Name - Shaan Alam

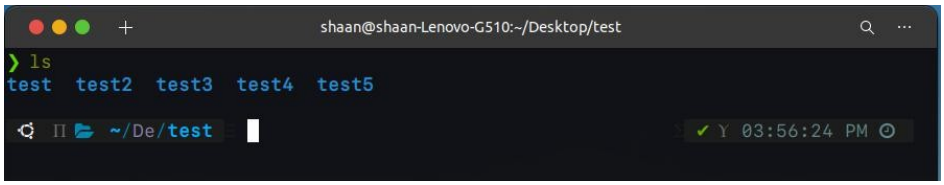
Roll no - 20/63027

Subject - Operating System

Sem – III

ls

This comand is used to list the files in a directory

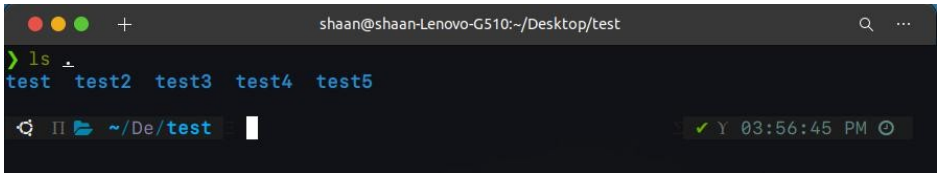


ls -a

This command is used to list all the files

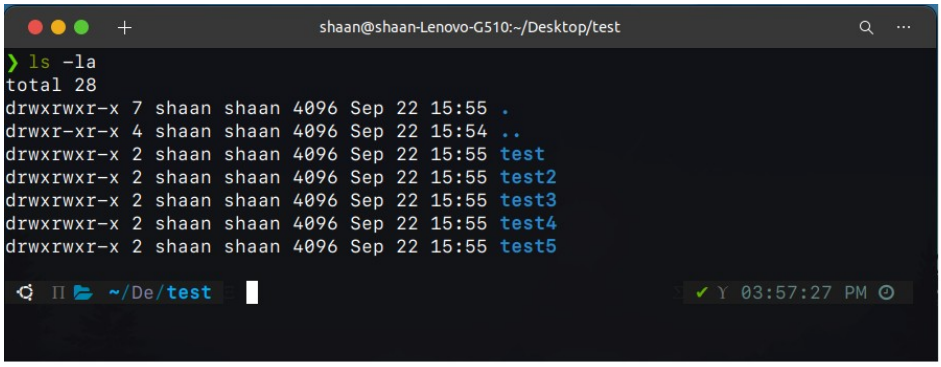
ls .

This command is used to list all the files in the current working directory



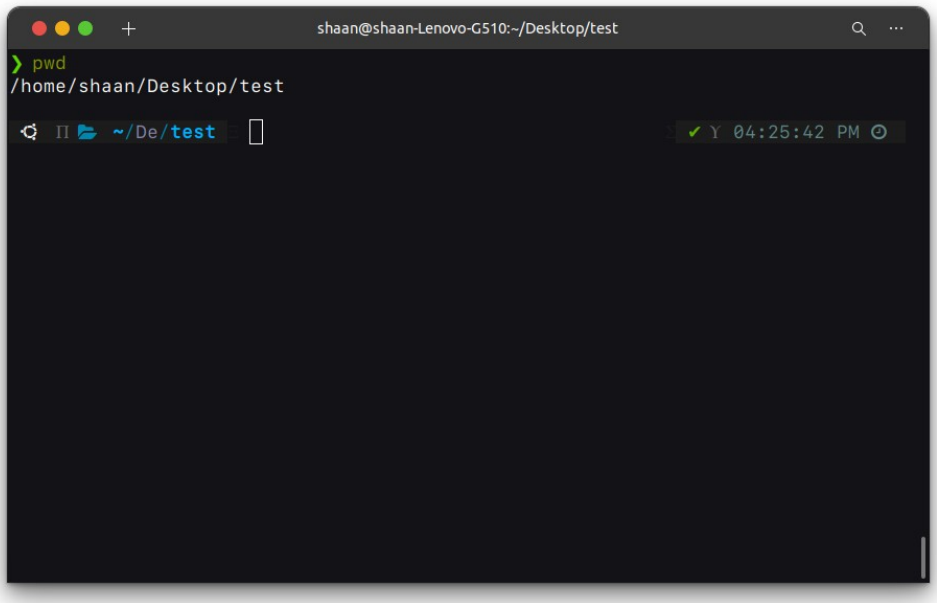
ls -la

This command is used to display the long listing directories



pwd

pwd stands for **print working directory**. When invoked the command prints the complete path of the current working directory



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tty

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tty stands for **Teletype** command. **tty** is a command to print the file name of the terminal connected to standard input.

