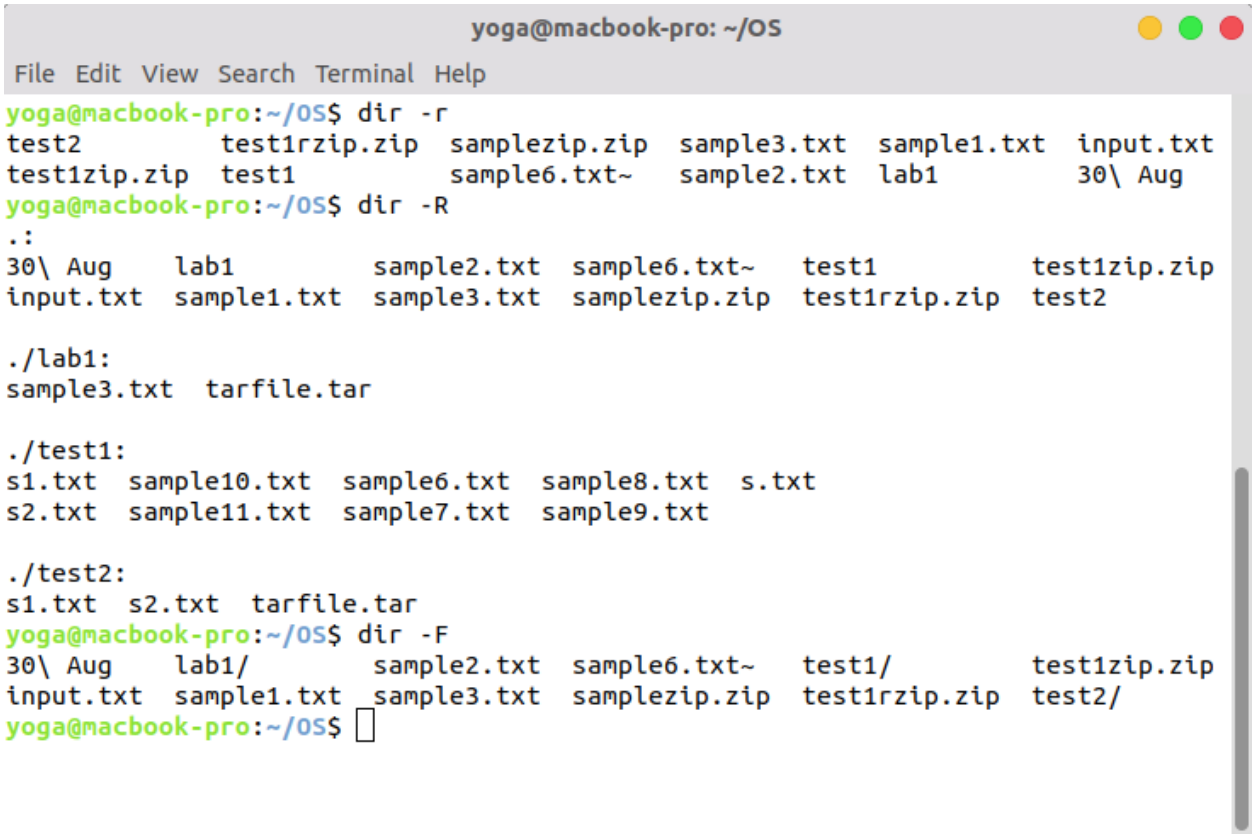
-B:Ignores listing of backed up files(ends with '~')

--color :This option is used to colorize the output



- -r:Lists files in reverse order while sorting
- -R:List all subdirectories recursively
- -F:Append indicator to the file names which classifies them into their type.

  Ex:
- A slash (`/`) indicates a directory.
- An asterisk (`*`) indicates an executable.
- An at sign (`@`) indicates a symbolic link.
- A percent sign (`%`) indicates a whiteout.
- An equal sign (`=`) indicates a socket.
- A vertical bar (`|`) indicates a FIFO.



46)look command:

Description:

This command is shows the lines beginning with a given string.Uses binary search for files not sorted

Syntax:

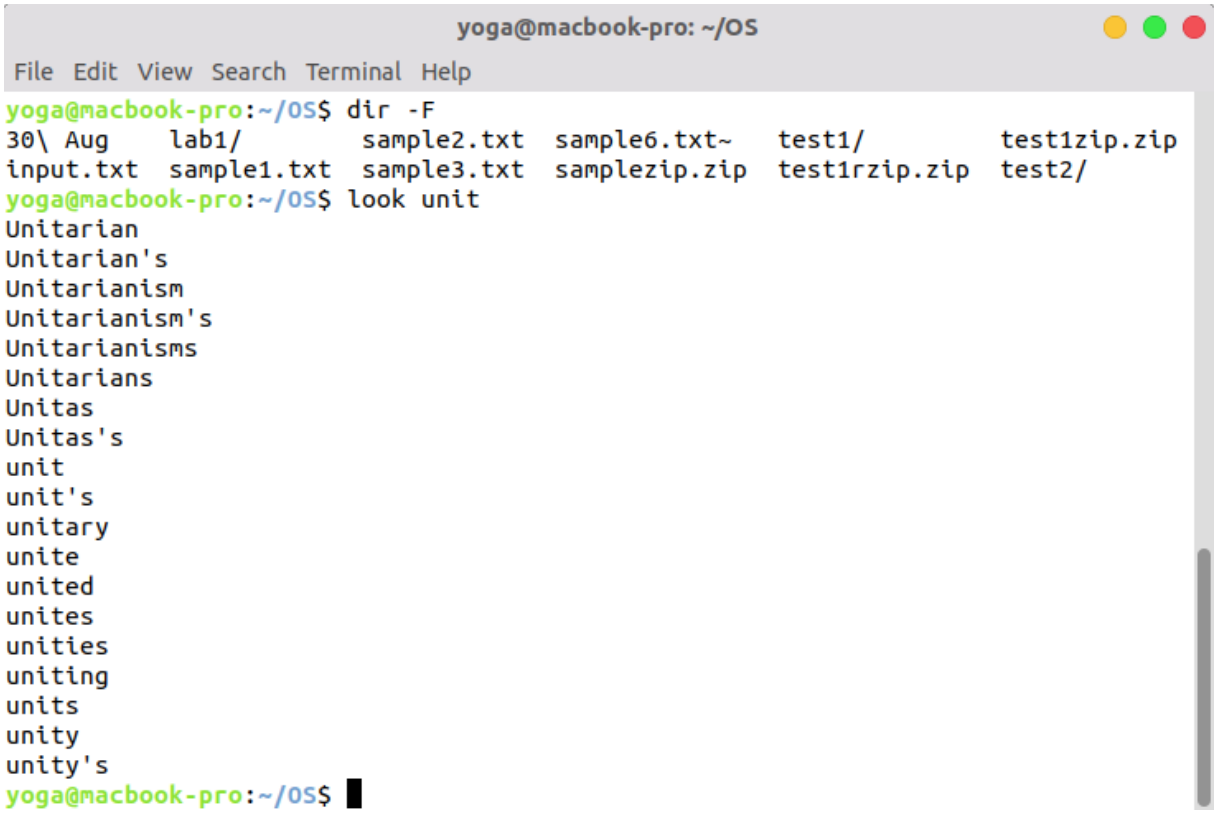
look [-bdf] [-t termchar] string [file….]

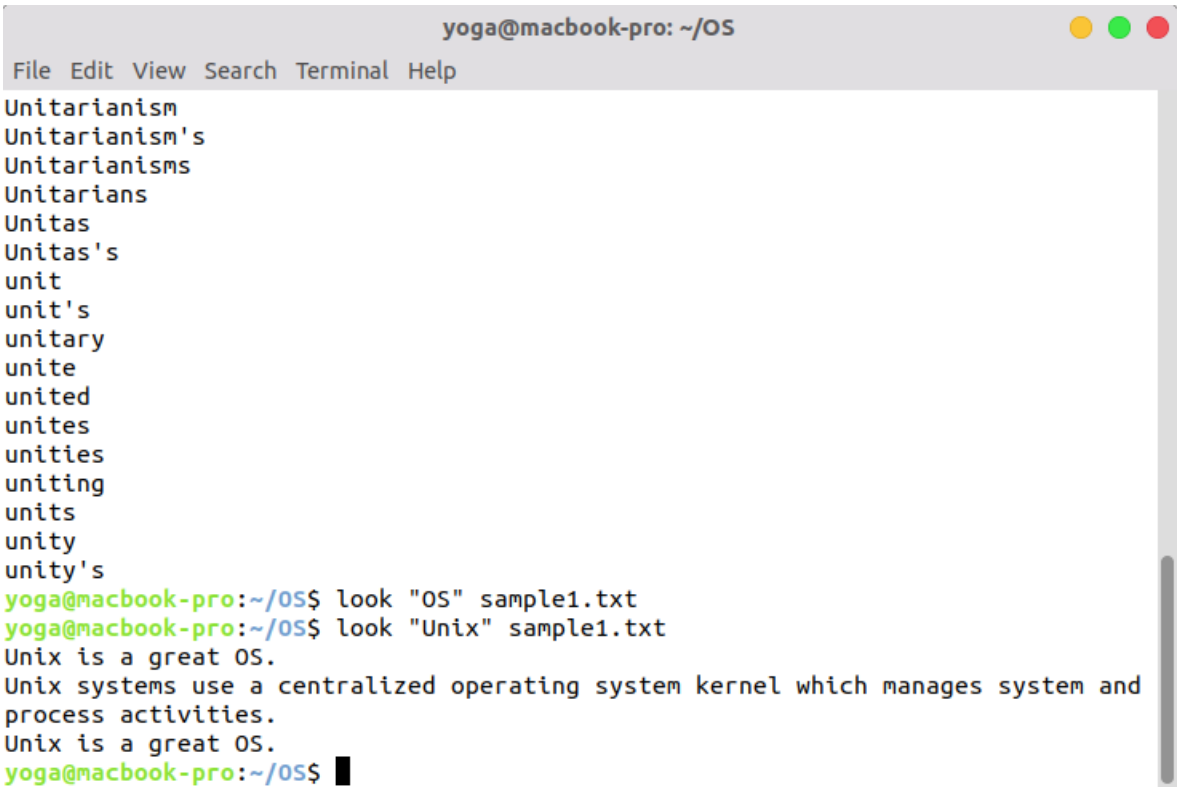
look -bf/-bd characters words// This option uses binary search on the given word list (Without filename,it searches in dictionary)

[OPTION]:

- -[string]:This option is used to search for the given string in a specified file
- -f:This option is used to ignore case sensitivity
- -t:This option is used to specify a string termination character

- -d:This command is used to compare only alphanumeric characters





47)wc command:

Description:

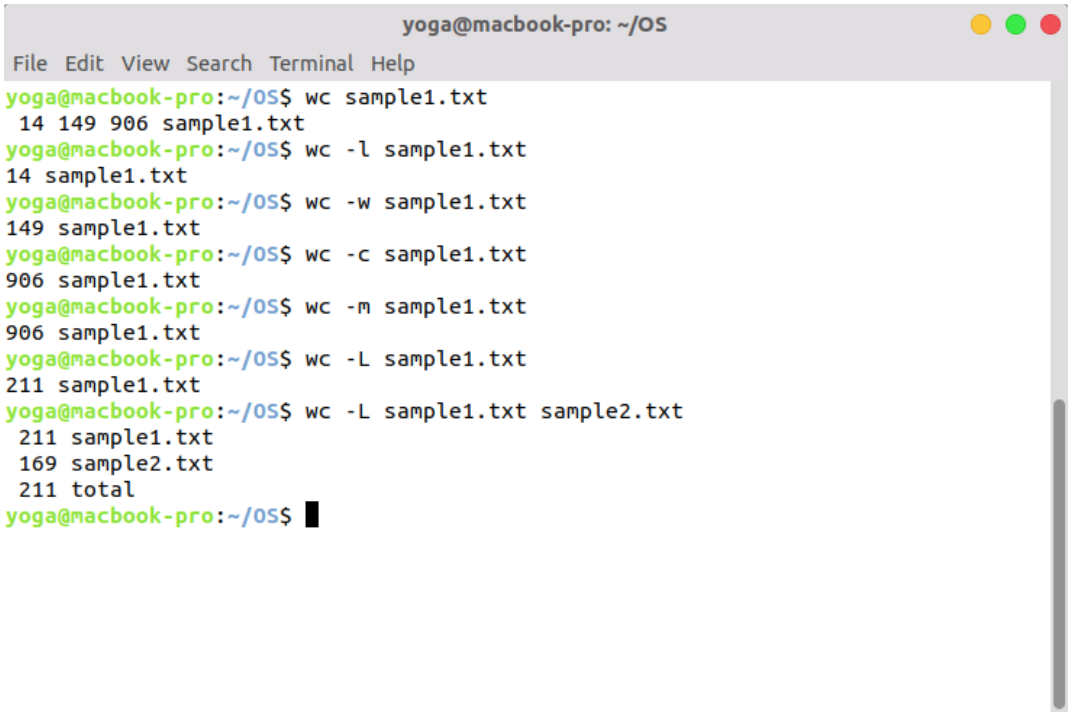
It is used for counting purpose(to count number of lines,word count ,byte and character count)

Syntax:

wc [OPTION].....[FILE].....

[OPTION]:

- -l:This command is used to print the number of lines
- -w:Prints the number of words
- -c:Prints the count of bytes
- -m:Prints the count of characters in a file
- -L:It is used to print out the length of longest line a file.



48)tac command:

Description:

This command is used to concatenate and print the files in reverse order.

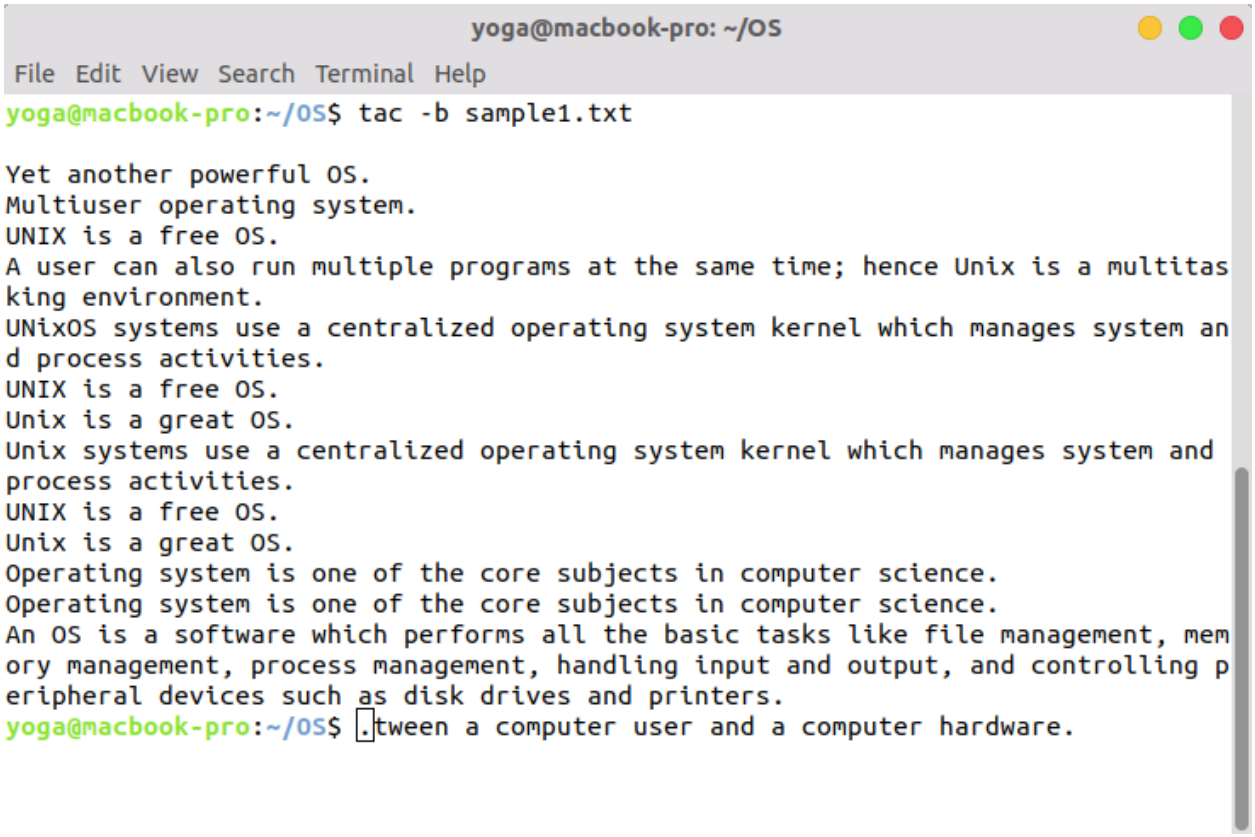
Syntax:

tac [OPTION]...[FILE]...

[OPTION]:

- -b:This command attaches a separator before each file
- -r:This option interprets separator as regular expression

- -s:This Option use String as separator



49)awk command:

Description:

Awk is a utility that enable user to write effective programs in the form of statements that define text patterns that are to be searched in each line of a document

Mostly used for pattern scanning and processing.

Also can be used for arithmetic and string operations

Using built in Variables:

NR:Keeps count of number of input records

NF:Keeps count of number of fields

FS:Contains the field separator character

RS:Stores the current record separator character

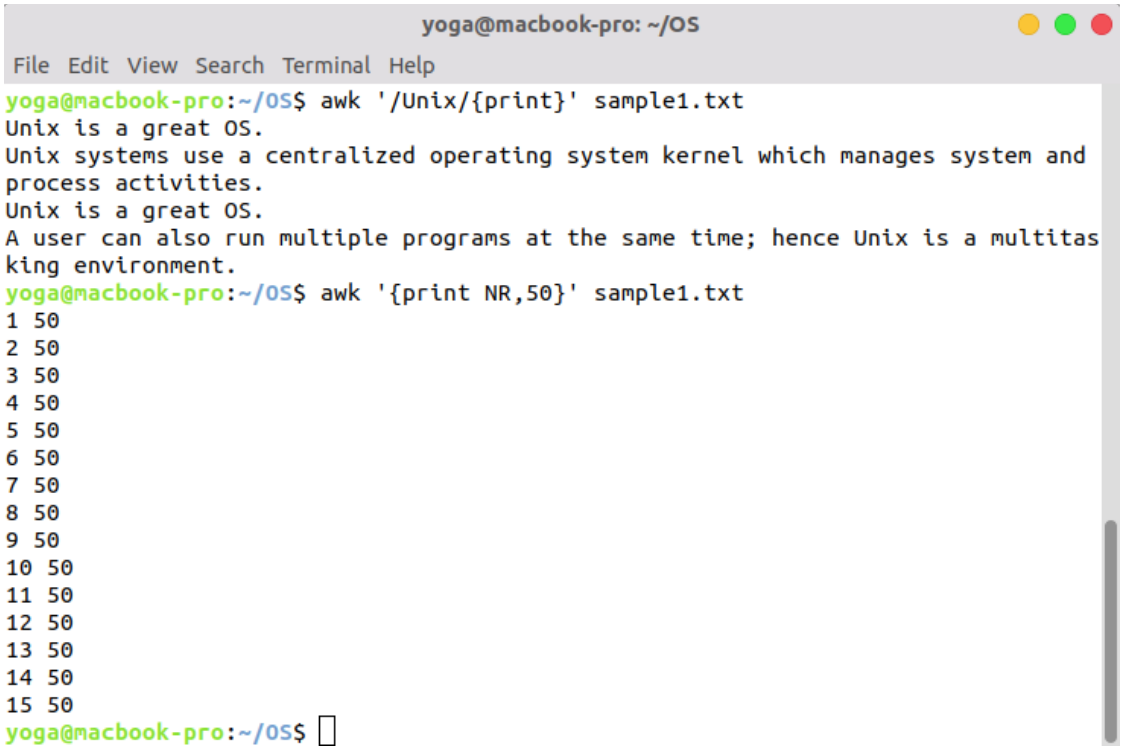
OFS:Stores the current output field separator

ORS:Stores the current output record separator

Syntax:

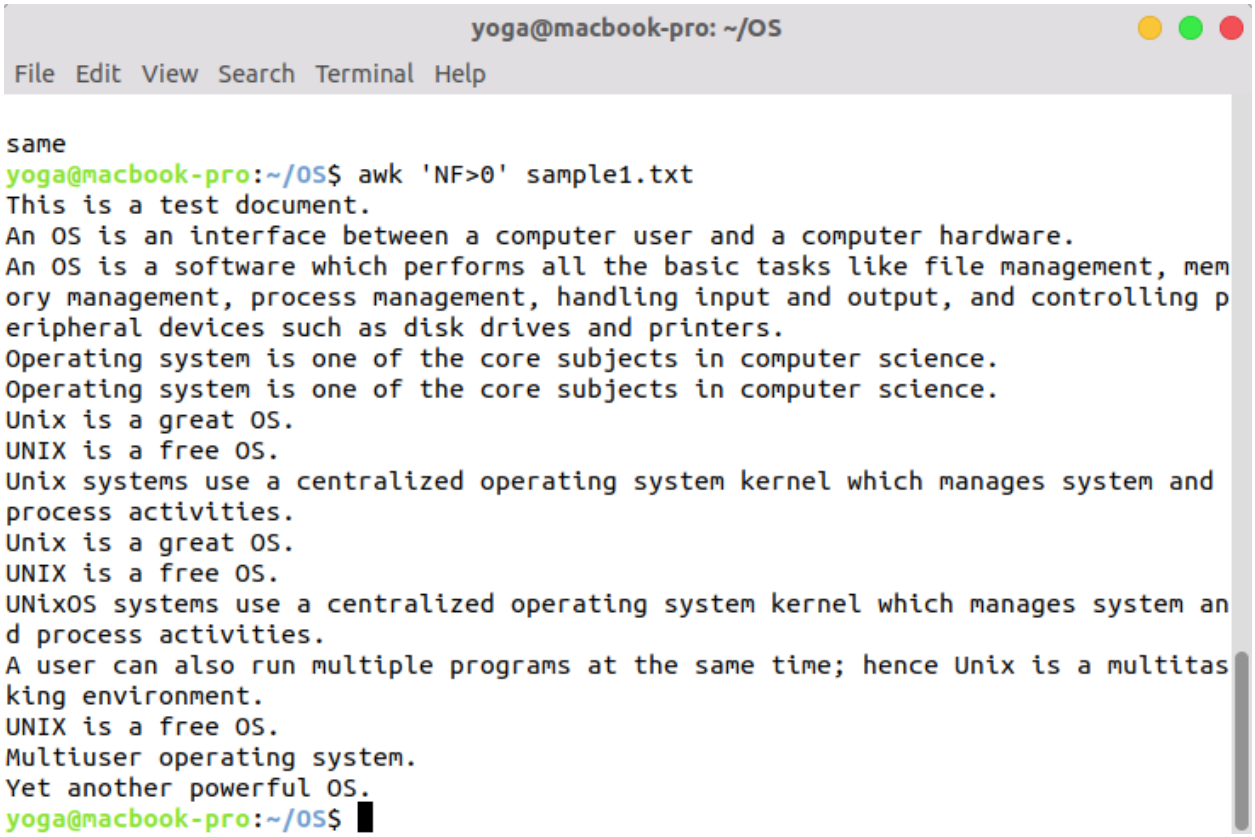
- awk options ‘selection_criteria {action}’ input-file>output-file
- awk ‘{print}’ FILE// Prints every line of data from the file