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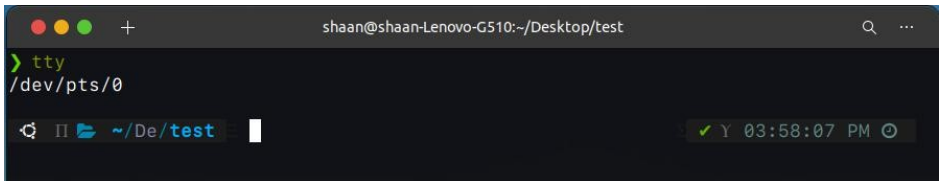
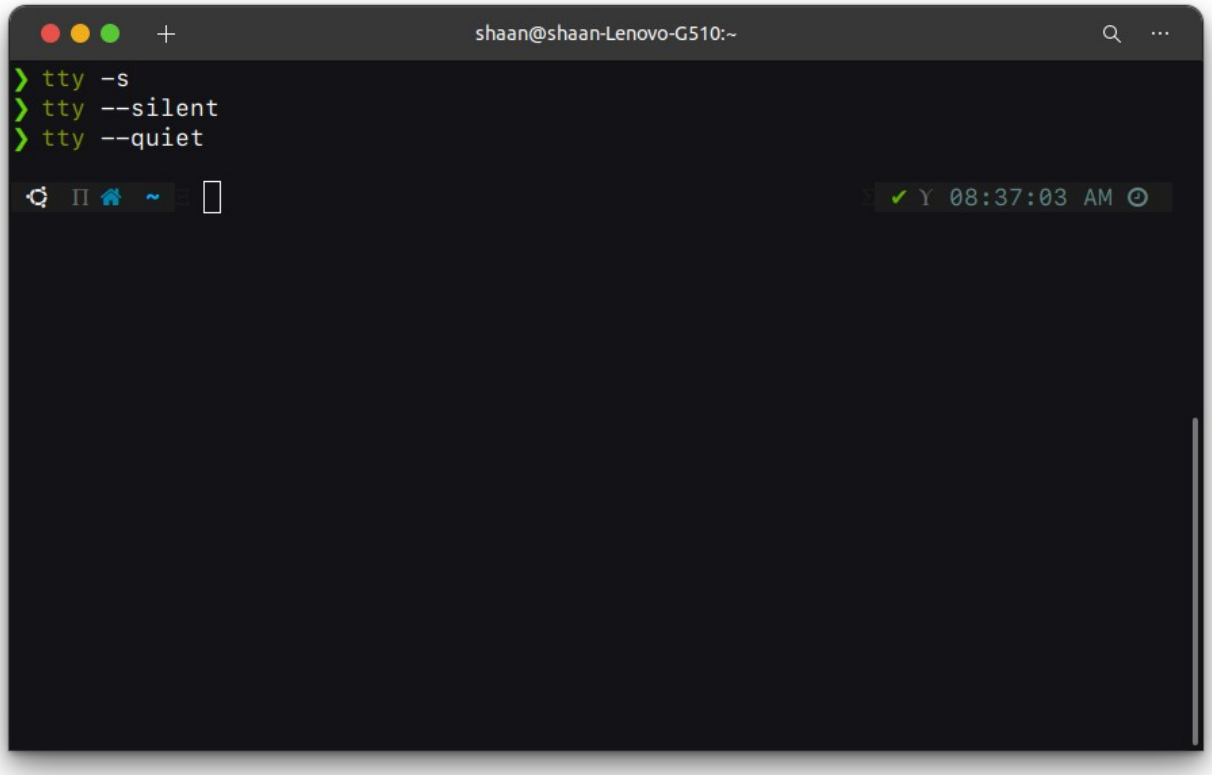
tty

This command prints the filename of the terminal connected to standard input teletype.



tty -s, tty --silent, tty --quiet

These command will print nothing but return only exit status.

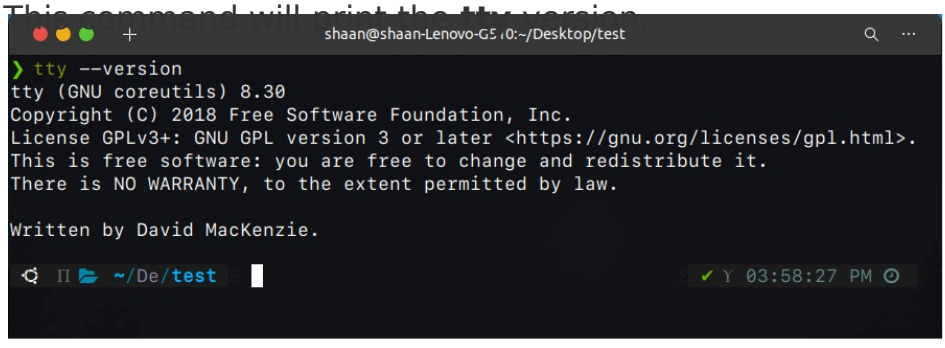


tty --help

This command will print the help message for **tty** command.

tty --version

This command will print the **tty** version

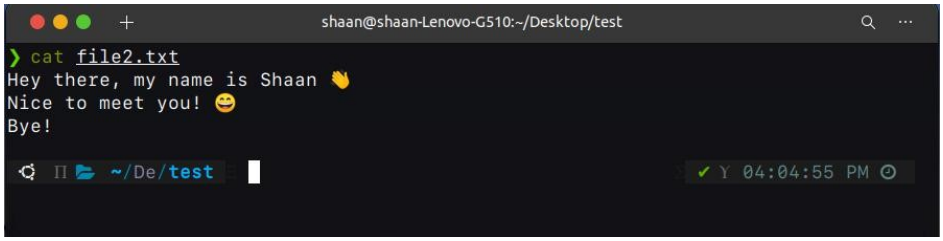


cat

cat command reads the data from the file and and gives their content as output.

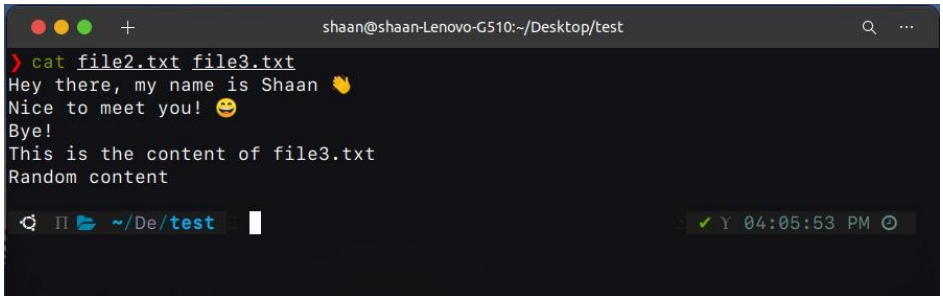
cat file_name

This command will print the content of a single file in the terminal.



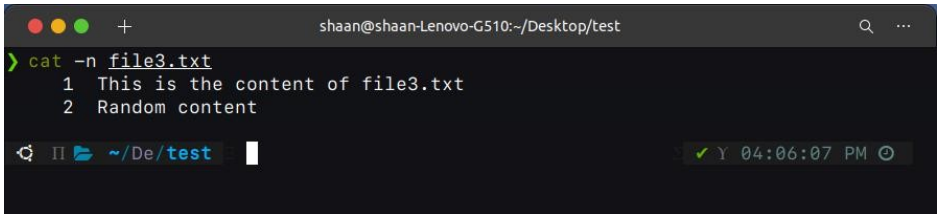
cat file_name_1 file_name_2

This command will print the content of multiple files in the terminal



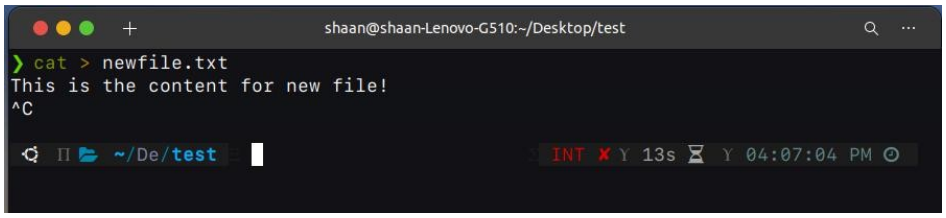
cat -n file_name

This command will print the content of a file along with line numbers.



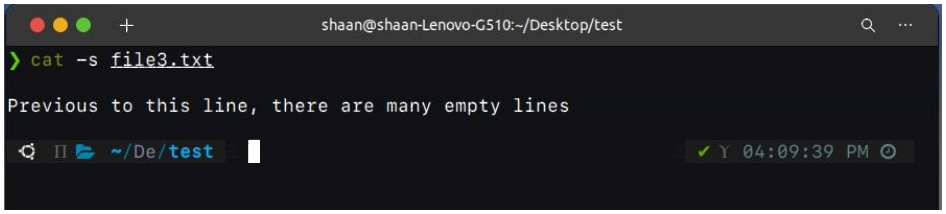
cat > file_name

This command will create a new file.