- awk ‘ / pattern / {print}’ FILE Print lines of a file that matches the pattern
- awk ‘{print NR,$0}’ FILE//Prints Line number

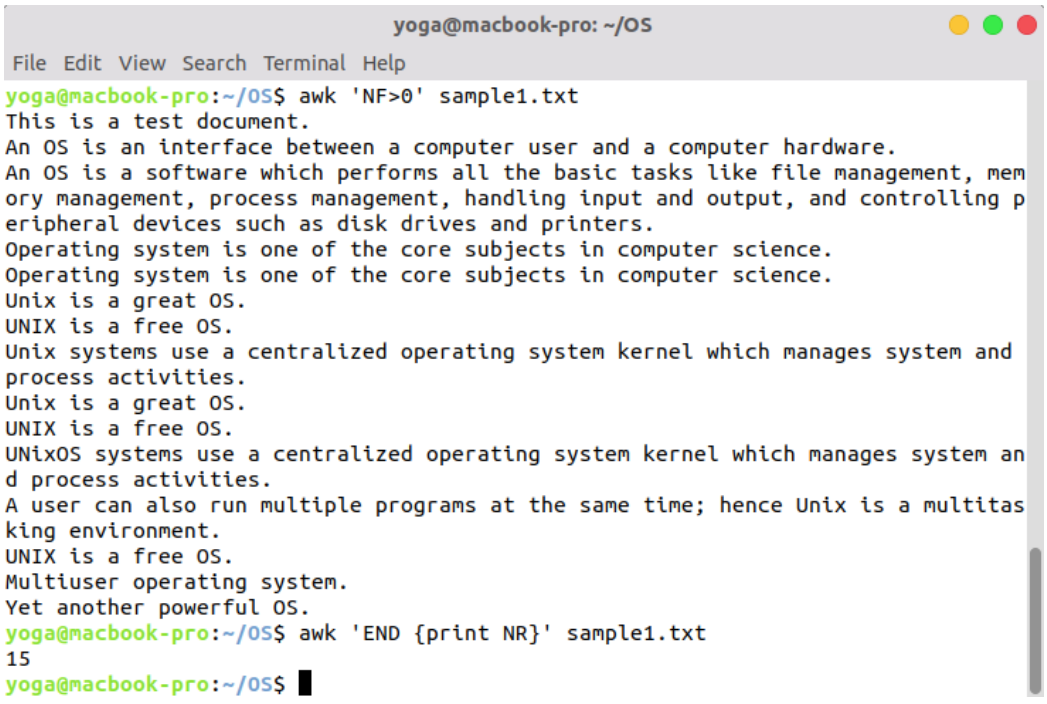


- awk ‘{print $n}’ FILE// Prints nth row data

- awk ‘NF >0’ FILE //Prints any non-empty line



- awk ‘END {print NR}’ FILE// Displays the count of lines



50)jobs command:

Description:

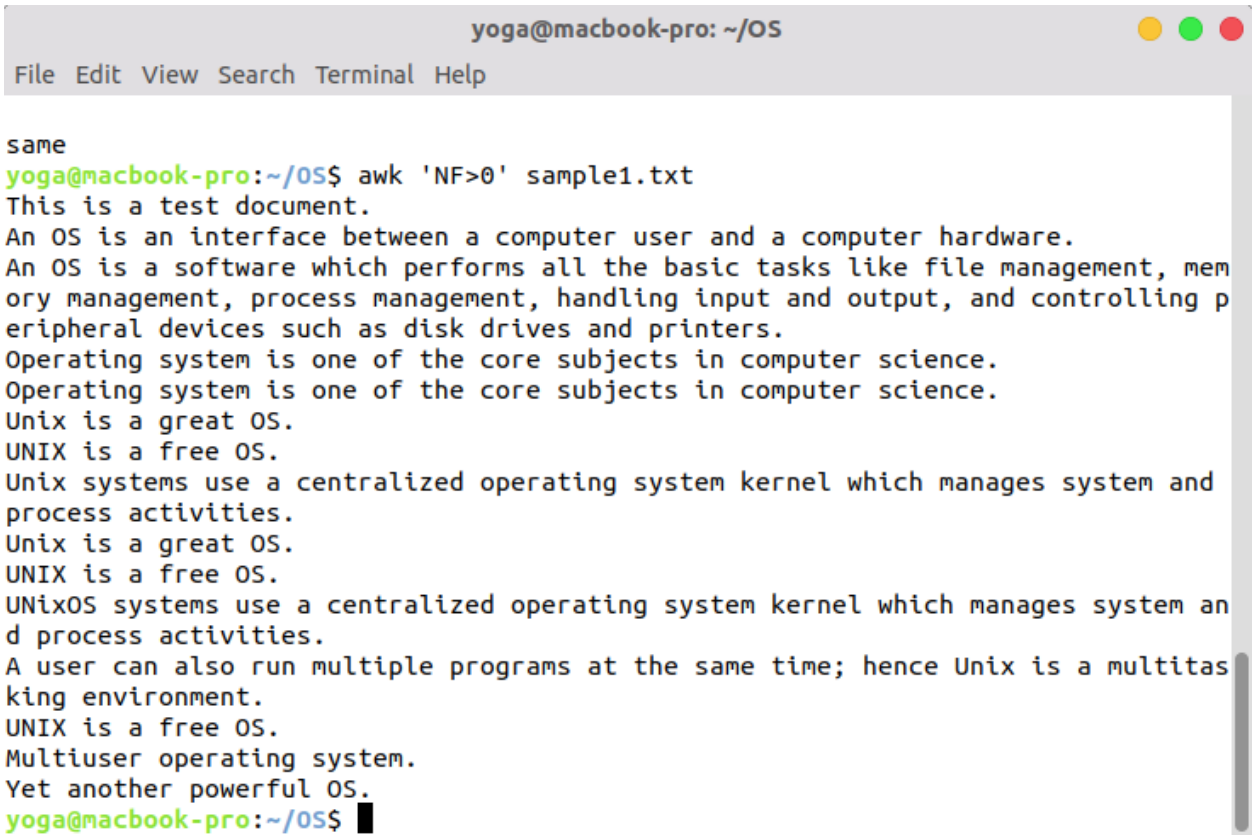
This command is used to list the jobs that are running in the background and in the foreground.

Syntax:

jobs [OPTION]//By Default jobs does not require any OPTIONS

[OPTION]:

- -l:Lists process IDs in addition to the normal information.
- -p:Lists process IDs only.
- -r:Restricts output to running jobs.
- -s:Restricts output to stopped jobs.



2. Create a directory and create a file inside that directory.

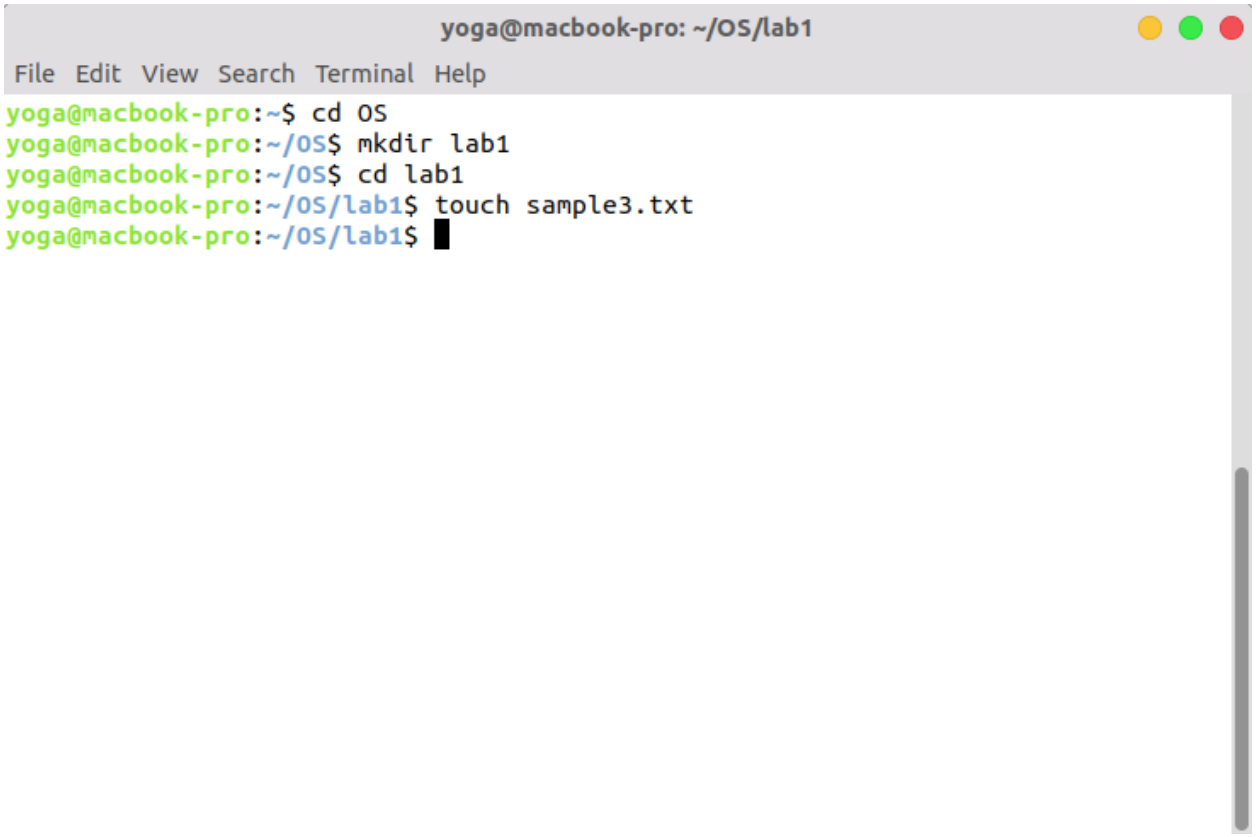
ANS:

i)mkdir <directory_name> creates the required directory

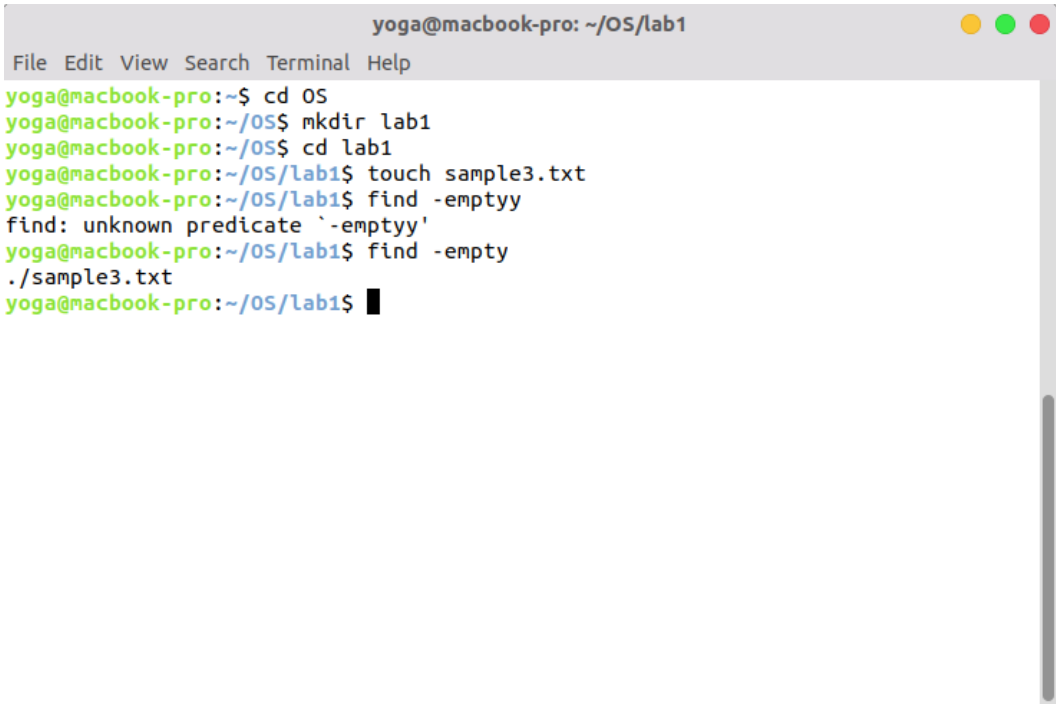
ii)cd <directory_name> to move to that specified directory

iii)cat > <filename> to create the file

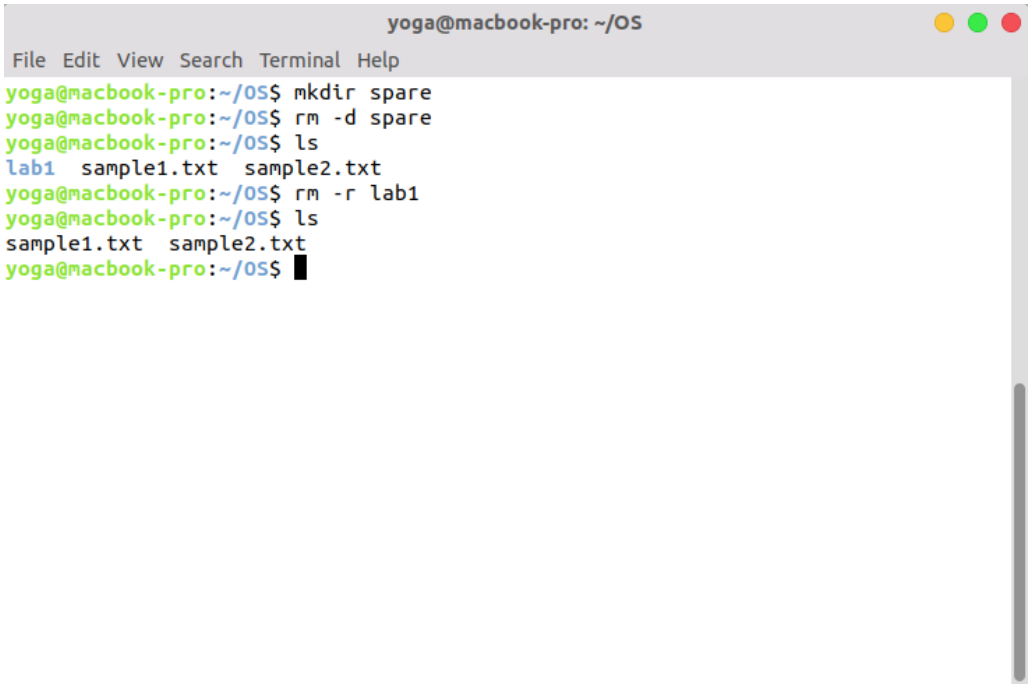
iv)touch <filename> to create the file



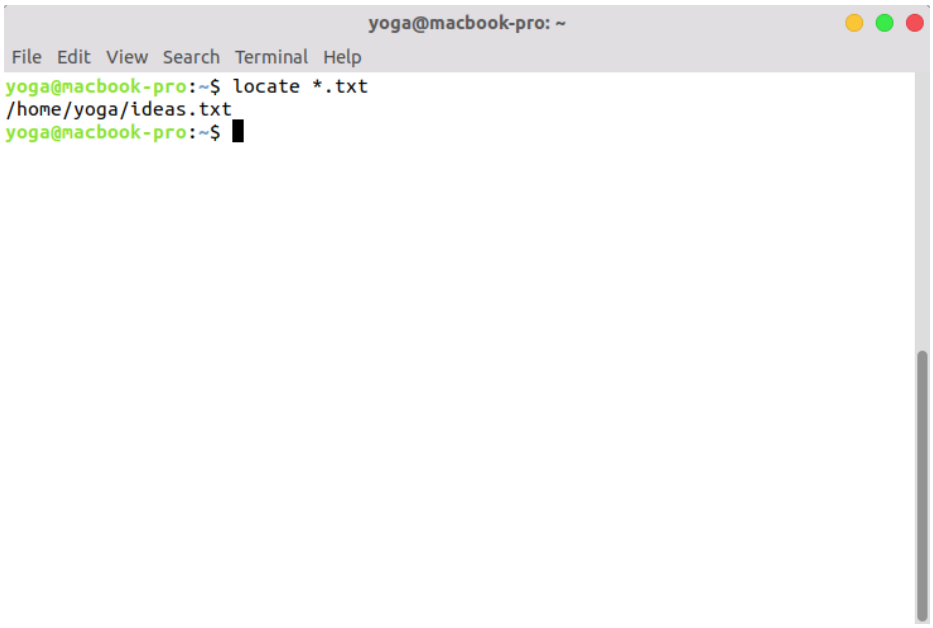
3. List the files and directories that are empty in a working directory.
ANS:find -empty



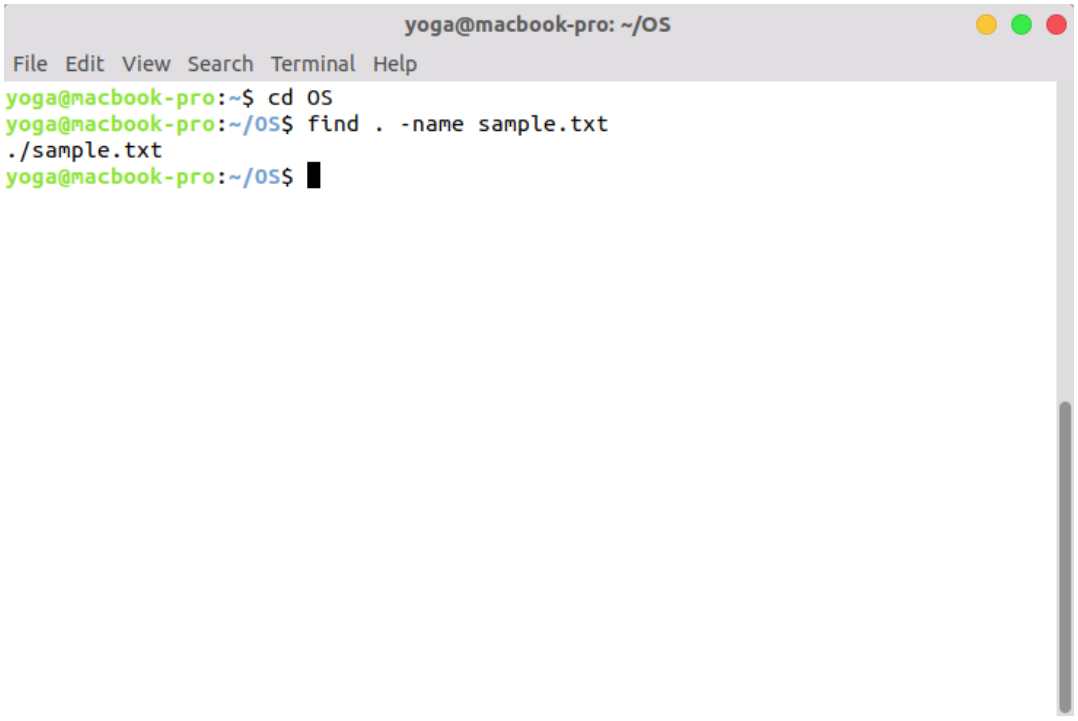
4. Show commands to delete empty and non-empty directory.
ANS:
rm -d to delete empty directory rm and
rm -r to delete non empty directory