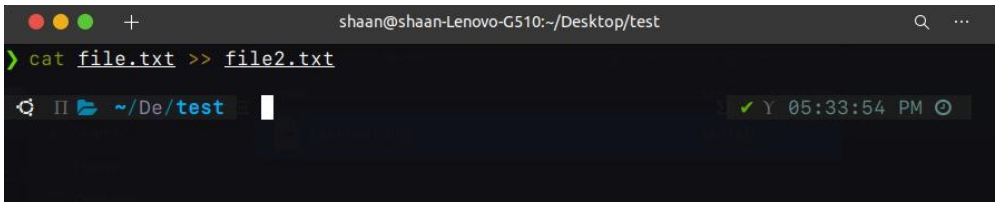
cat -s file_name

This command will suppress repeated empty lines in the output



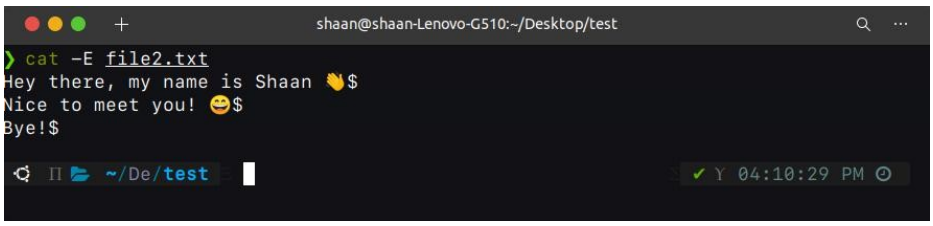
cat file1 >> file2

This command will append the content of one file to another



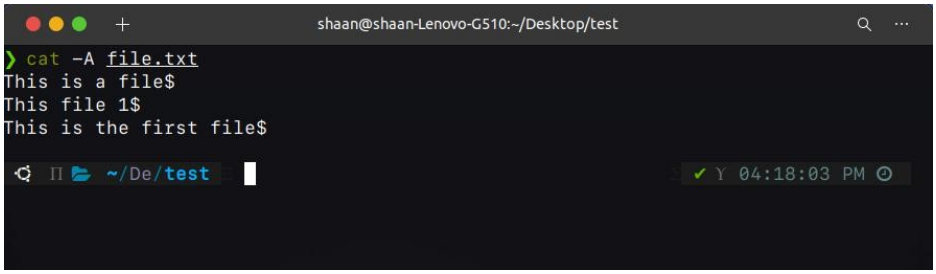
cat -E file_name

This command will highlight the end of line



cat -A file_name

Instead of using -vET command, we can use -A command.



cat file_name | more

If the file has a lot of content and it can't fit in the terminal window, you can use | more parameter along with the cat command.

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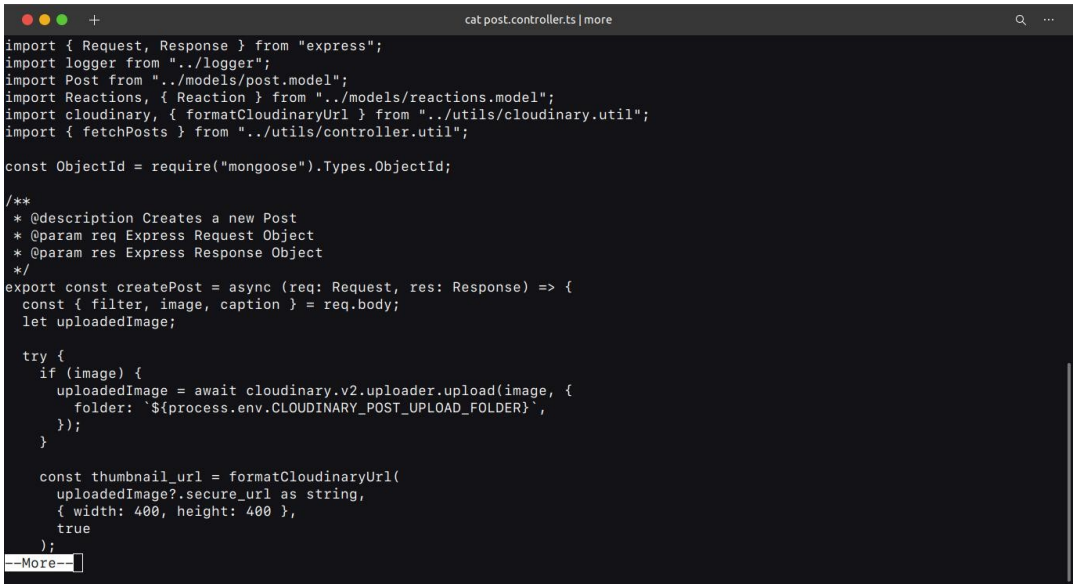
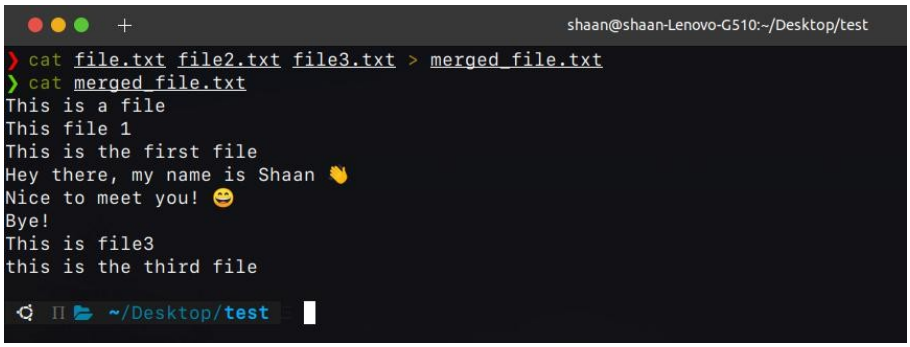
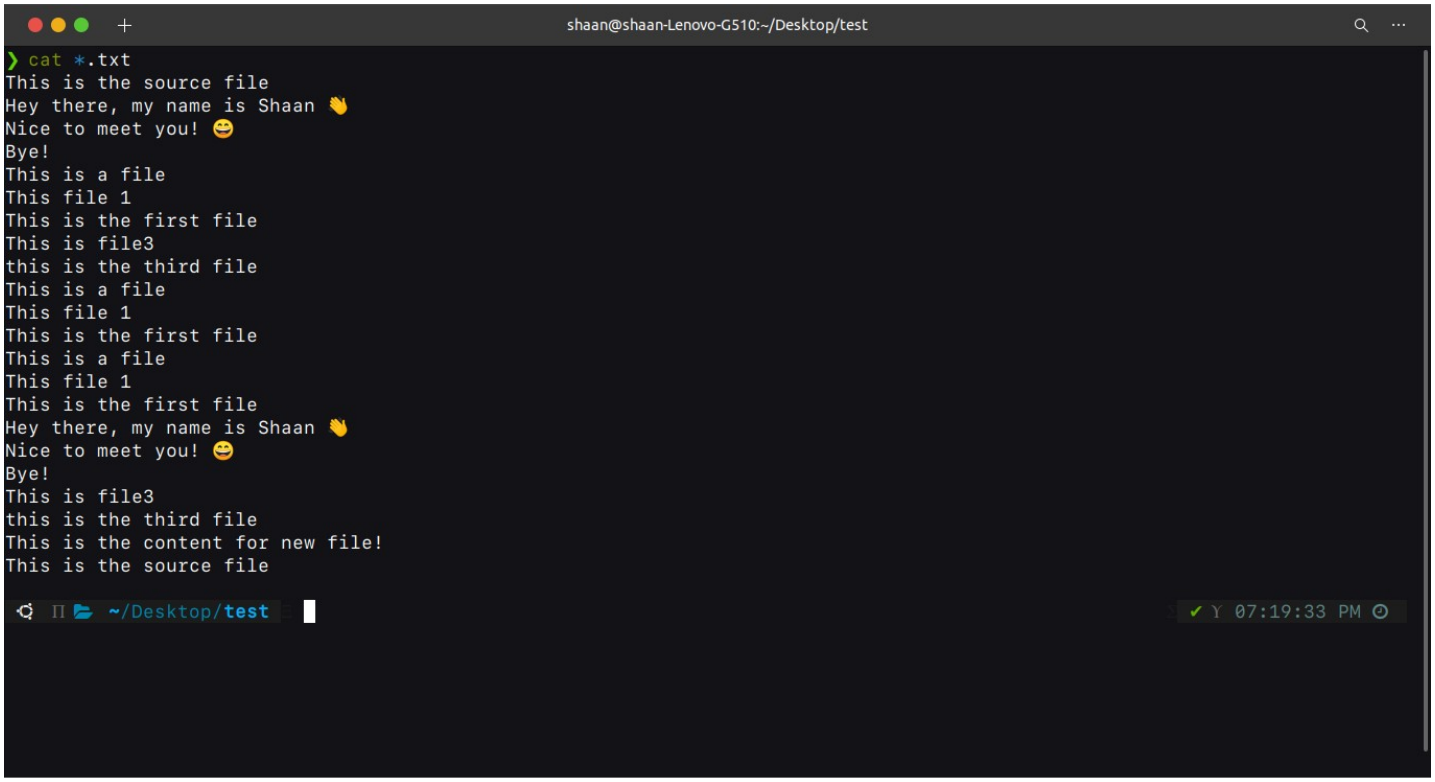


cat file_name_1 file_name_2 file_name_3 > merged_file_name
This command will merge the mentioned files into a single file.



cat *.txt

This command will print all the .txt files present in the current folder. **Note-** You can also use this command to print other type of files like *html*, *js*, *ts* etc. For ex - cat *.html will print all the *.html* files present in the current folder.