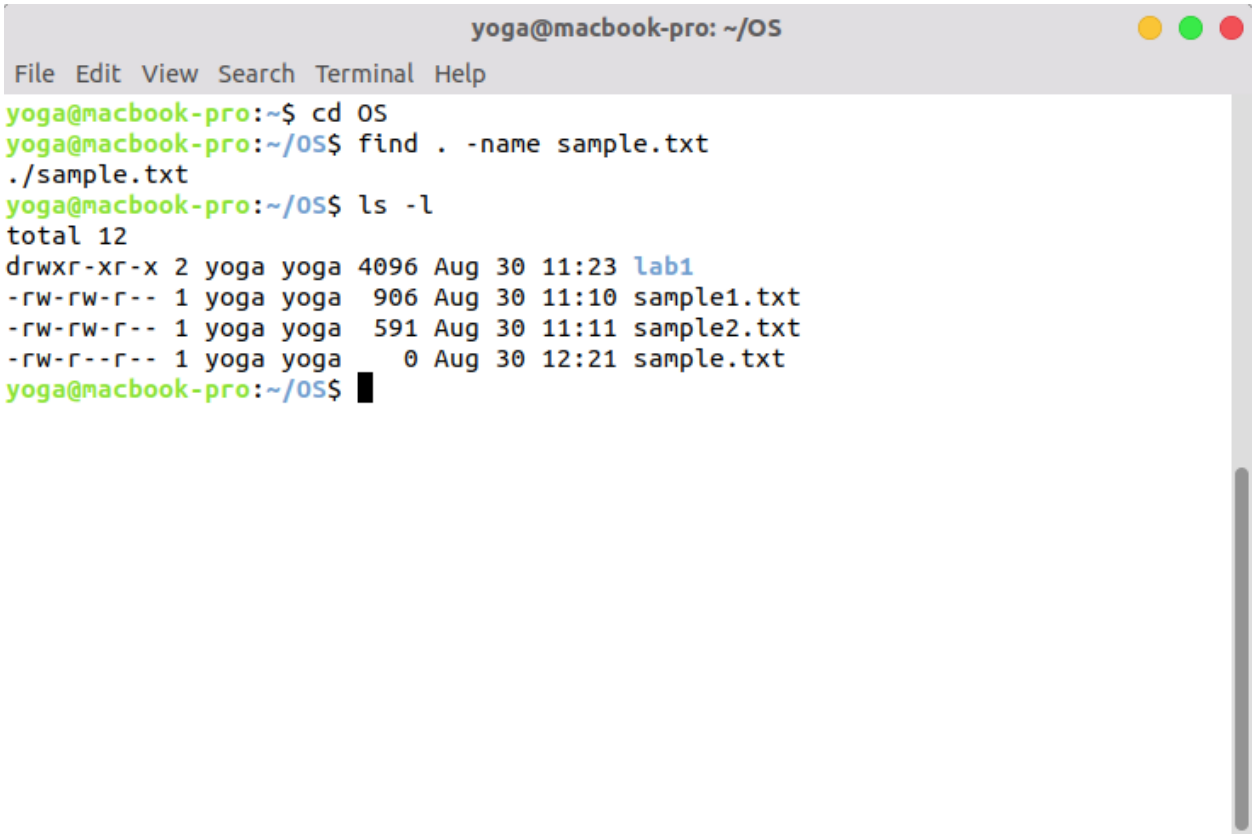
5. Find the location of the input files using locate and find command.
Locate Command:
ANS:locate *.txt



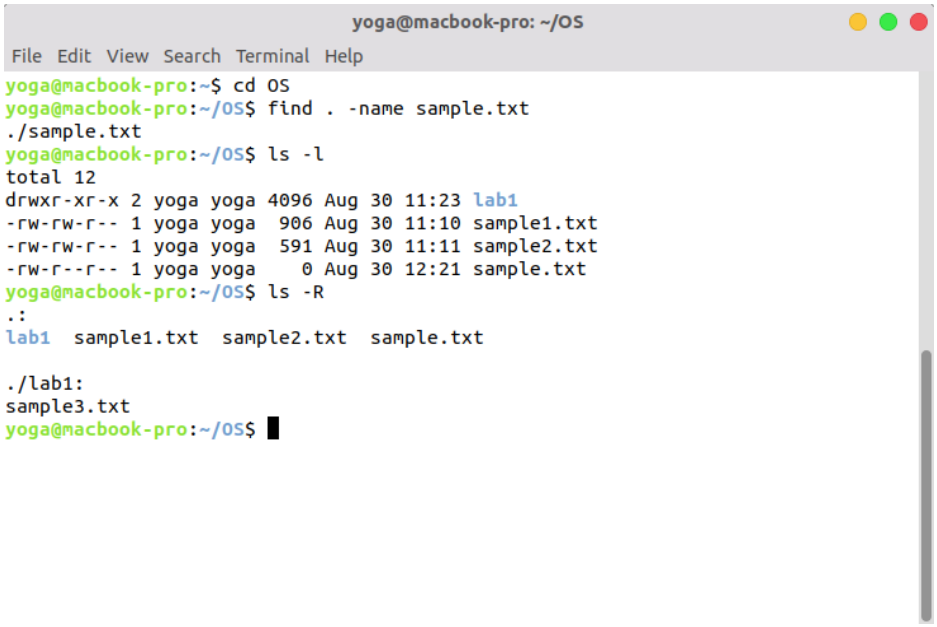
ANS:Find Command:find directoryname -name *.txt



6. View the user permissions and ownership of the files in the current directory and change the ownership of some selected files to another user.
ANS:ls -l

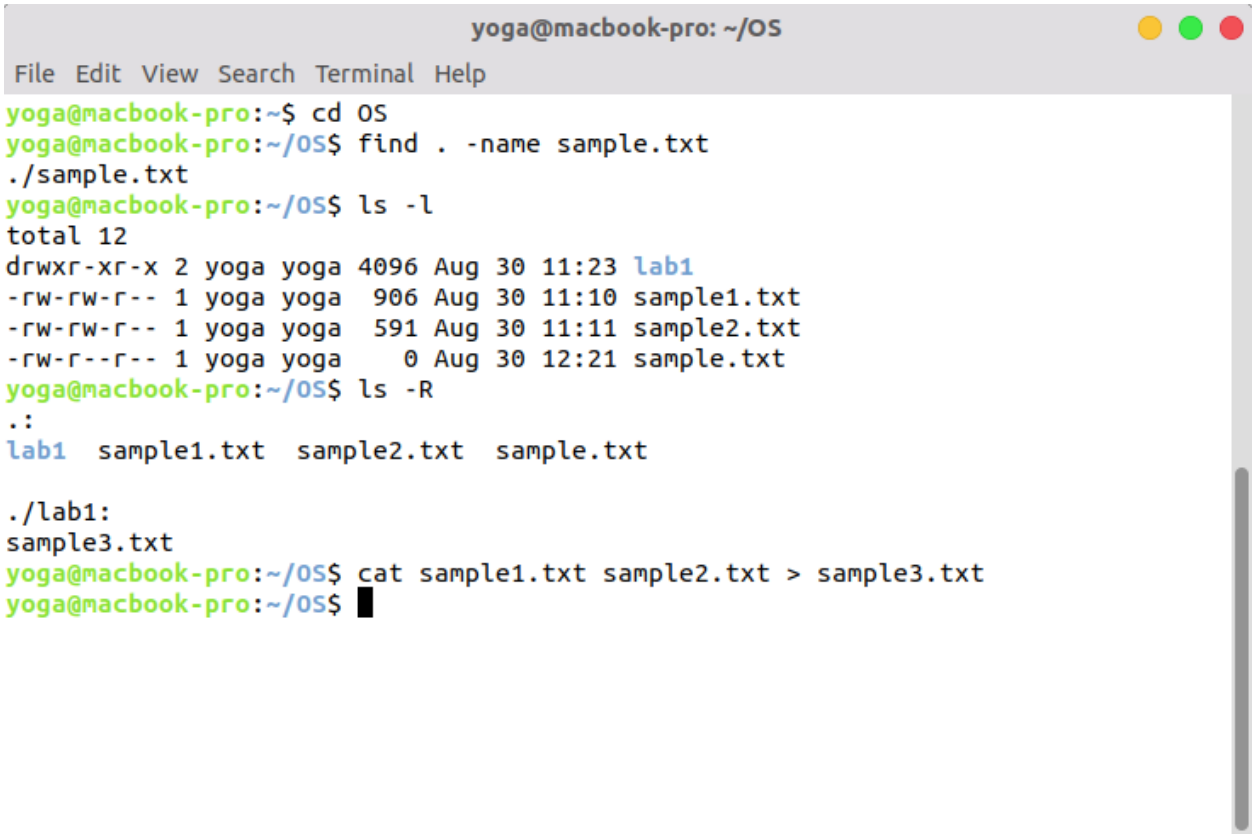


7. List all the files in the current directory and subdirectories.
ANS:ls -R

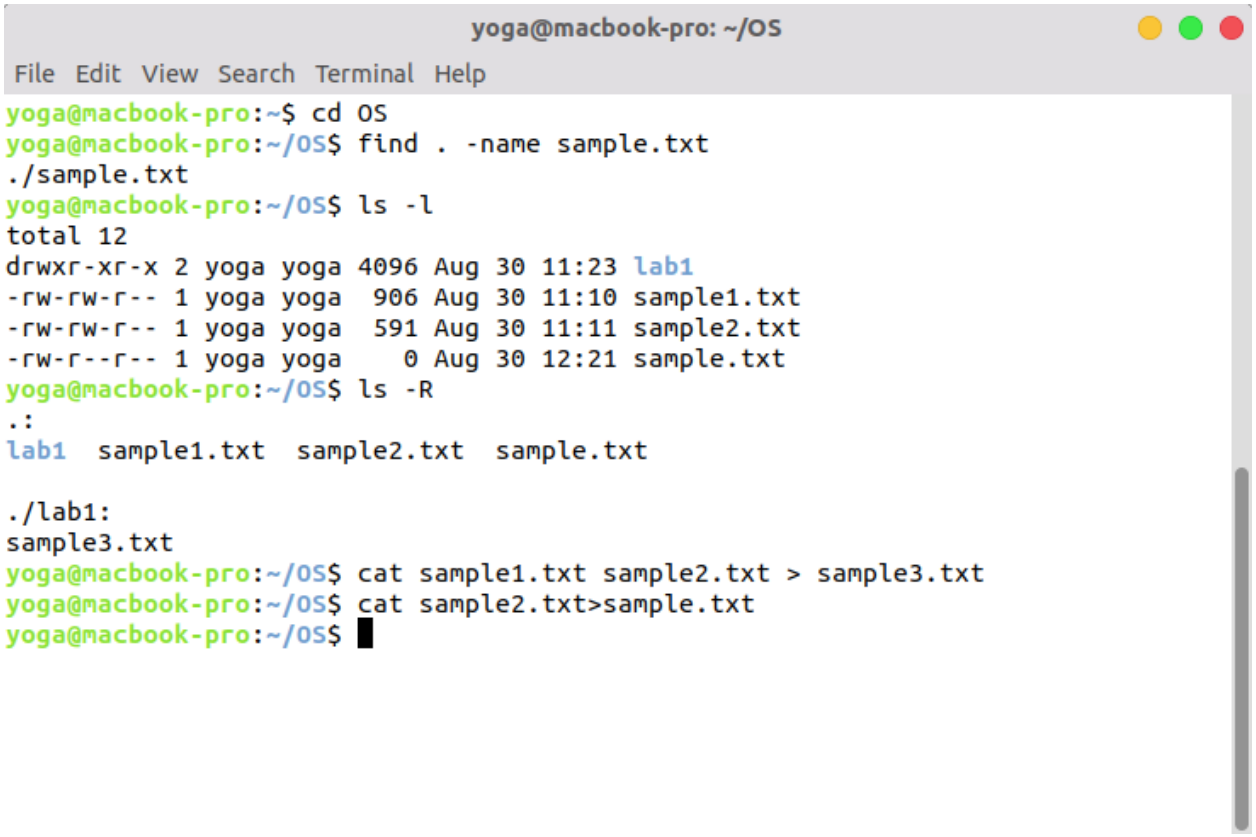


8. Concatenate the two input files: “sample1.txt” and “sample2.txt” and save it to a new file named “Input”.

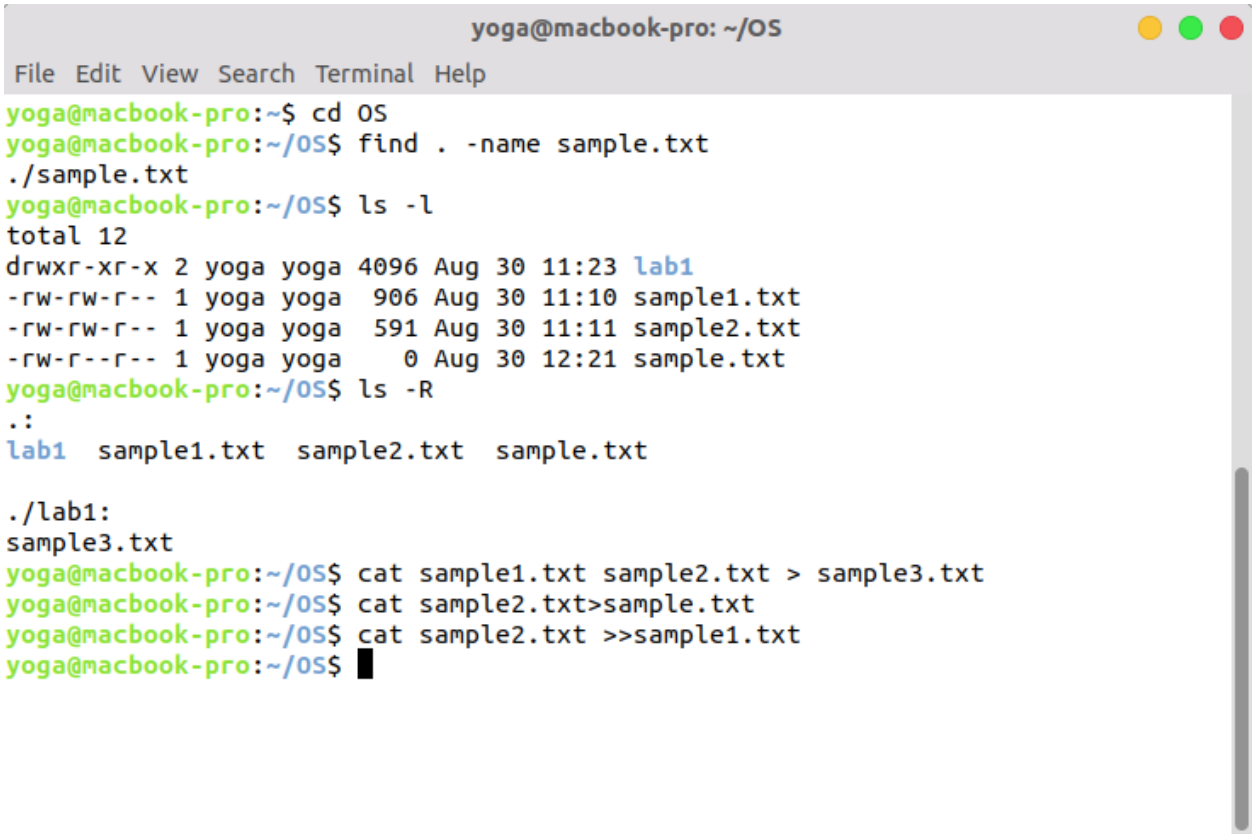
ANS:cat sample1.txt sample2.txt > sample3.txt



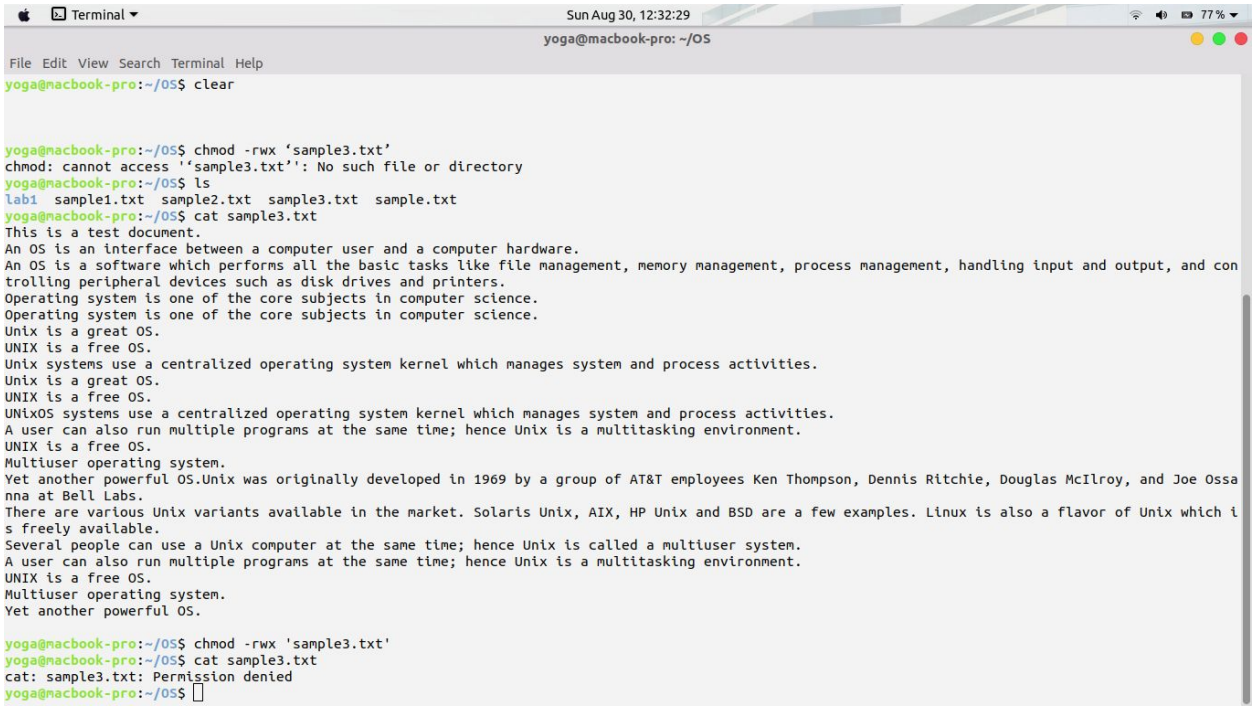
9. Copy the contents of file ‘sample2.txt’ to ‘sample.txt’
ANS:cat sample2.txt>sample.txt



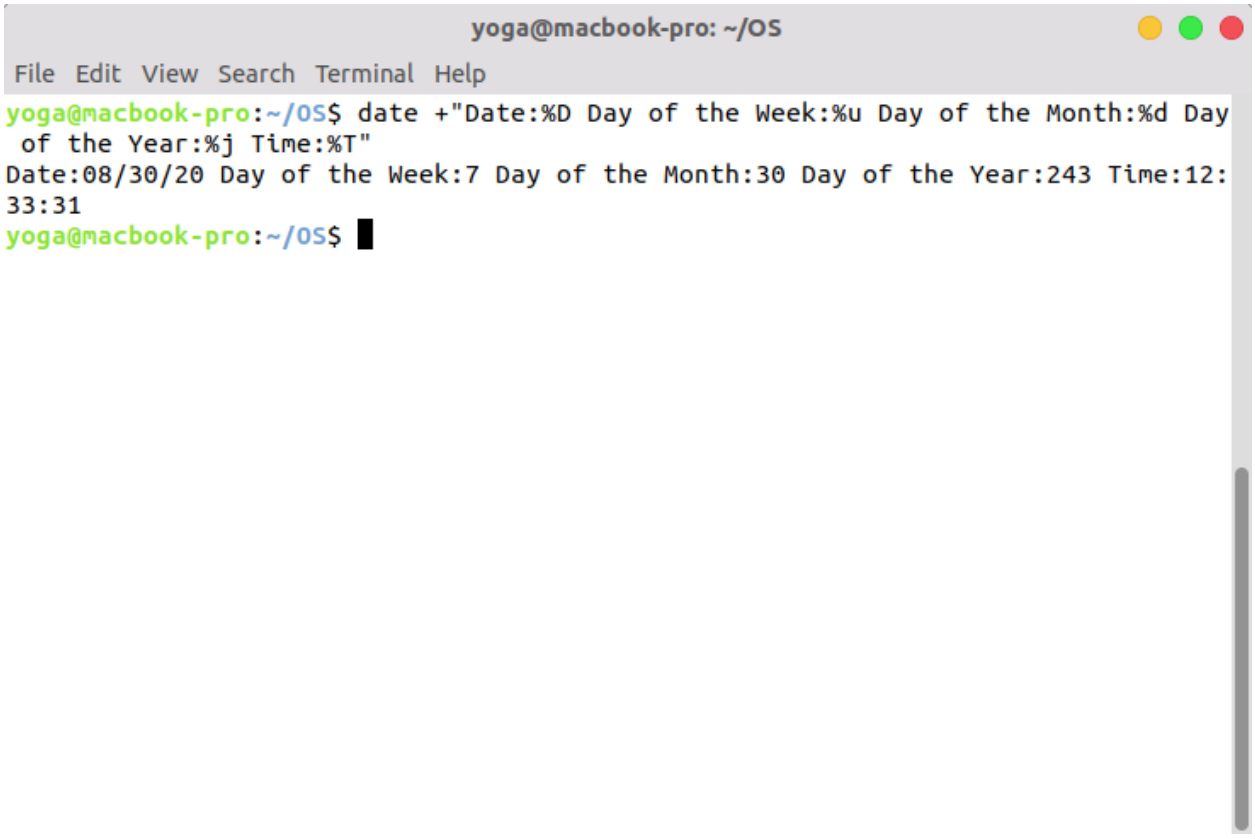
10. Append the file contents of input file ‘sample2.txt’ to the end of the first input file ‘Sample1.txt’.
ANS:cat sample2.txt >>sample1.txt



11. Remove the permission for the users to read, write and execute the file ‘sample.txt’.
chmod -rwx ‘sample.txt’

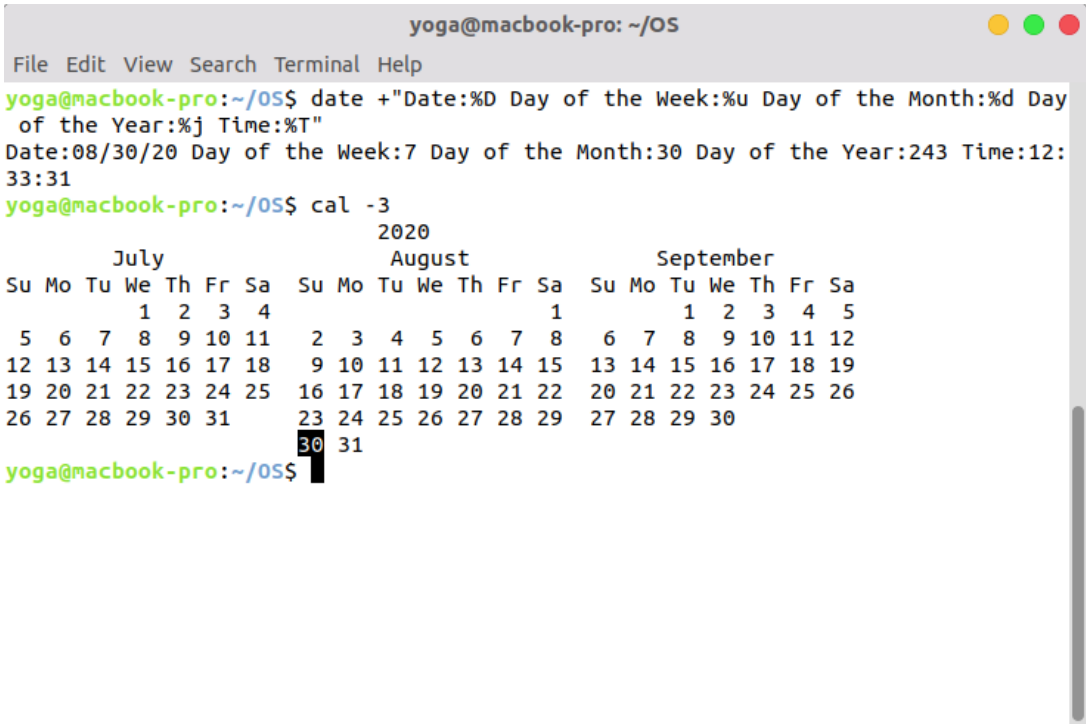


12. Display the current date with the day of week, month, time and the year.
ANS:
date +"Date:%D Day of the Week:%u Day of the Month:%d Day of the Year:%j Time:%T"
%D displays Date
%u displays Day of the week
%d displays Day of the Month with leading zeroes
%j displays Day of the year with upto two leading zeroes
%T displays Time in HH:MM:SS format

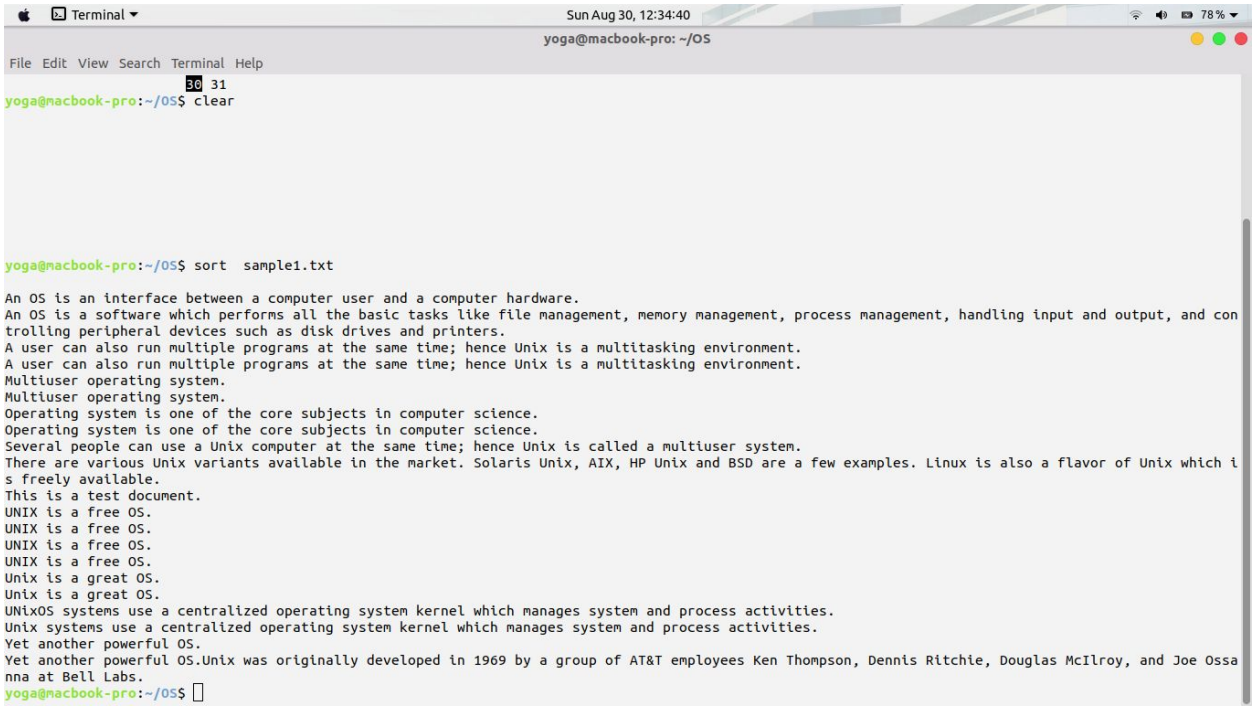


13. Show the calendar of previous, current and next month.

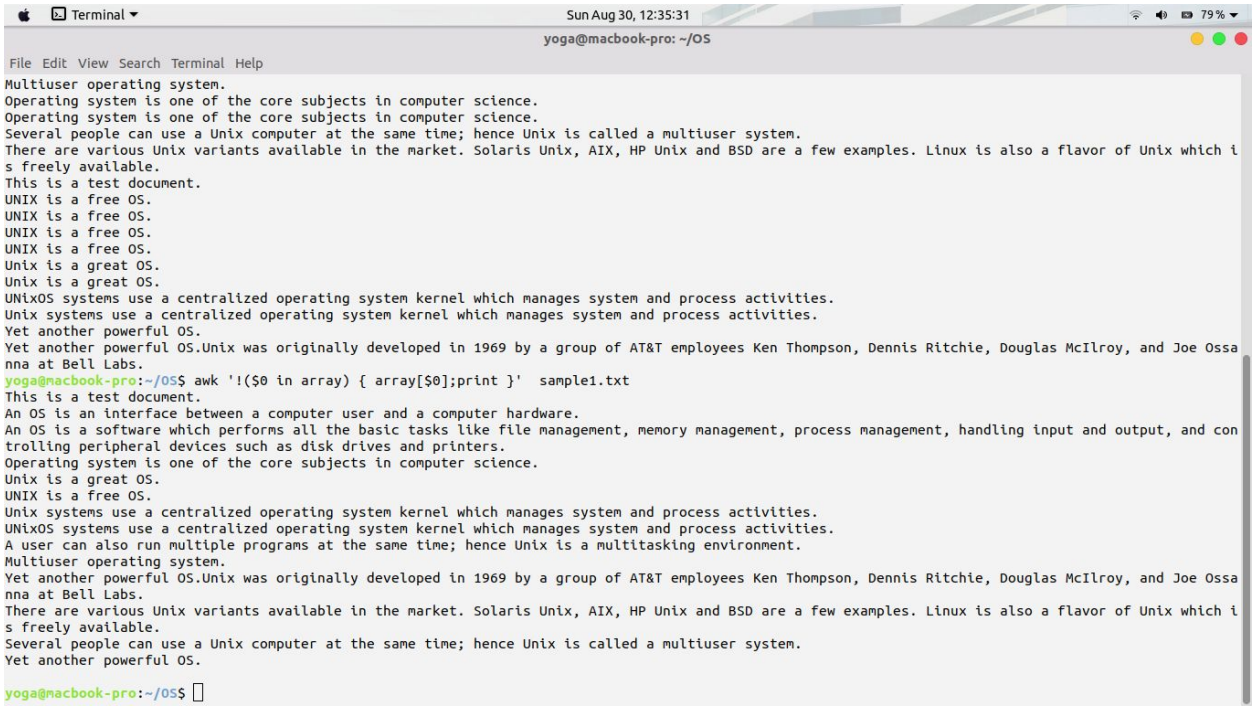
ANS:cal -3



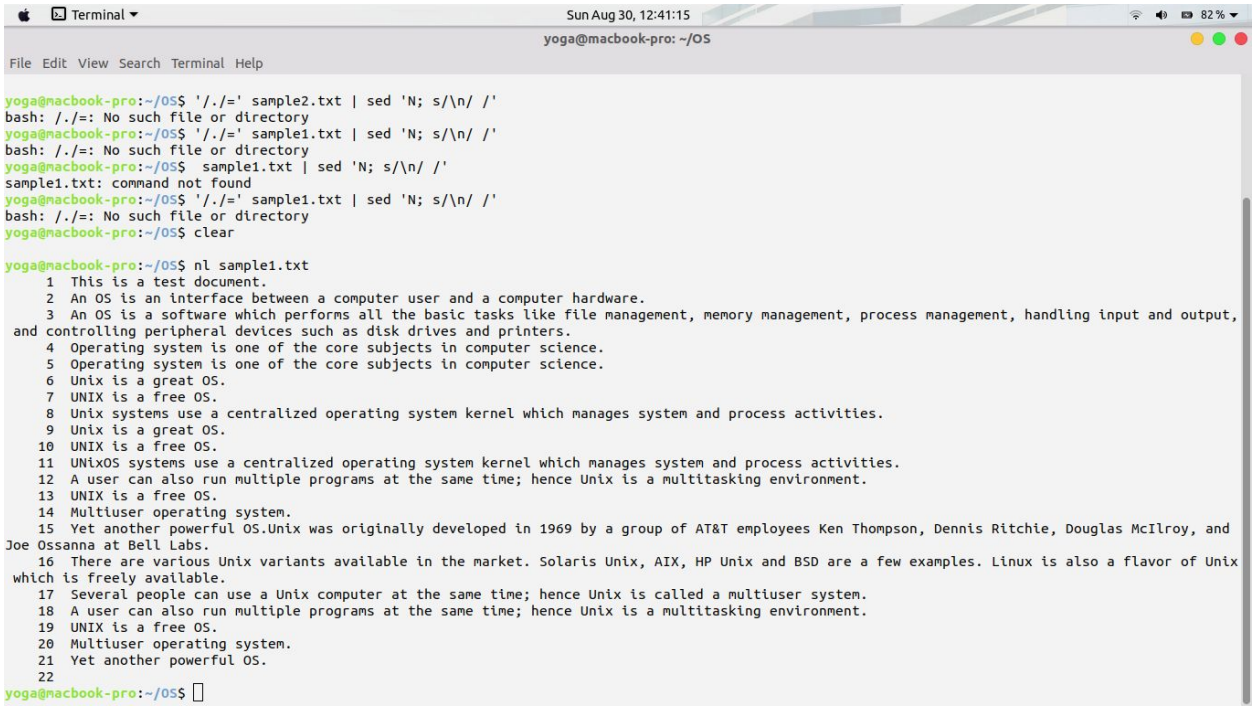
14. Sort the contents of the file ‘sample1.txt’ in alphabetical order.
ANS:sort sample1.txt



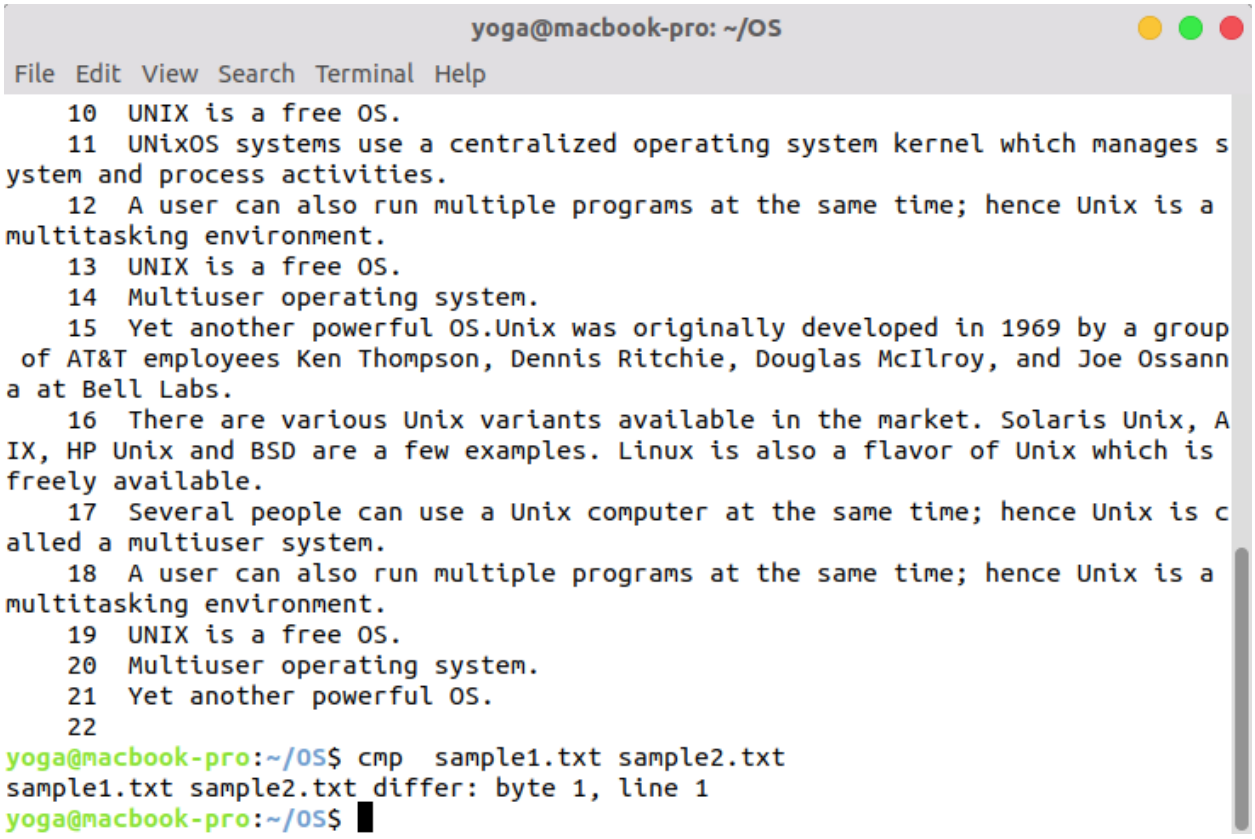
15. Erase duplicate records in the file ‘sample1.txt’ and display only the unique records
ANS:awk '!($0 in array) { array[$0];print }' sample1.txt



16. Add line numbers to the file ‘sample2.txt’
ANS:
nl sample1.txt



17. Find out whether the two pairs of input files are identical or not.
Compare sample1.txt and sample2.txt
ANS:cmp sample1.txt sample2.txt



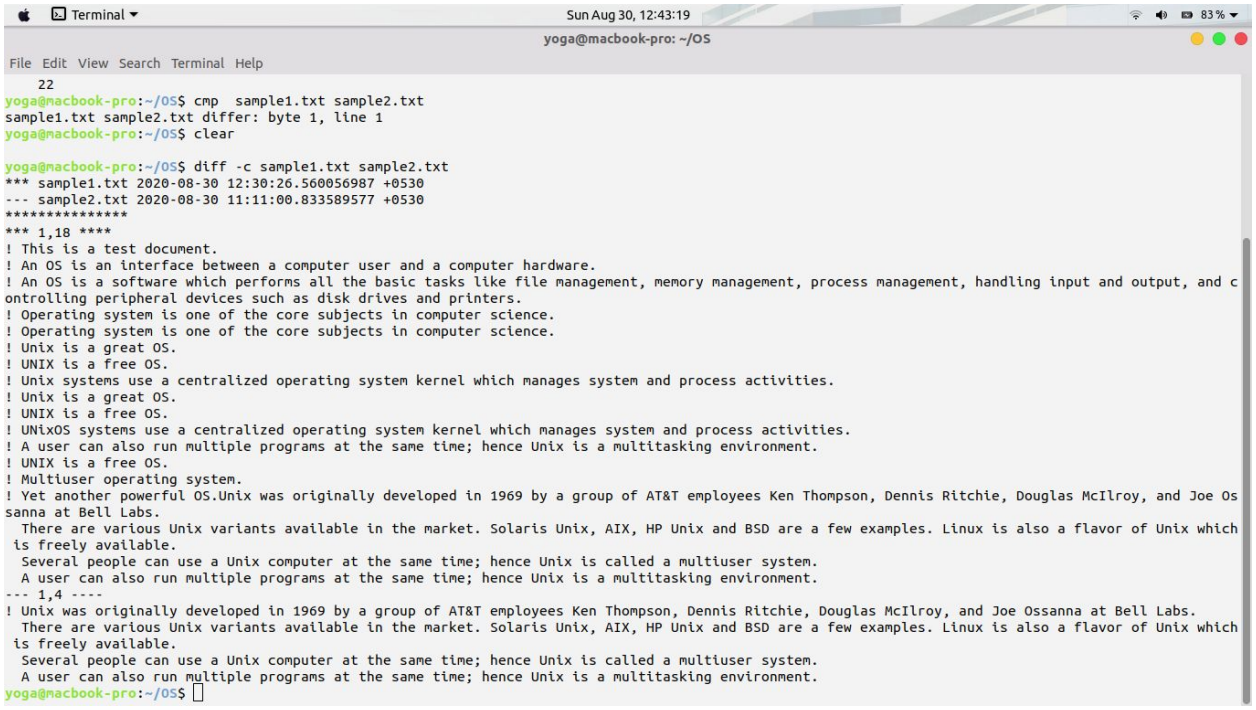
Displays where the first difference is found.Hence the files are not identical from the above screenshot.

18. Show how the input file “sample1.txt” differs line by line from “sample2.txt” in context and unified mode.

ANS:

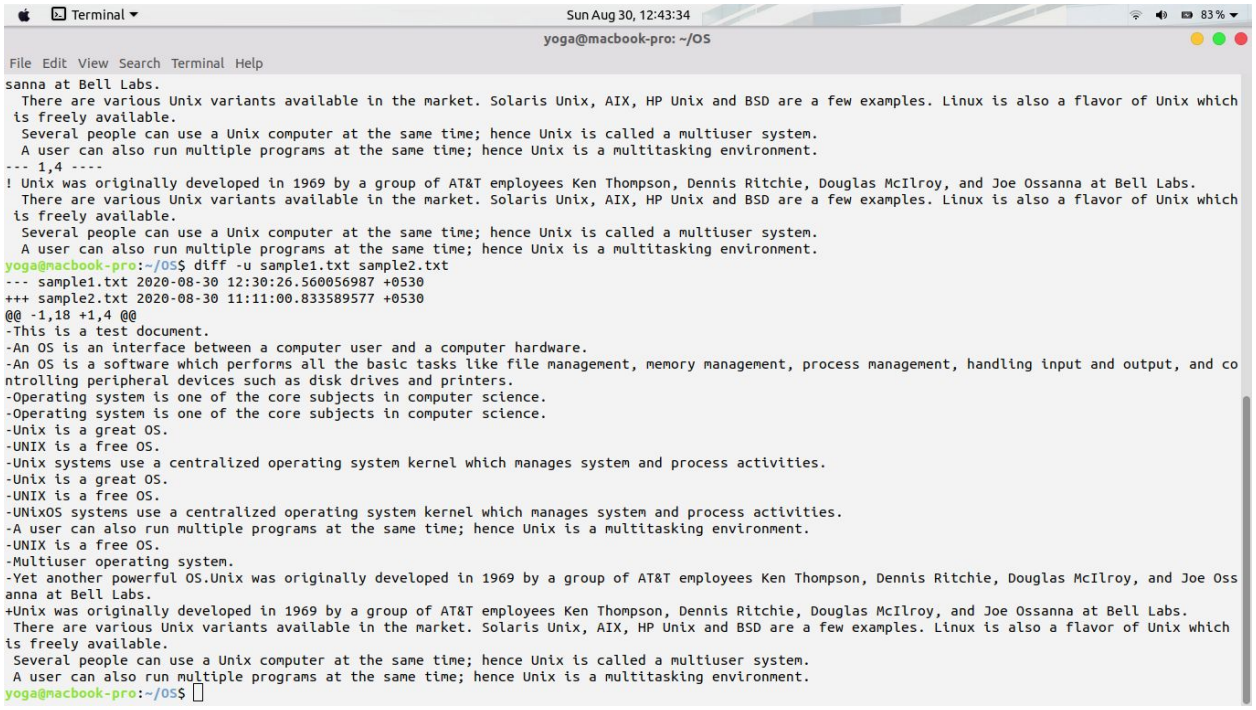
Context mode:

diff -c sample1.txt sample2.txt



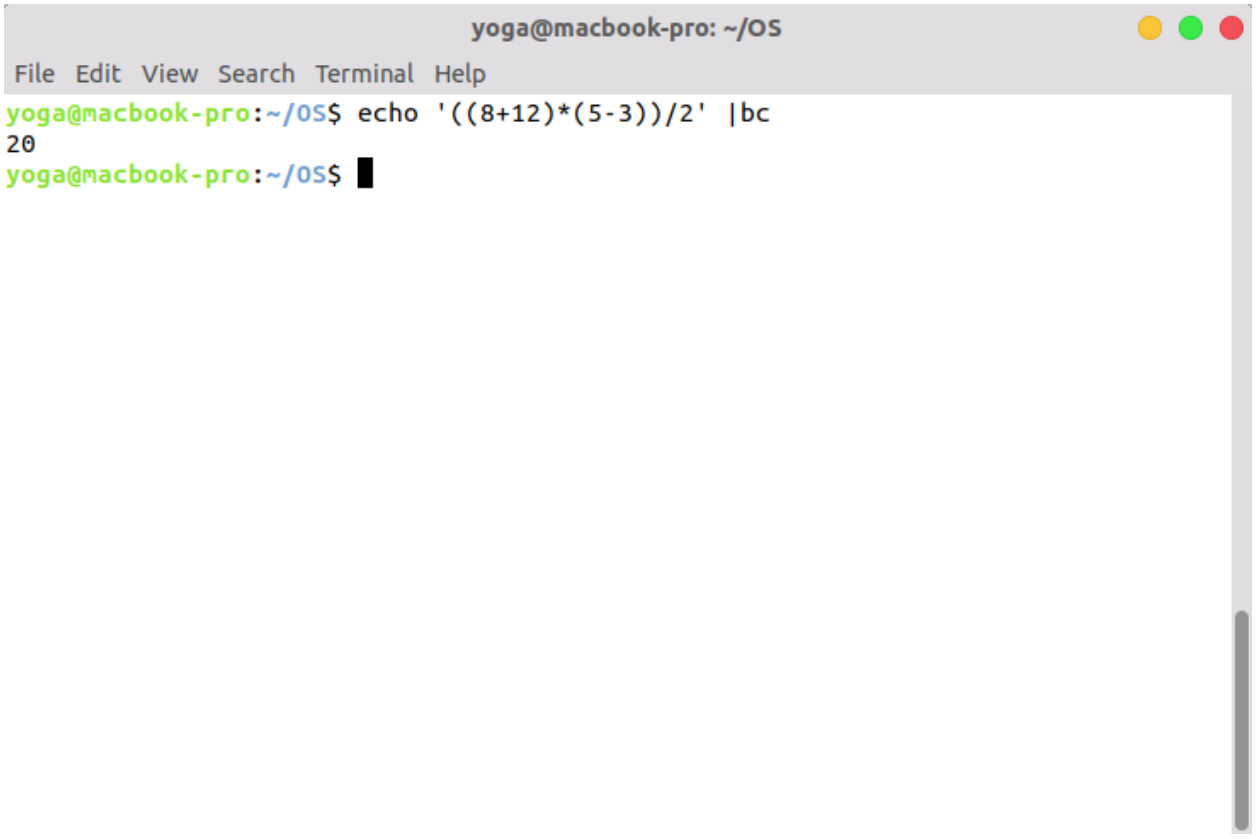
Unified Mode:

diff -u sample1.txt sample2.txt

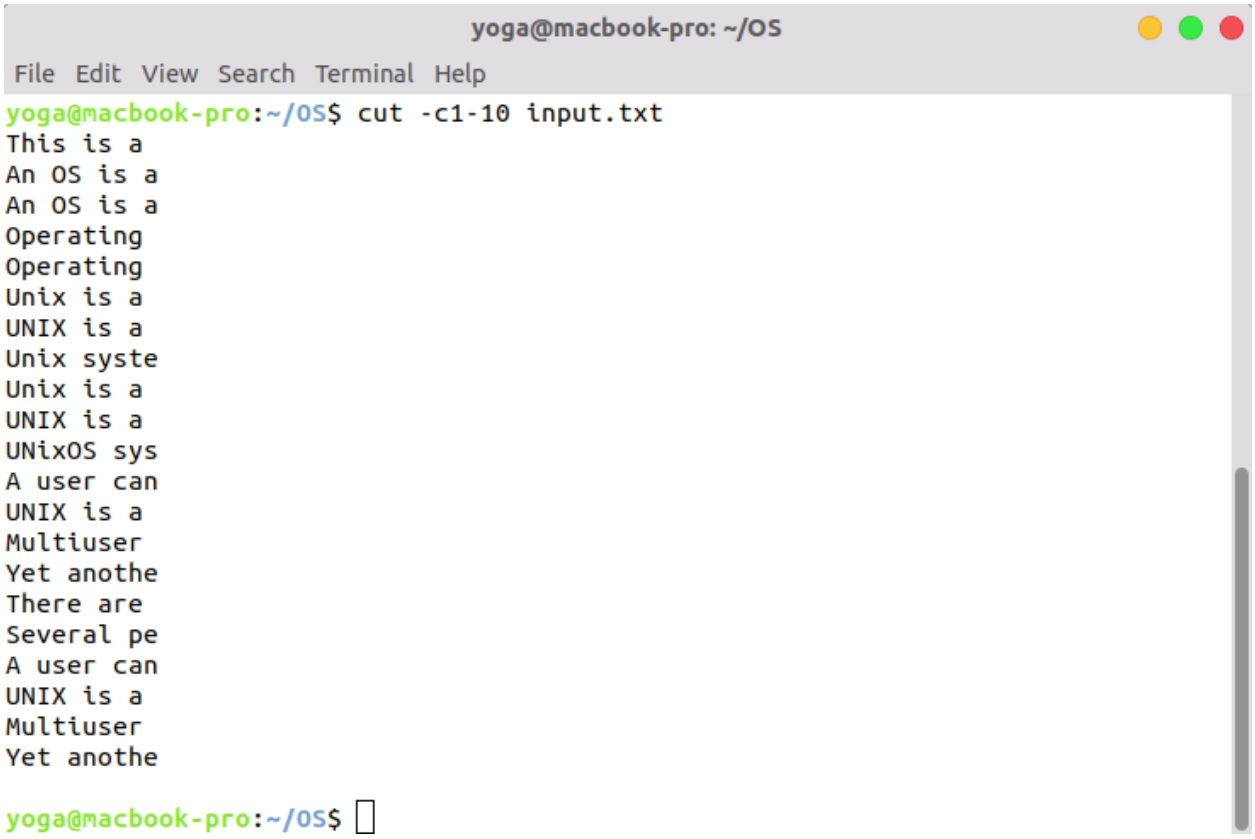


19. Solve the arithmetic expression: ((8+12)*(5-3))/2 using linux commands

ANS:echo '((8+12)*(5-3))/2' |bc

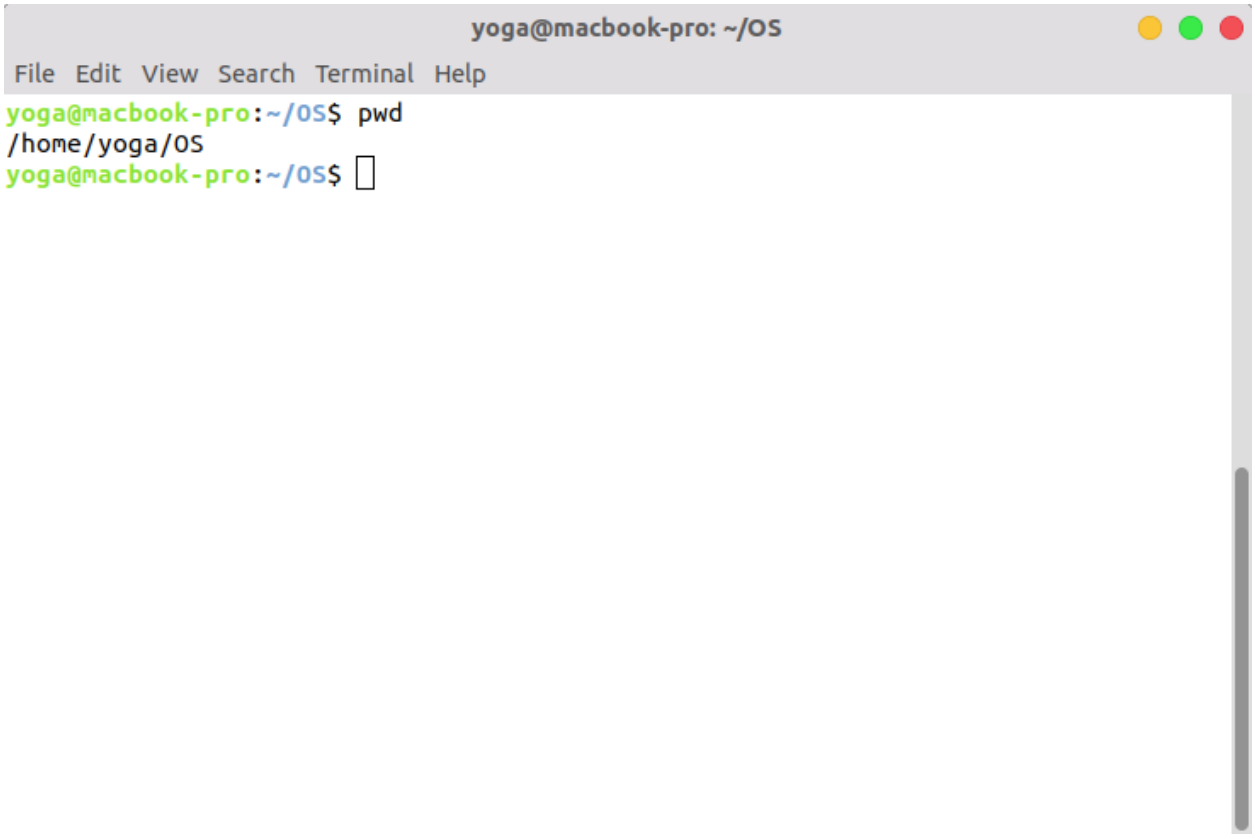


20. Cut and display the first 10 characters of every line of the file “Input.txt”.
ANS:cut -c1 -10 Input.txt



21. Print the name of the current working directory.

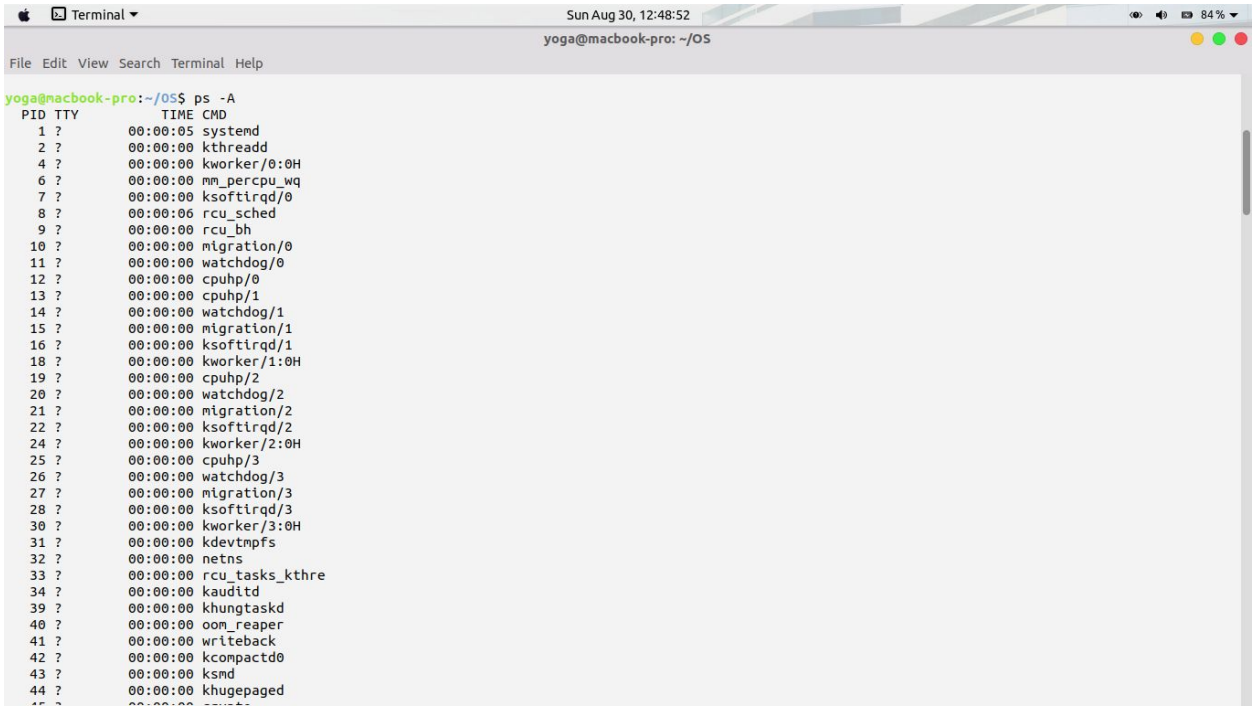
ANS:pwd



22. Process Status

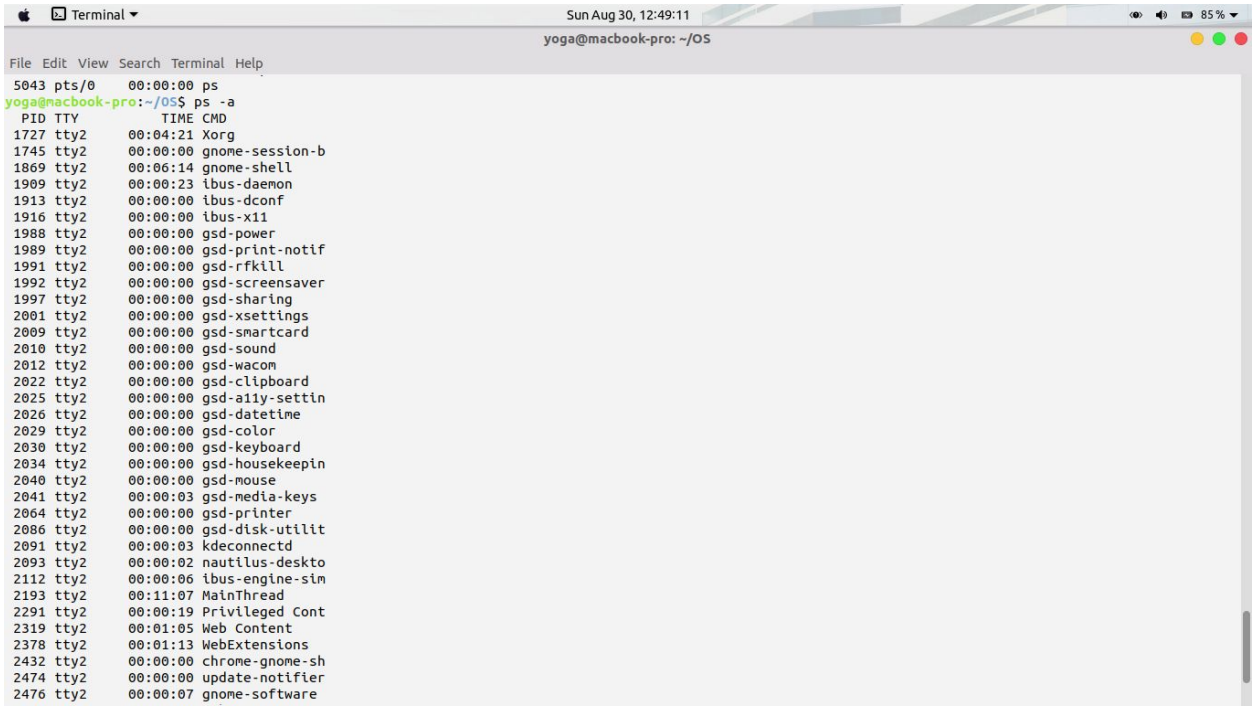
a. List all the running processes with their corresponding PIDs.

ANS:ps -A



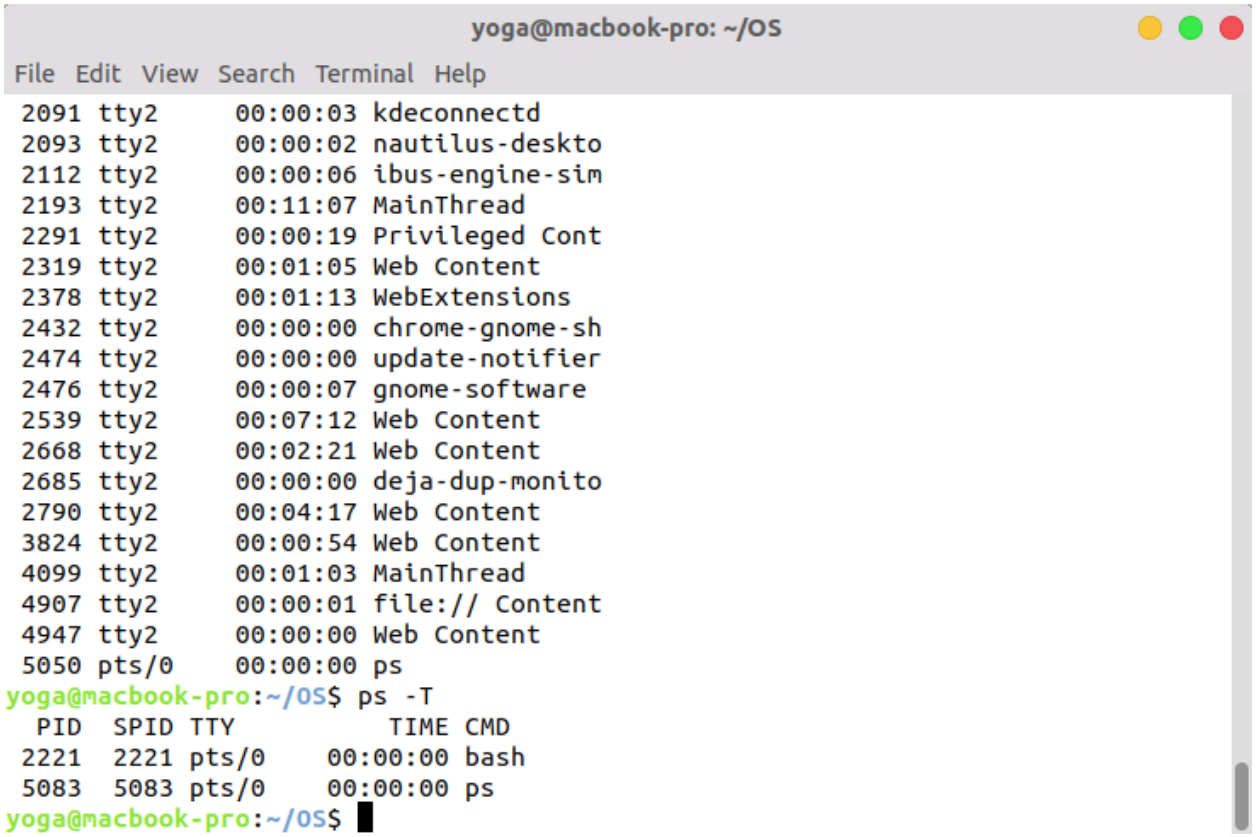
b. List the processes that are not associated with the terminal.

ANS:ps -a

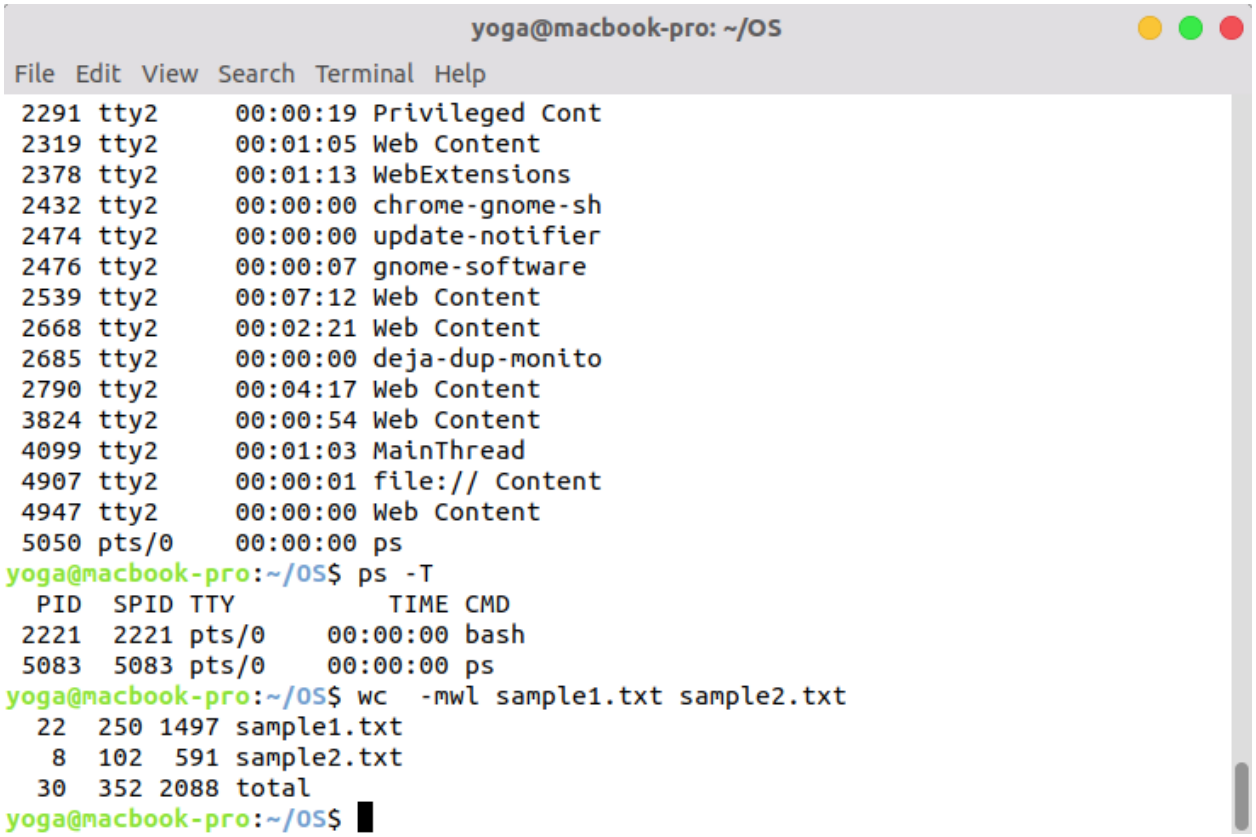


c. List the processes that are associated with the terminal.