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who and whoami

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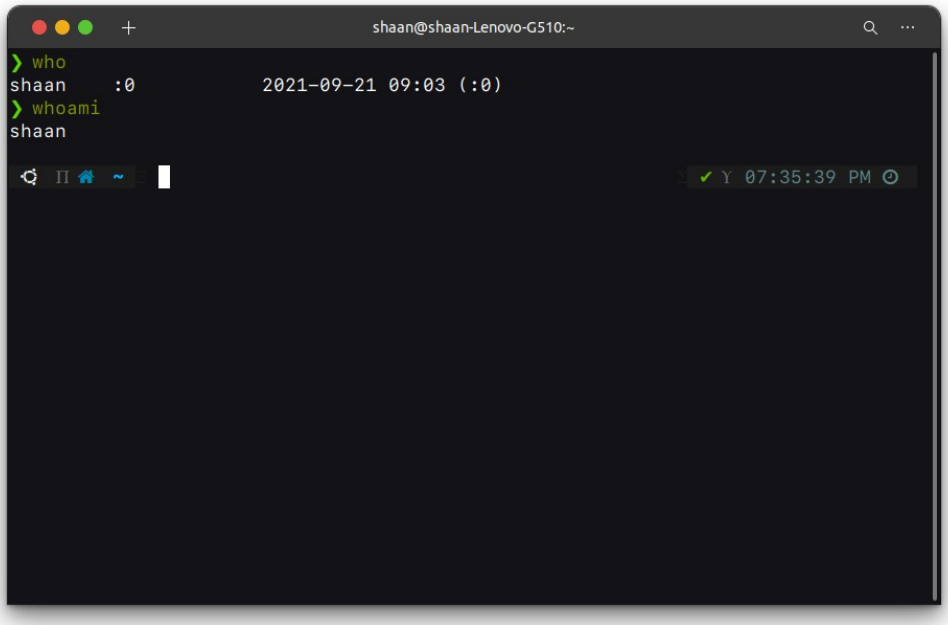
who

who command will print the name of currently logged in user along with some other informations.

- Login name of the users
- Terminal line numbers
- Login time of the users in to system

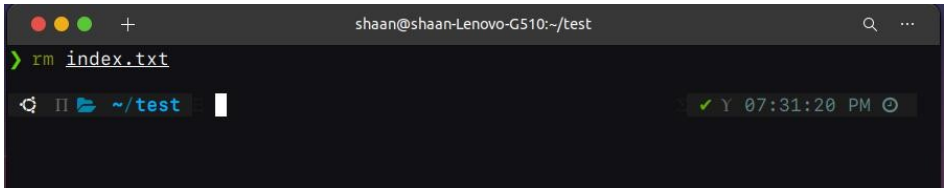
whoami

whoami command prints the user name.



rm *[filename]*

rm command will delete the file specified.

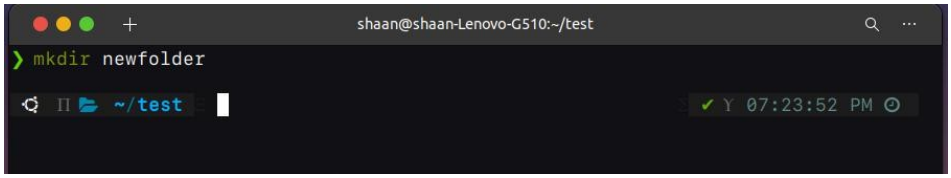


mkdir

This command is used to create a new directories in the current working directory.

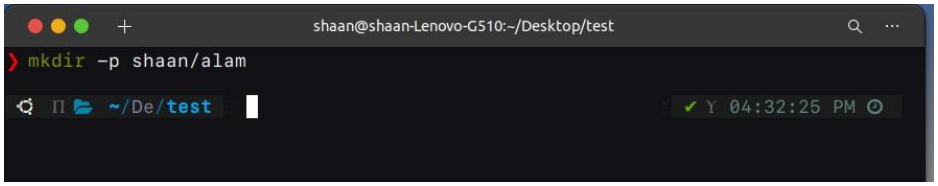
mkdir *[dirname]*

This command is used to create a new directory.



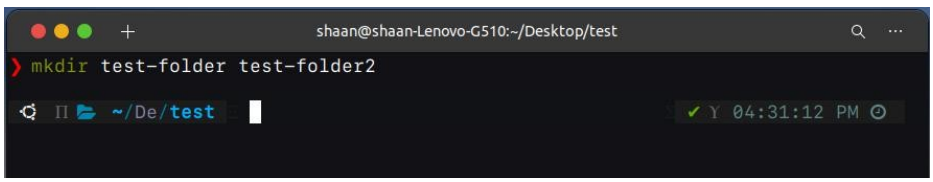
mkdir -p /shaan/alam

This command will create all required parent directories



mkdir *[dirname1] [dirname2]*

This command will create multiple directories at the same time.