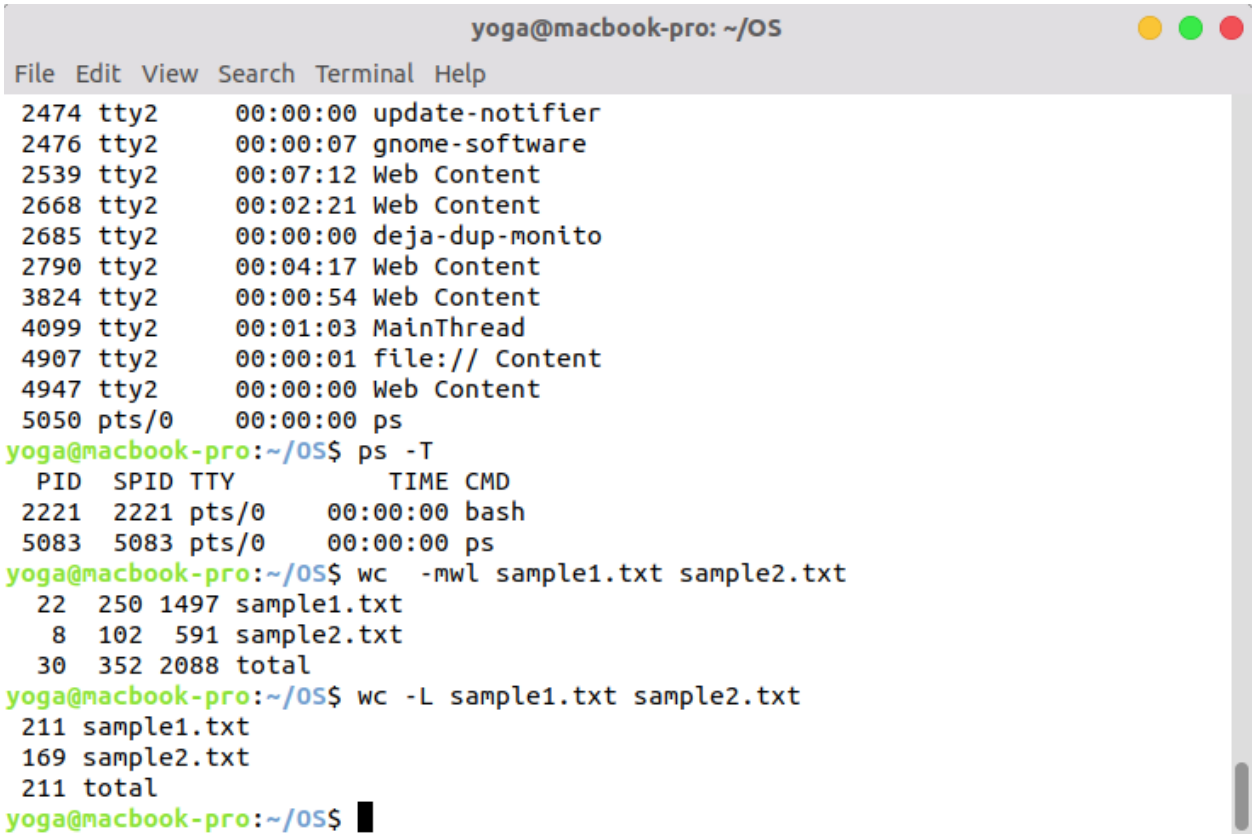
ANS:ps -T



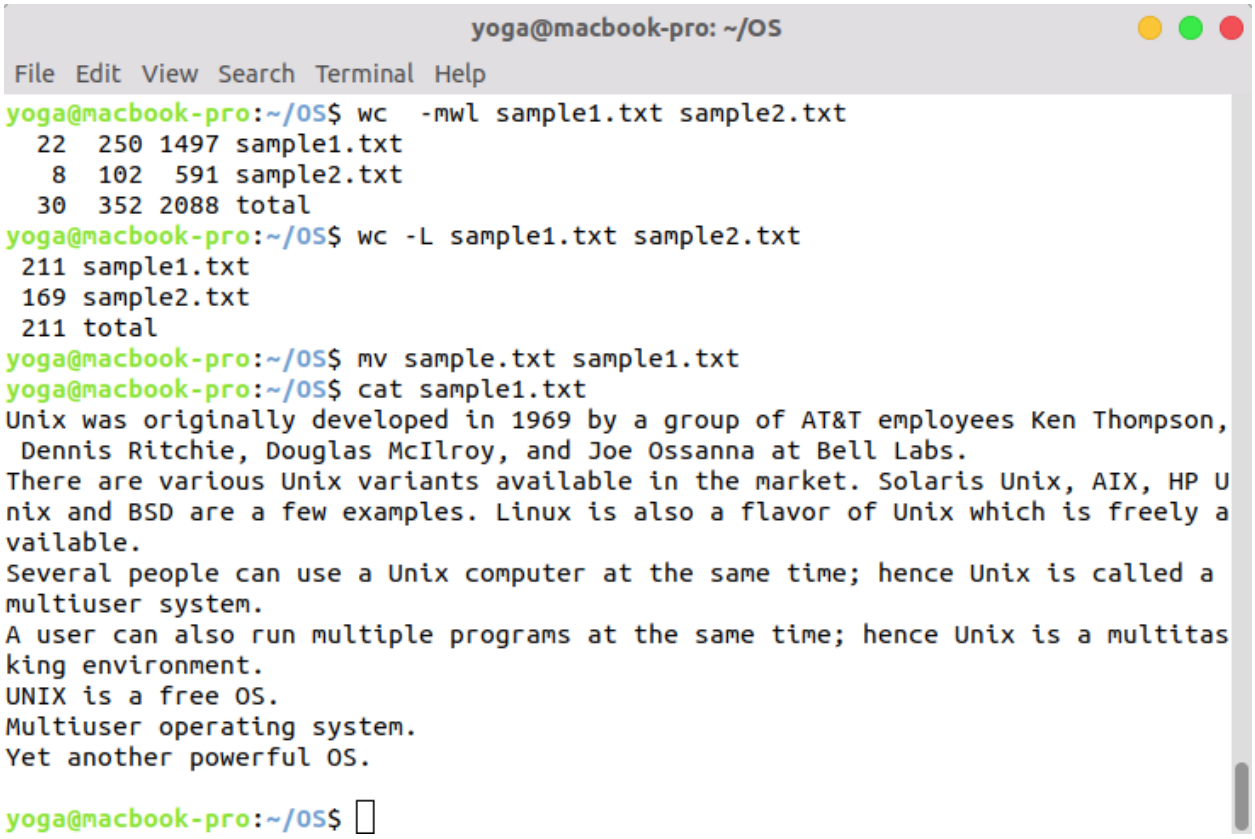
23. Print the number of characters, number of lines and number of words all the given input files.
ANS:
wc -mwl sample1.txt sample2.txt
“m” displays no of characters ,”w” for no of words and “l” for no of lines
In Terminal ,No of lines ,no of words and no of characters are displayed in order respectively along with filename



24.Print the length of the longest line from all the input files.
ANS:wc -L sample1.txt sample2.txt



25. Move the contents of the input file sample.txt to a new file.
ANS:mv sample.txt sample1.txt



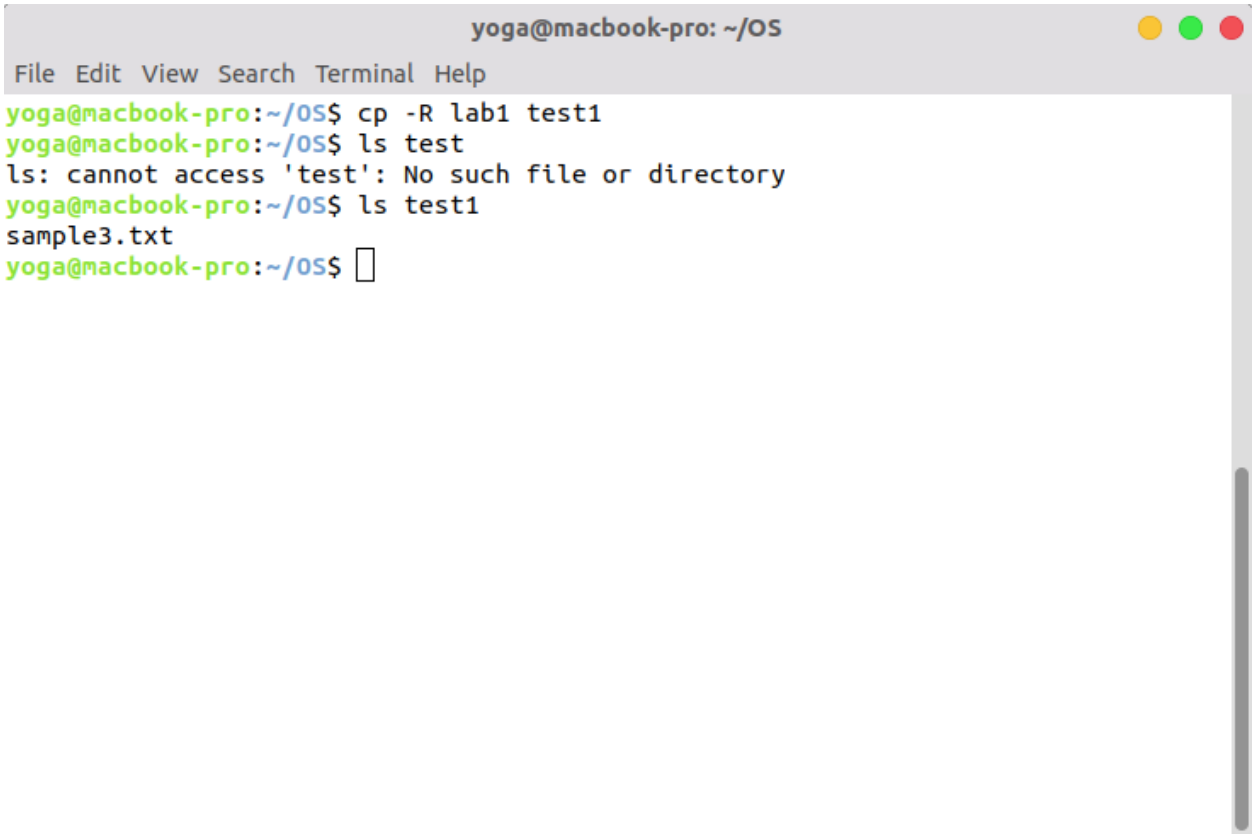
26. Copy the contents of one directory to another directory.

ANS:

cp -R <From-directory name> <To-directory name>

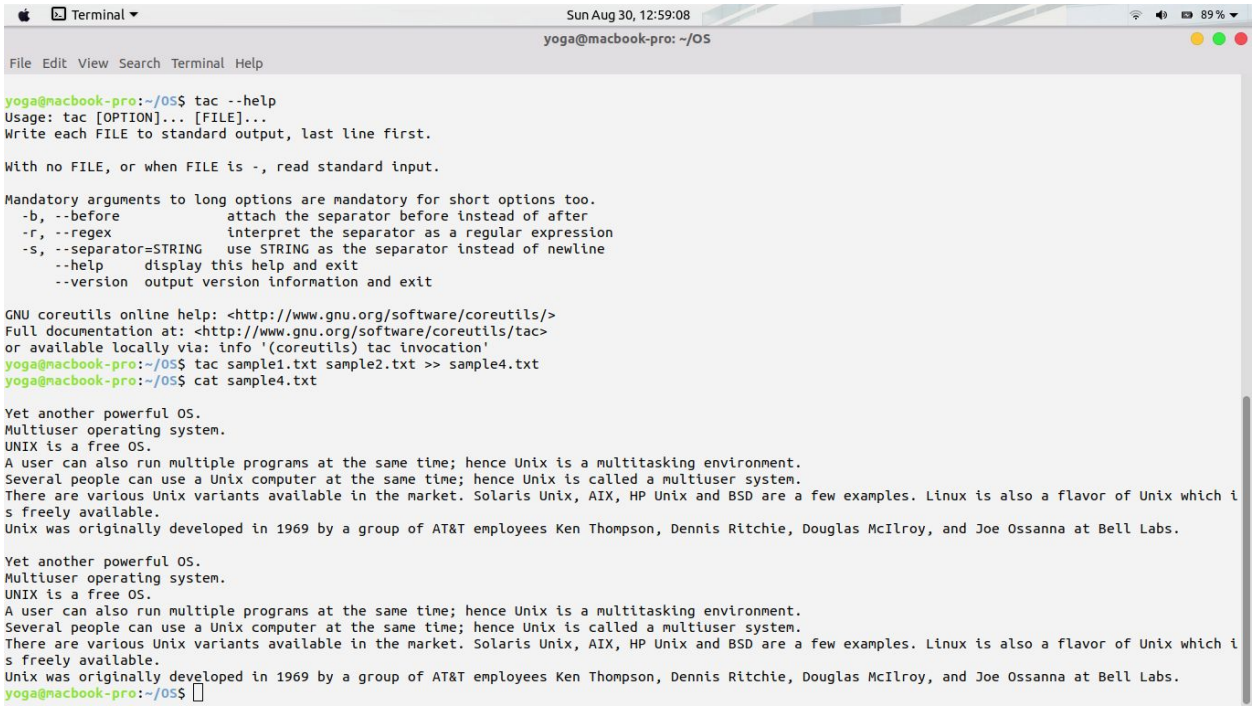
Example:

cp -R lab new.2



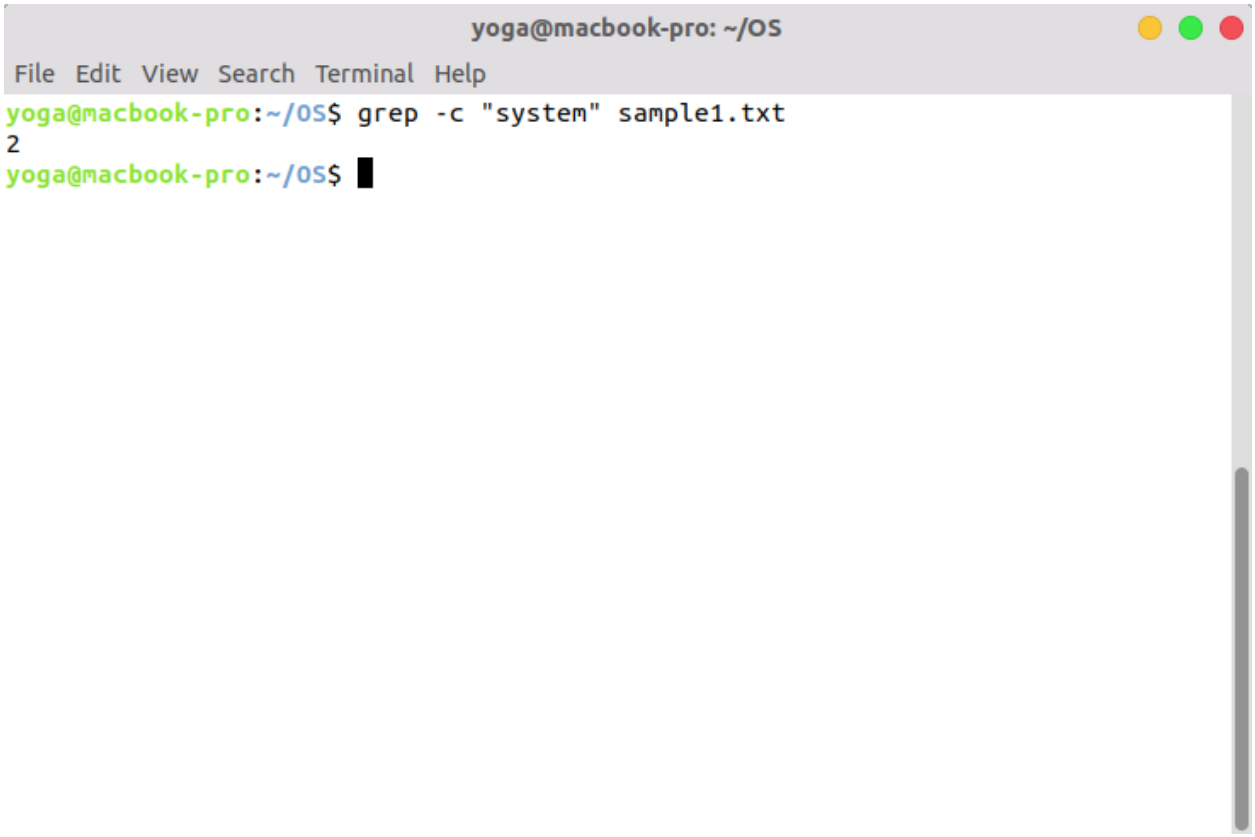
27. Reverse the lines of the two input files and concatenate the file contents using a single Command.

ANS:tac sample1.txt sample2.txt >> sample3.txt

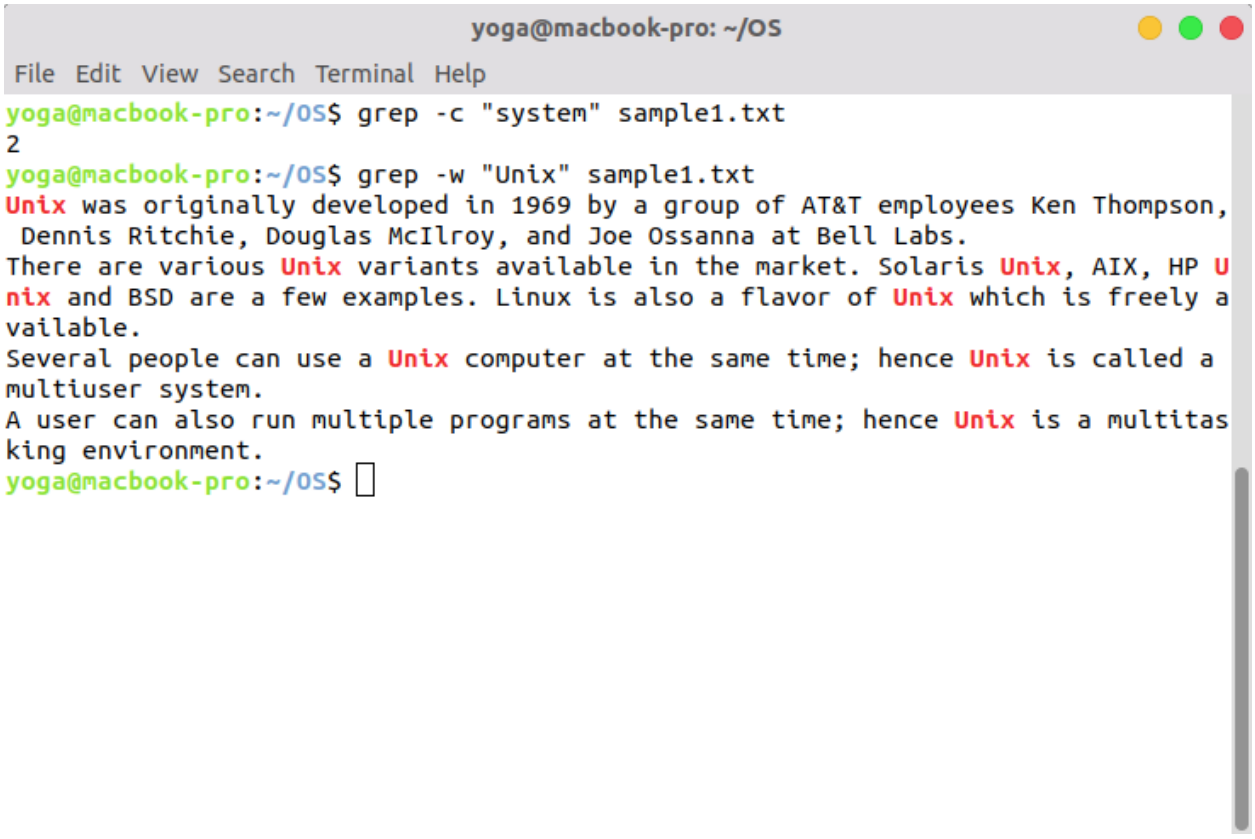


28. Delete all the files with *.txt extension from the working directory using yes command.
ANS:rm -i *.txt

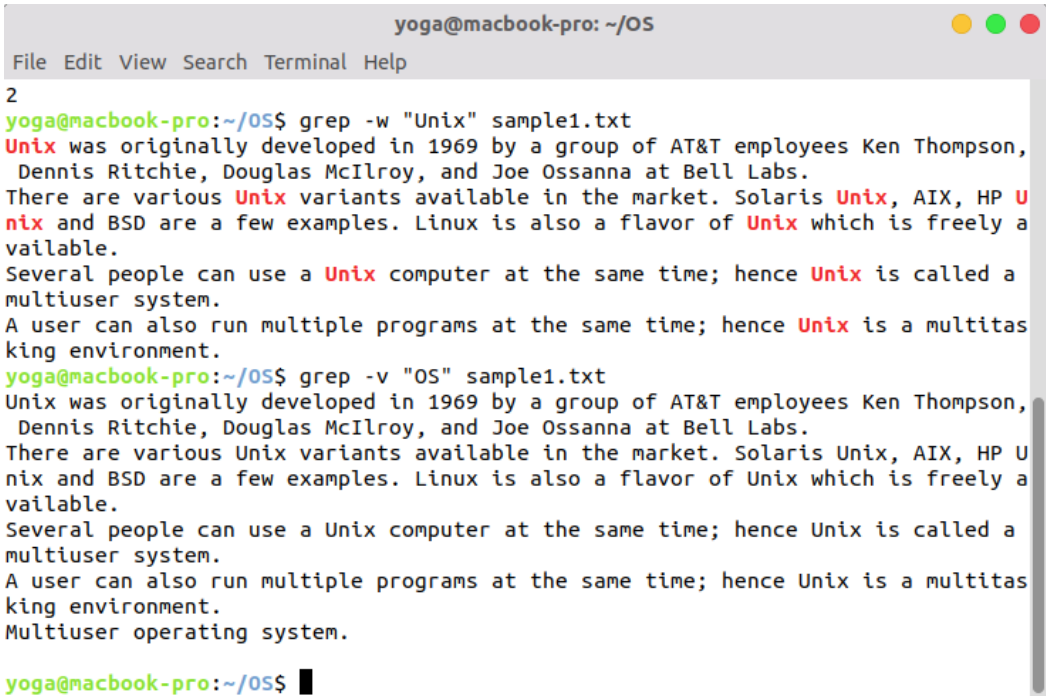
29. Given the input file “sample1.txt”, print the number of the lines that match the pattern “system”.
ANS:grep -c “system” sample1.txt



30. Having sample1 file as input, print the matched lines that contain the pattern “Unix” as whole Words.
ANS:grep -w “Unix” sample1.txt