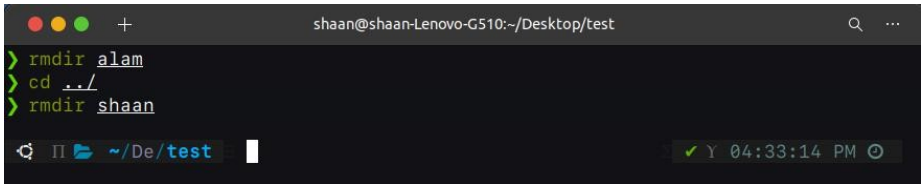


rmdir

This command is used to delete directories specified.

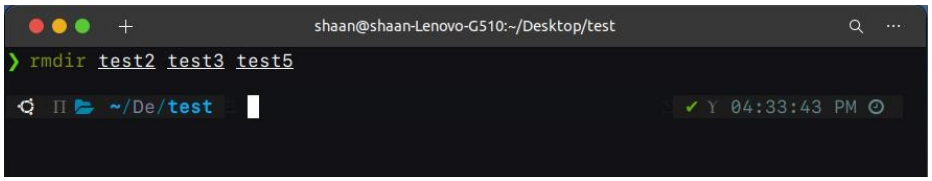
rmdir *[dirname]*

This comand will delete a single directory specified.



rmdir *[dirname] [dirname]* ...

This command will delete multiple directories specified.

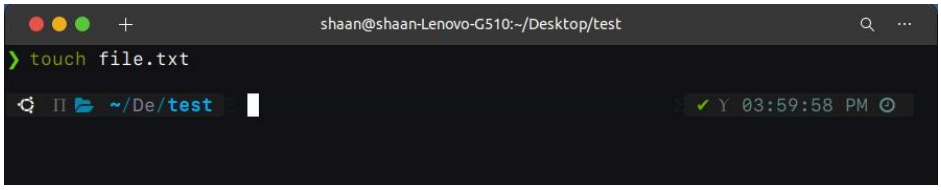


touch

touch command is used to create new files.

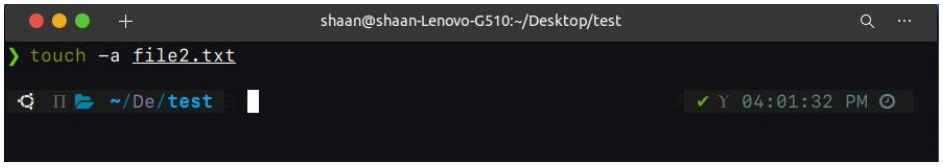
touch *[filename]*

This command will create a new file.



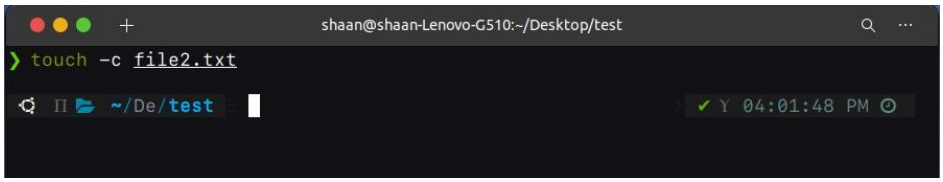
touch -a *[filename]*

This command is used to change access time only.



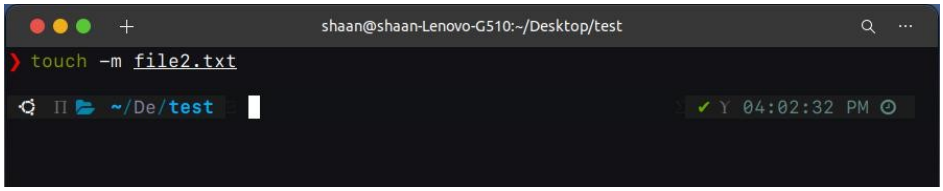
touch -c *[filename]*

This command is used to check whether a file is created or not. If not created then don’t create it.



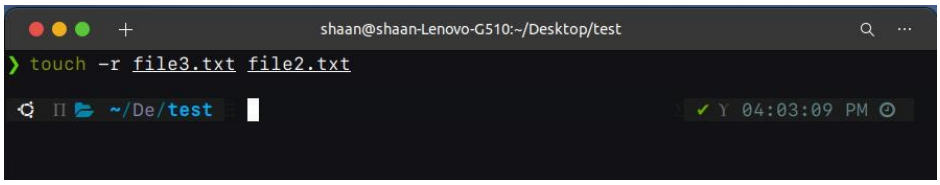
touch -m *[filename]*

his is used to change the modification time only. It only updates last modification time.