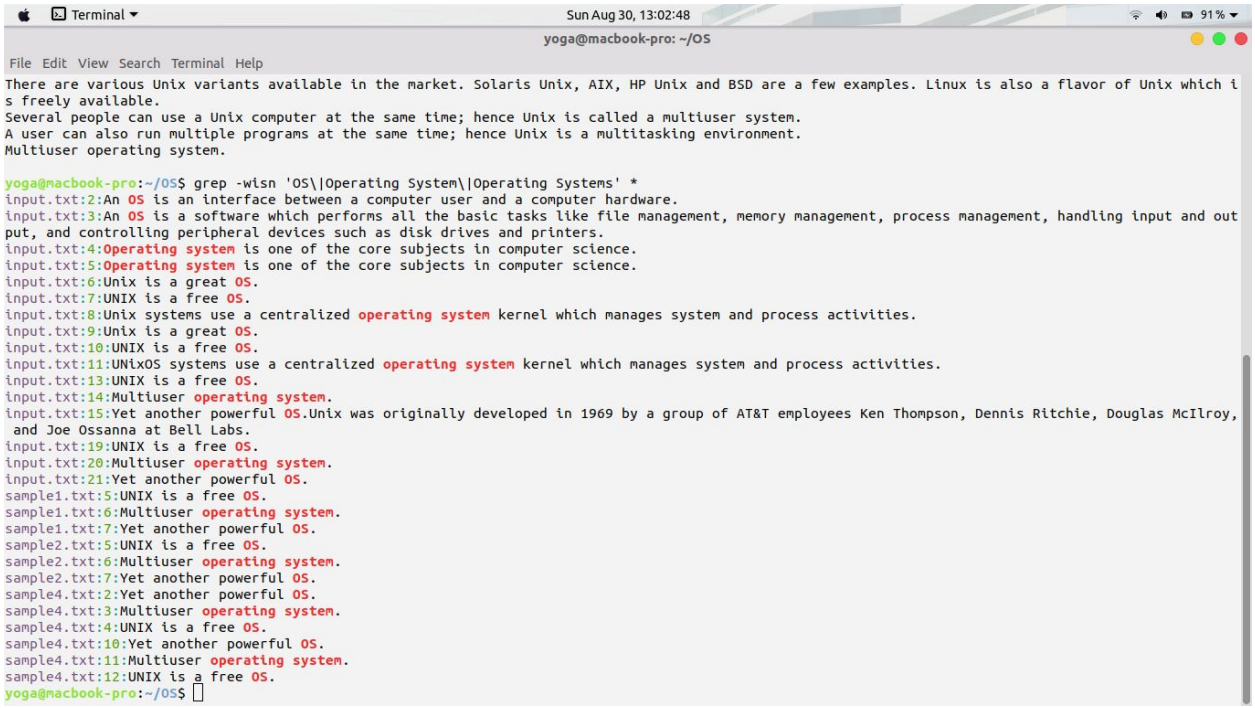


31. Print the lines from “sample1.txt” that do not match the pattern “OS”.
ANS:grep -v “OS” sample1.txt

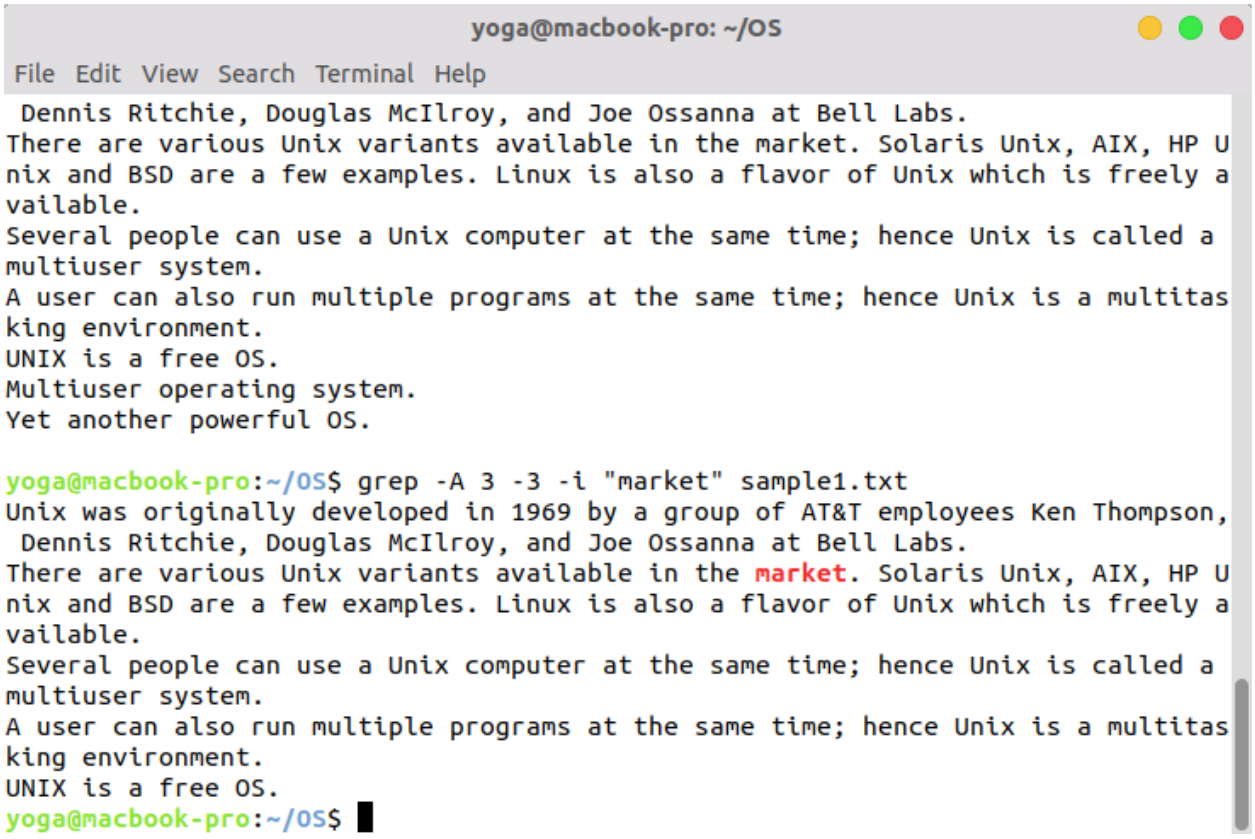


32. Fetch the files that contain the word “OS”, “Operating System”, “Operating Systems” with its respective line number. (Ignore the case).

ANS:
grep -wisn 'OS\|Operating System\|Operating Systems' *
w for exact matching of word
i to ignore case sensitivity
s for suppressing error based on accessing the file
n to display line number

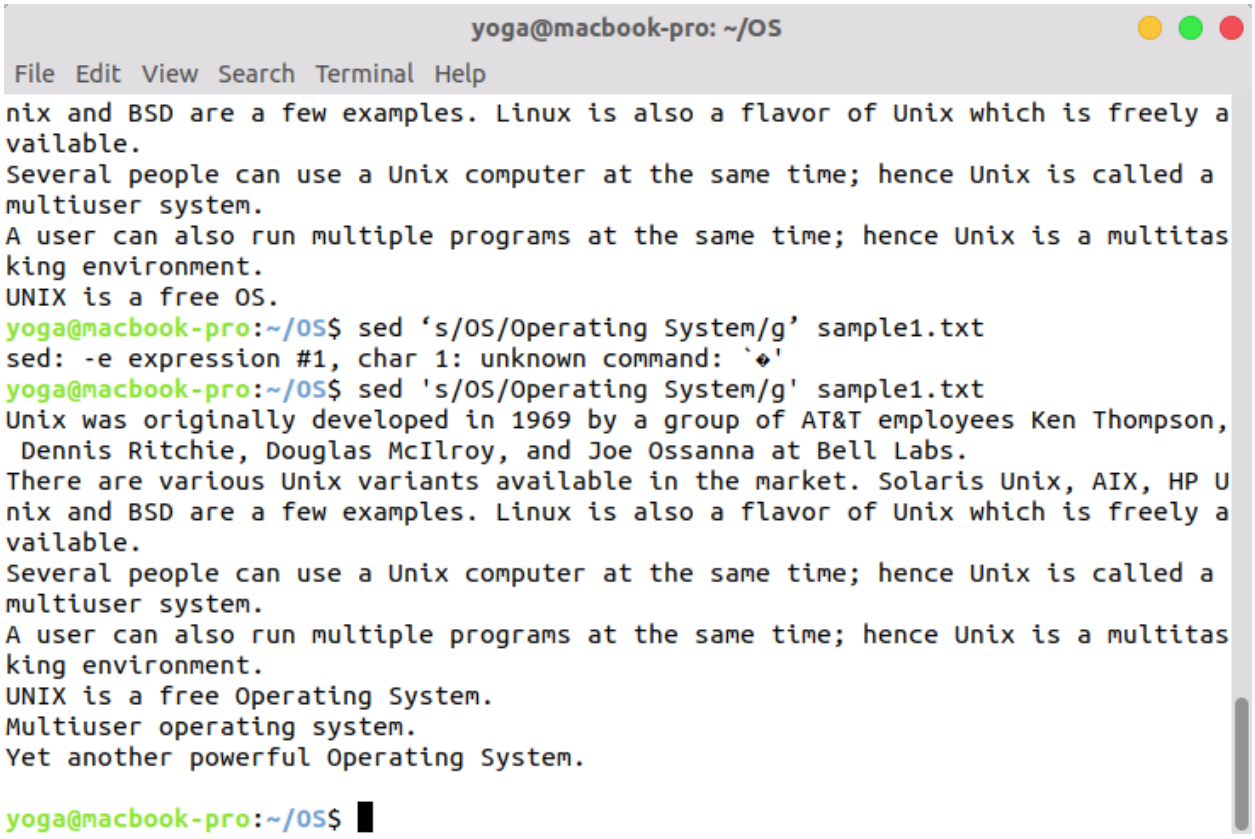


33. Having “sample1.txt” and “core” as the input and pattern respectively, along with the matched line print three lines before and after the pattern match.
ANS:
grep -A 3 -3 -i "core" sample1.txt



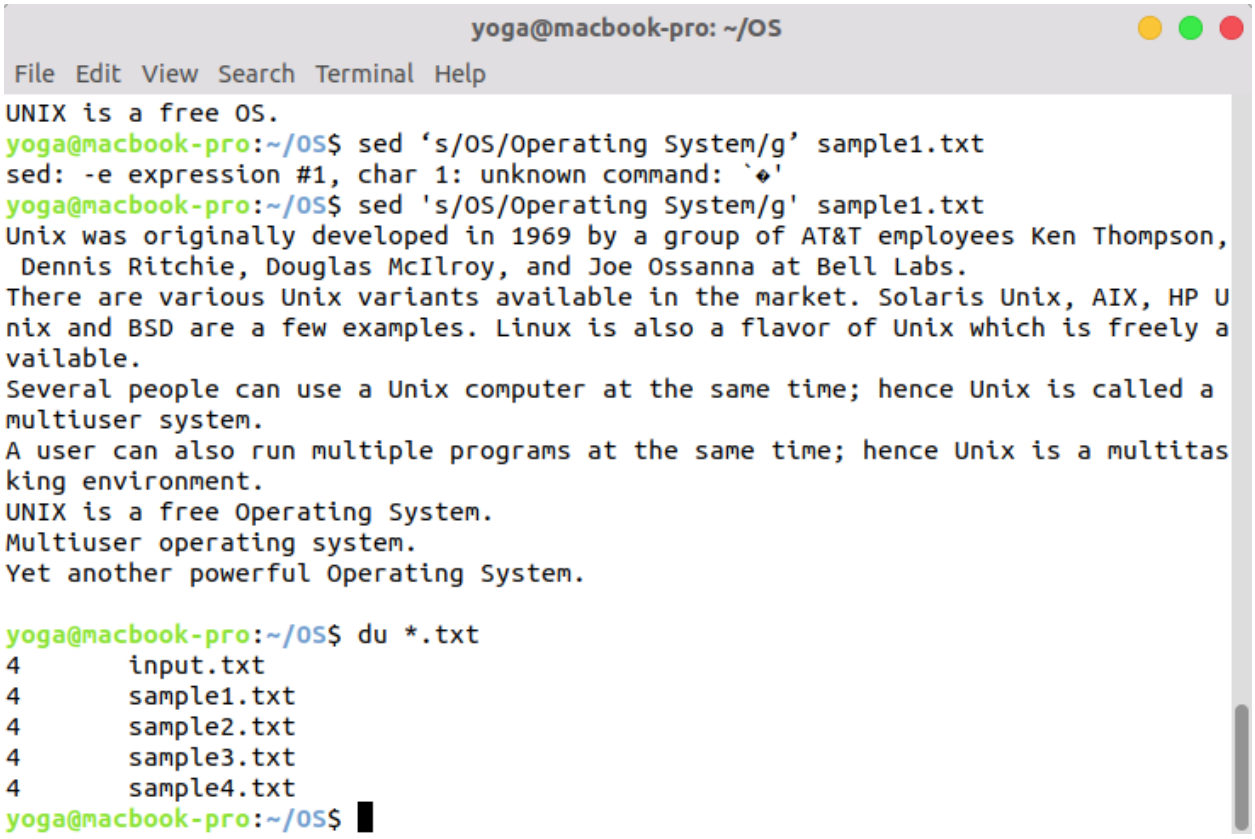
34. Find and replace the string “OS” with “Operating System”.

ANS:sed ‘s/OS/Operating System/g’ sample1.txt



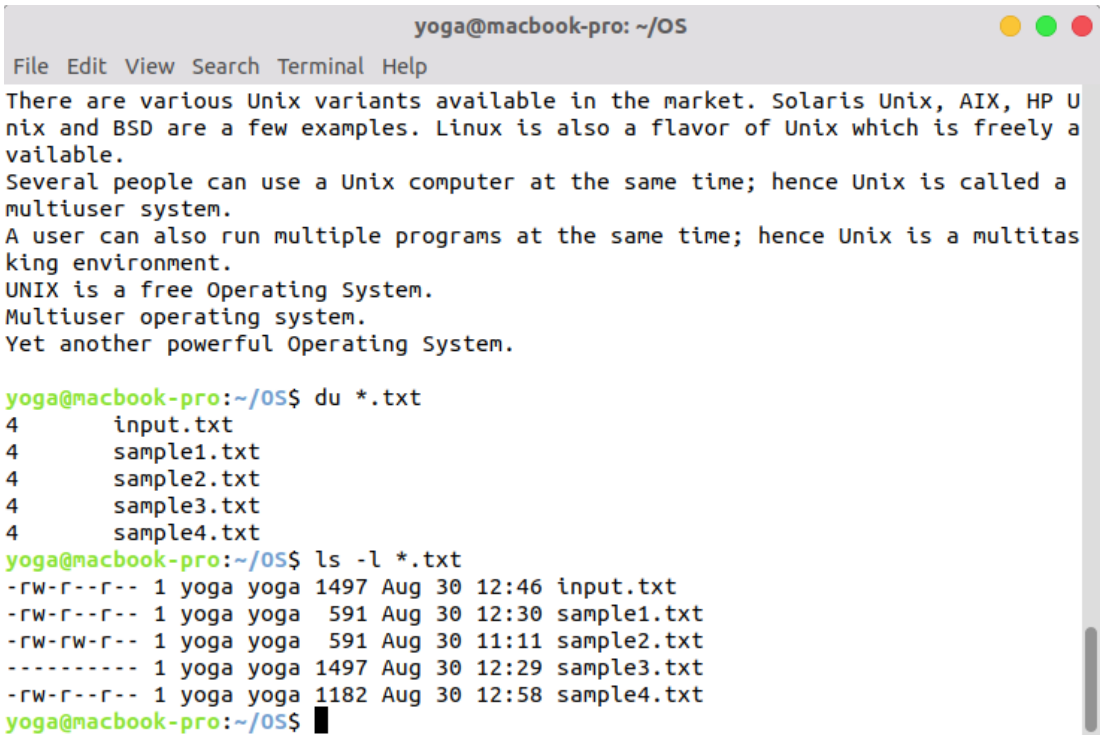
35. List only the text files in the current working directory with its corresponding disk space Occupied.

ANS:du *.txt



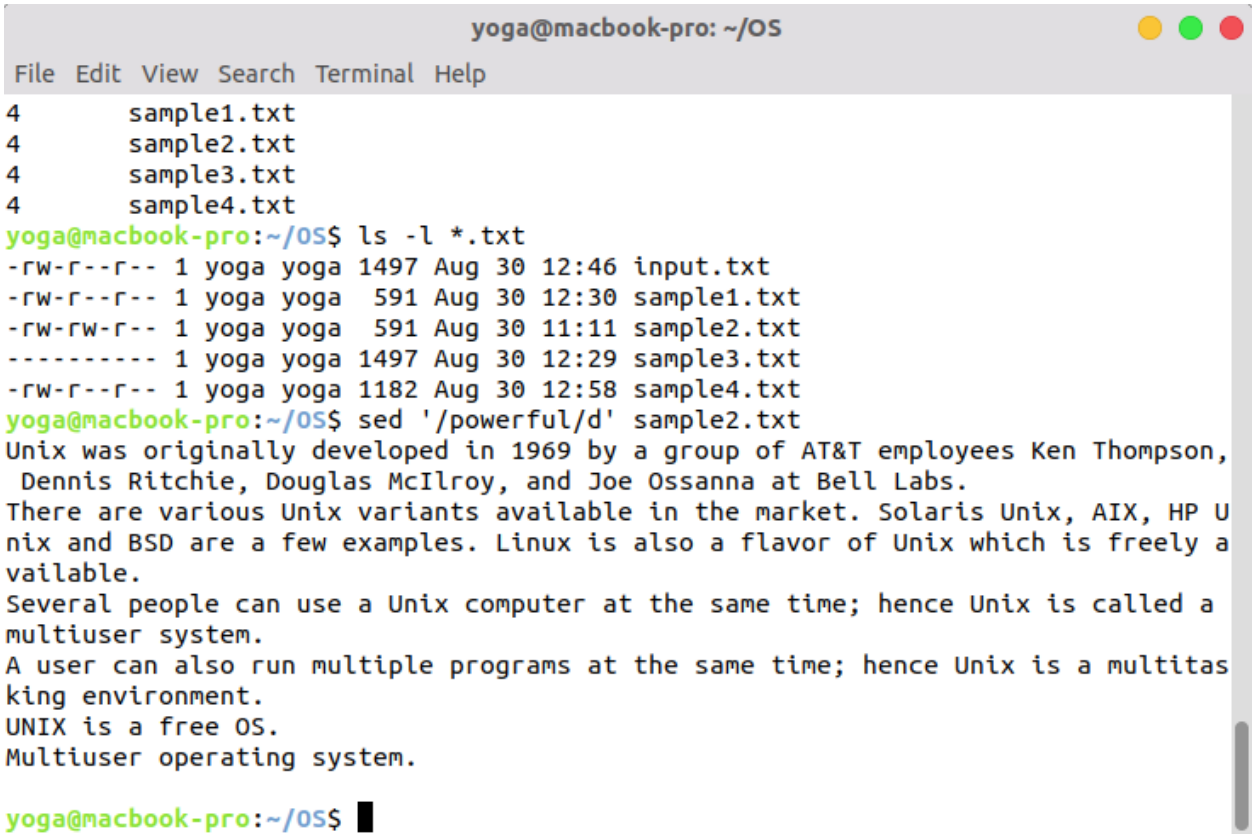
36. Show the last modification time of all the input text files.

ANS:ls -l *.txt



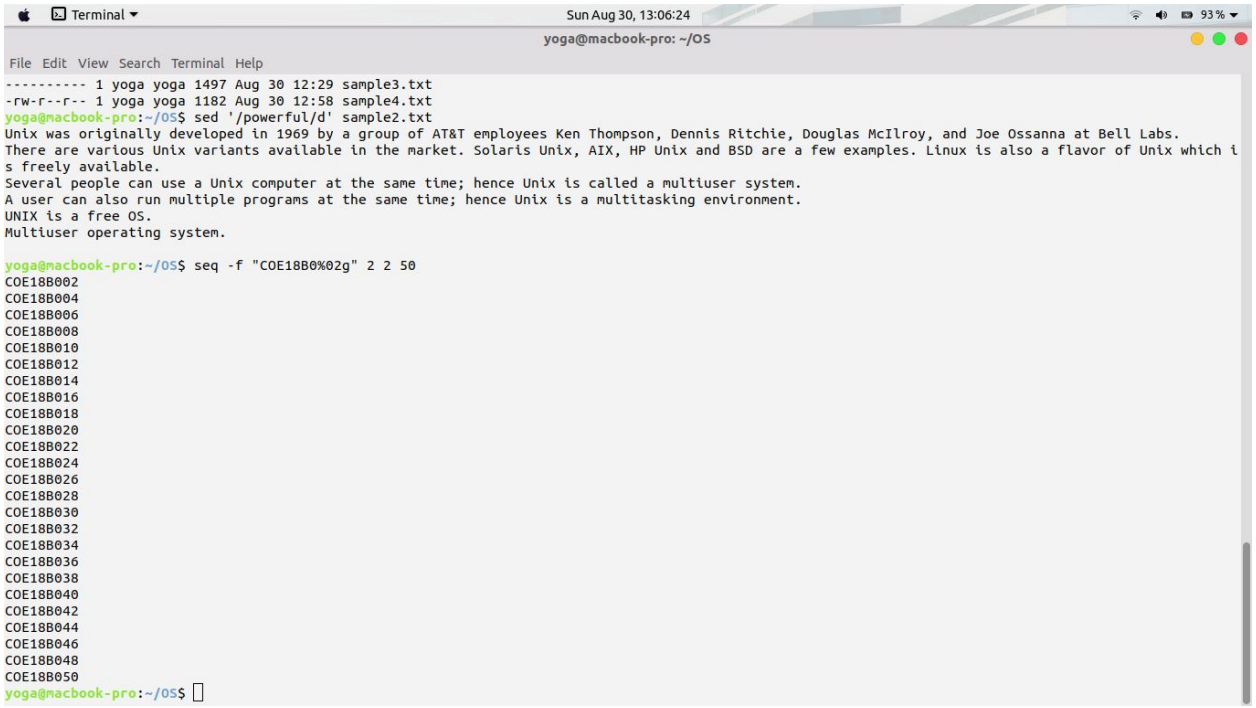
37. Delete the line that has the word “Powerful” from text file “sample2.txt”.

ANS:sed ‘/powerful/d’ sample2.txt



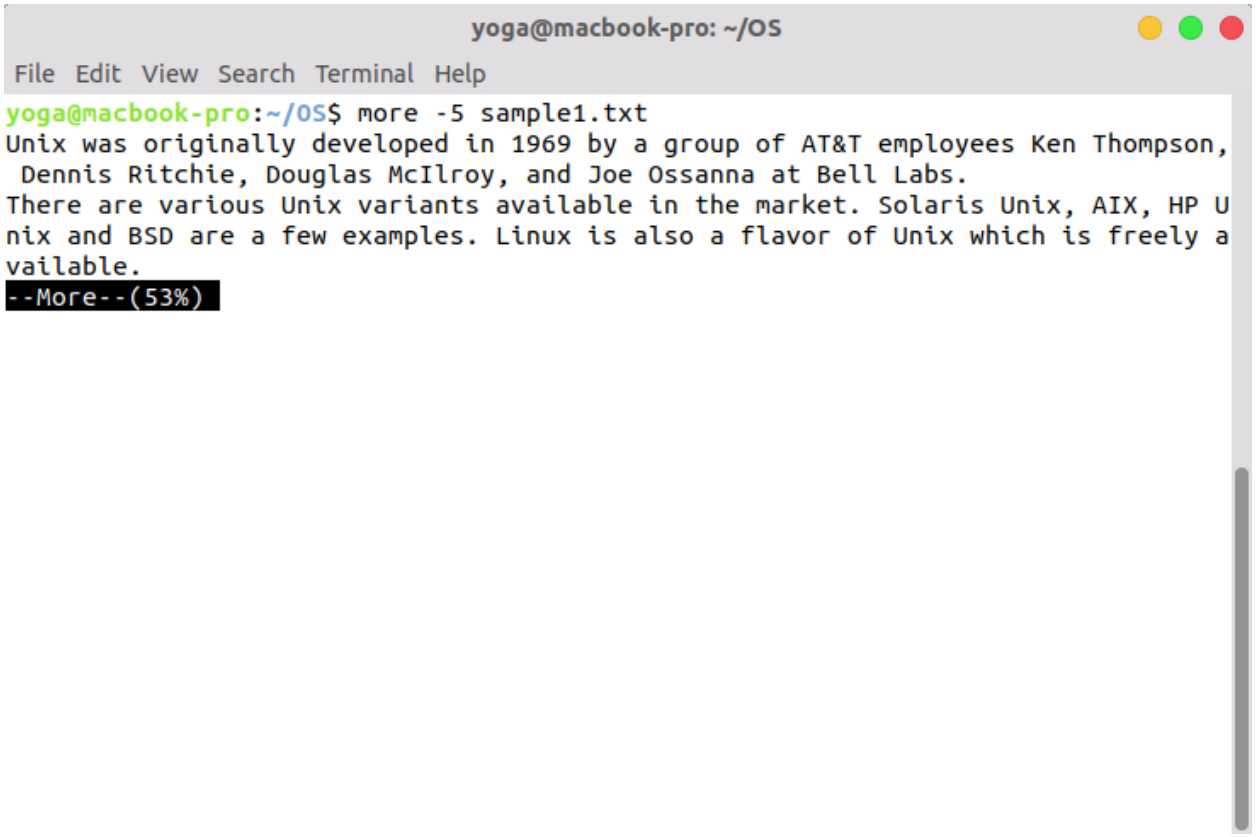
38. Print the roll numbers that end with even numbers in the format (COE18B002) up to COE18B050.

ANS:seq -f “COE18B0%02g” 2 2 50



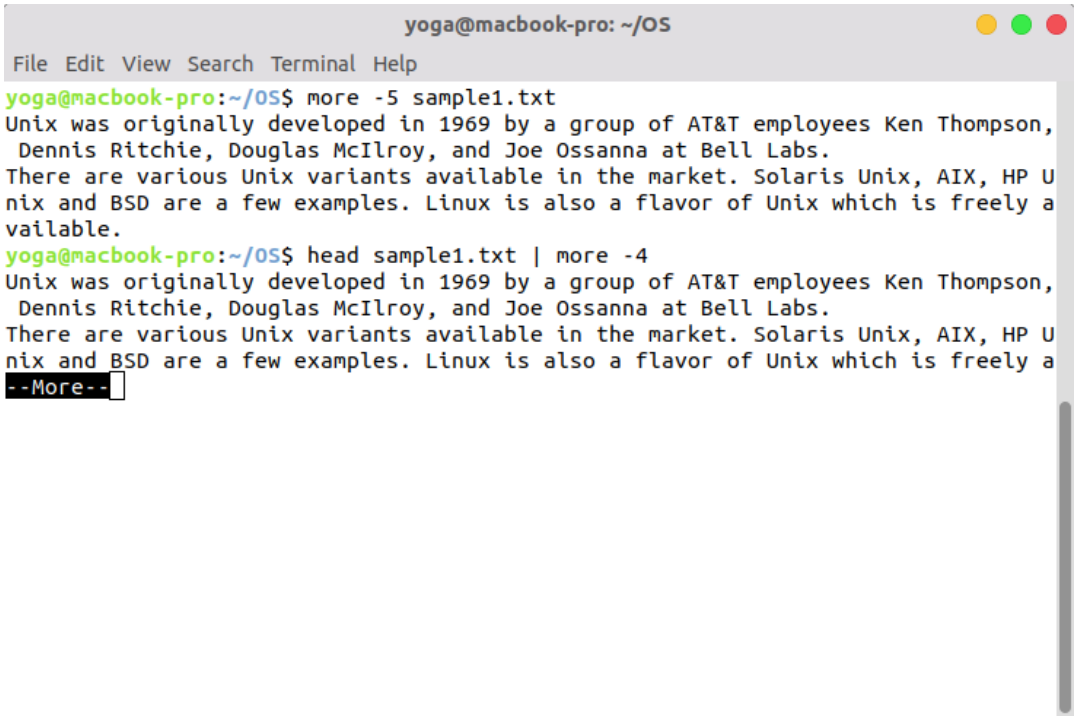
39. Use filter commands like head, tail, more to view the file contents page by page.

ANS:more -n inputfile



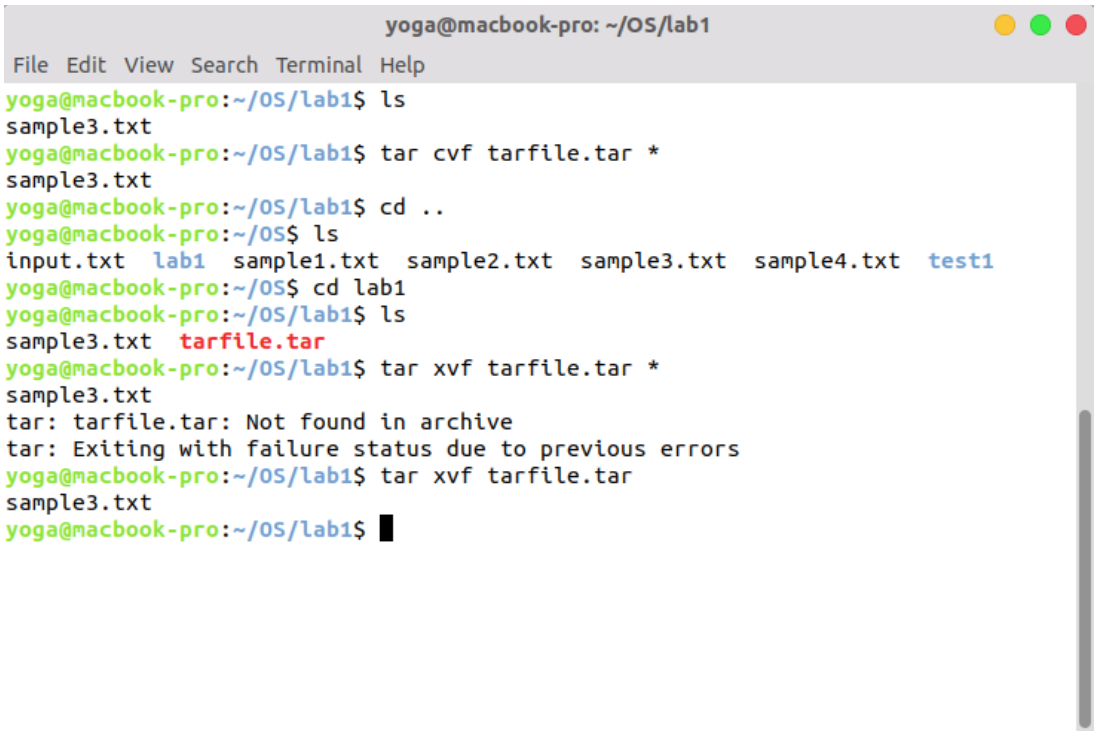
ANS:head inputfile | more -n

ANS:tail inputfile | more -n



40. Compress the current working directory contents to a tar file and extract those files from the compressed tar file.

ANS:tar cvf tarfile.tar *

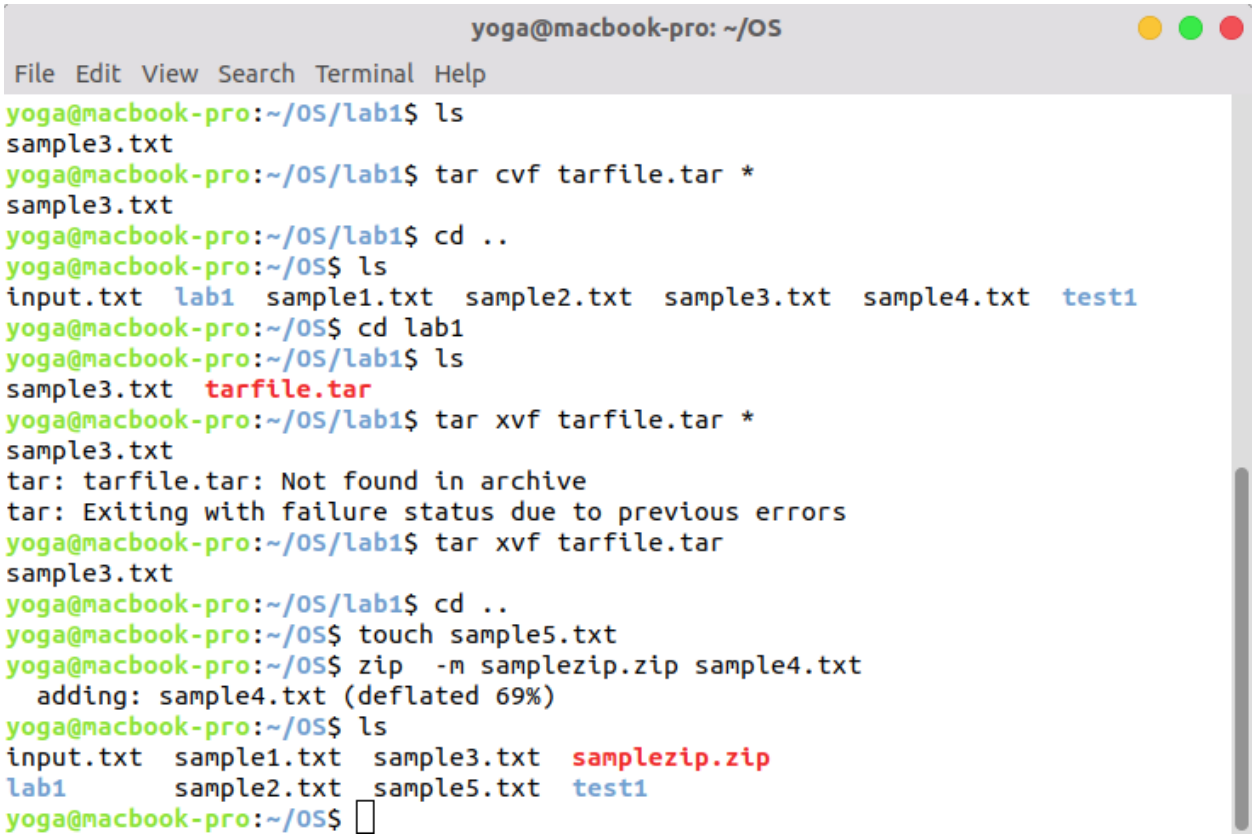


tar xvf tarfile.tar

41. Compress the files using zip command.

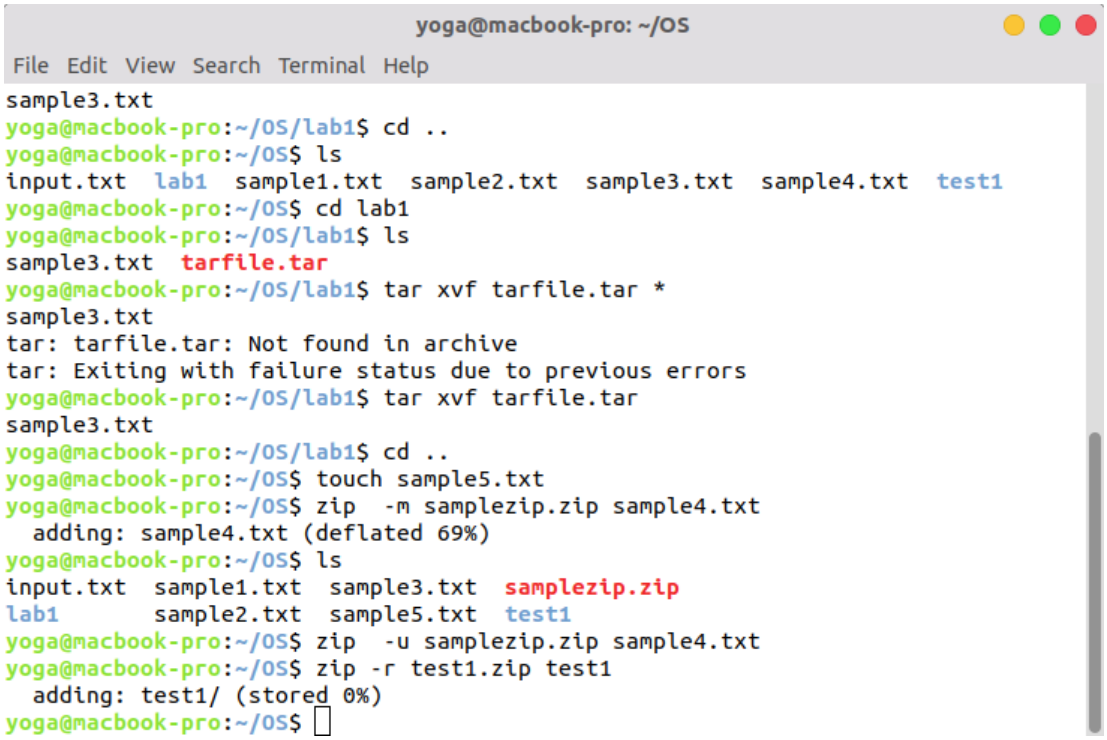
a. Zip the input file “sample1.txt” as samplezip.zip and remove the file from the current directory after zipping.

ANS:zip -m samplezip.zip sample2.txt



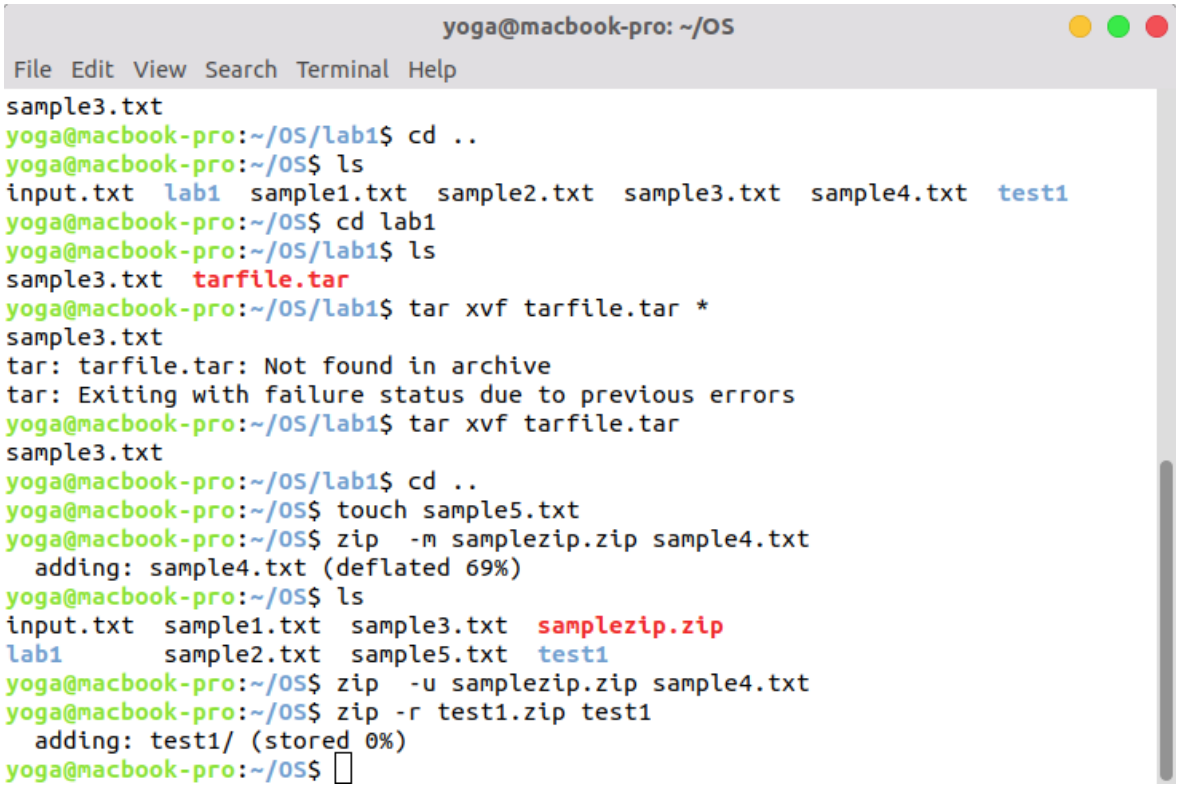
b. Add “sample2.txt” and update the zip archive.

ANS:zip -u samplezip.zip sample2.txt



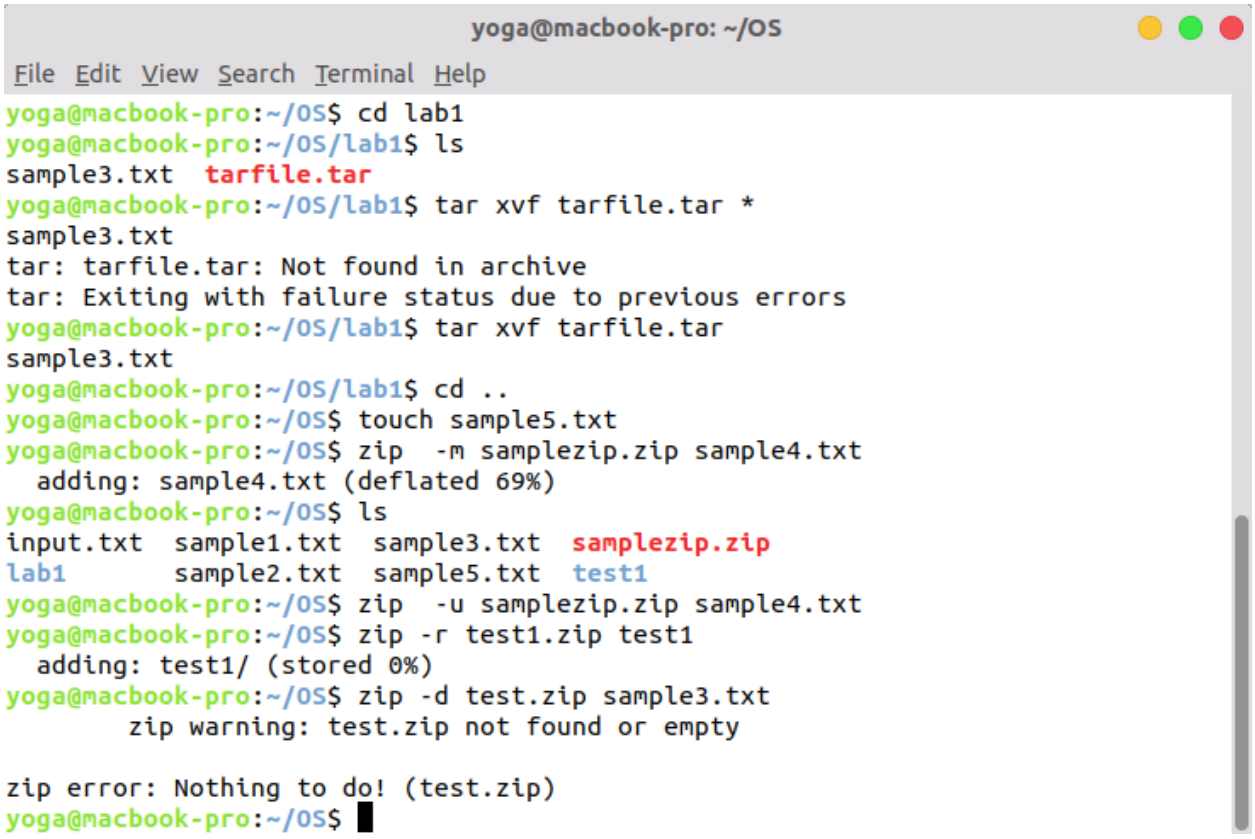
c. Zip a directory with all its contents.

ANS:zip -r test1.zip test1



d. Remove a file from the zip archive

ANS:zip -d samplezip.zip sample2.txt



e. Unzip the contents from samplezip.zip

ANS:unzip samplezip.zip