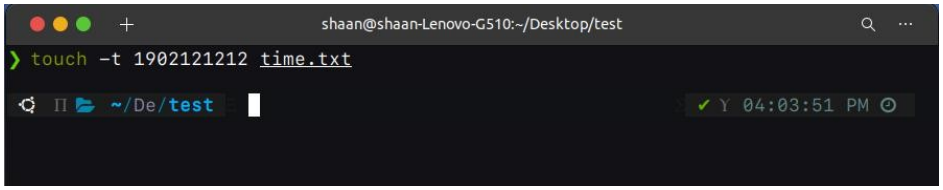
touch -r *[filename]*

This command is used to use the timestamp of another file.



touch -t *[filename]*

This is used to create a file using a specified time.



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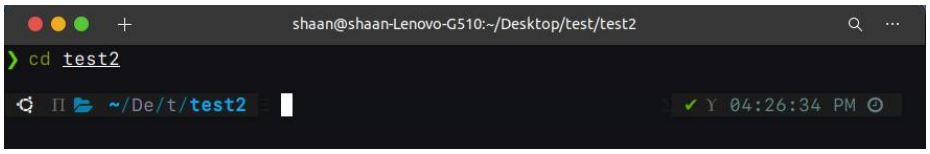
cd

cd command stands for **Change Directory**. As the name specifies, it is used to change the directory from the current working directory.

cd *[dirname]*

This command will the change the current working directory to [dirname] directory. (Here, *[dirname]* is the name of the directory you want to change to.You can provide your own directory name instead of *[dirname]* for example :- cd shaan)

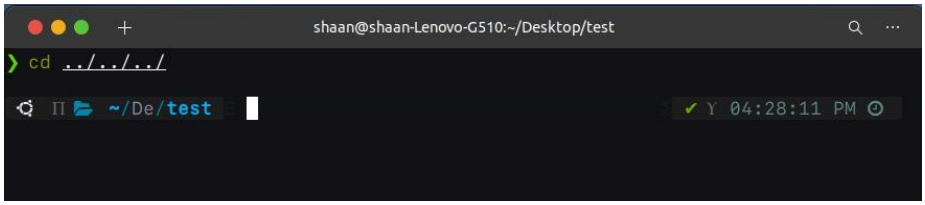


cd *[dir1]/[dir2]/[dir3]*

This command will change the current working directory to *dir1/dir2/dir3* directory. (Here, *[dir]* is the name of the directory you want to change to.You can provide your own directory name instead of *[dir]* for example :- cd linux_class/shaan)

cd ../

This command will change the current working directory to the parent directory or previous folder.



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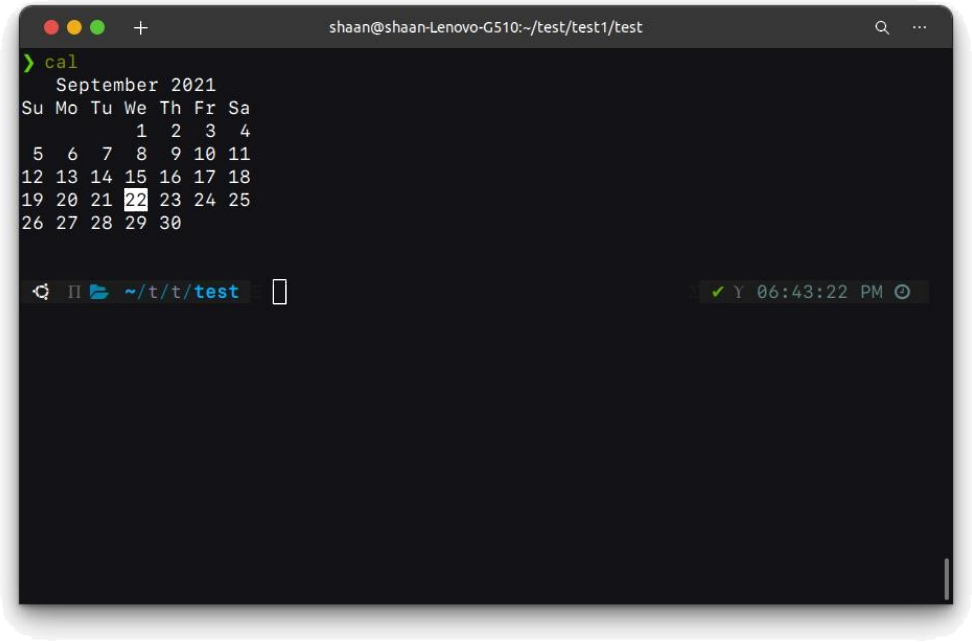
cal

cal command will print the calendar in terminal window. By default, cal command will show the current month as output.

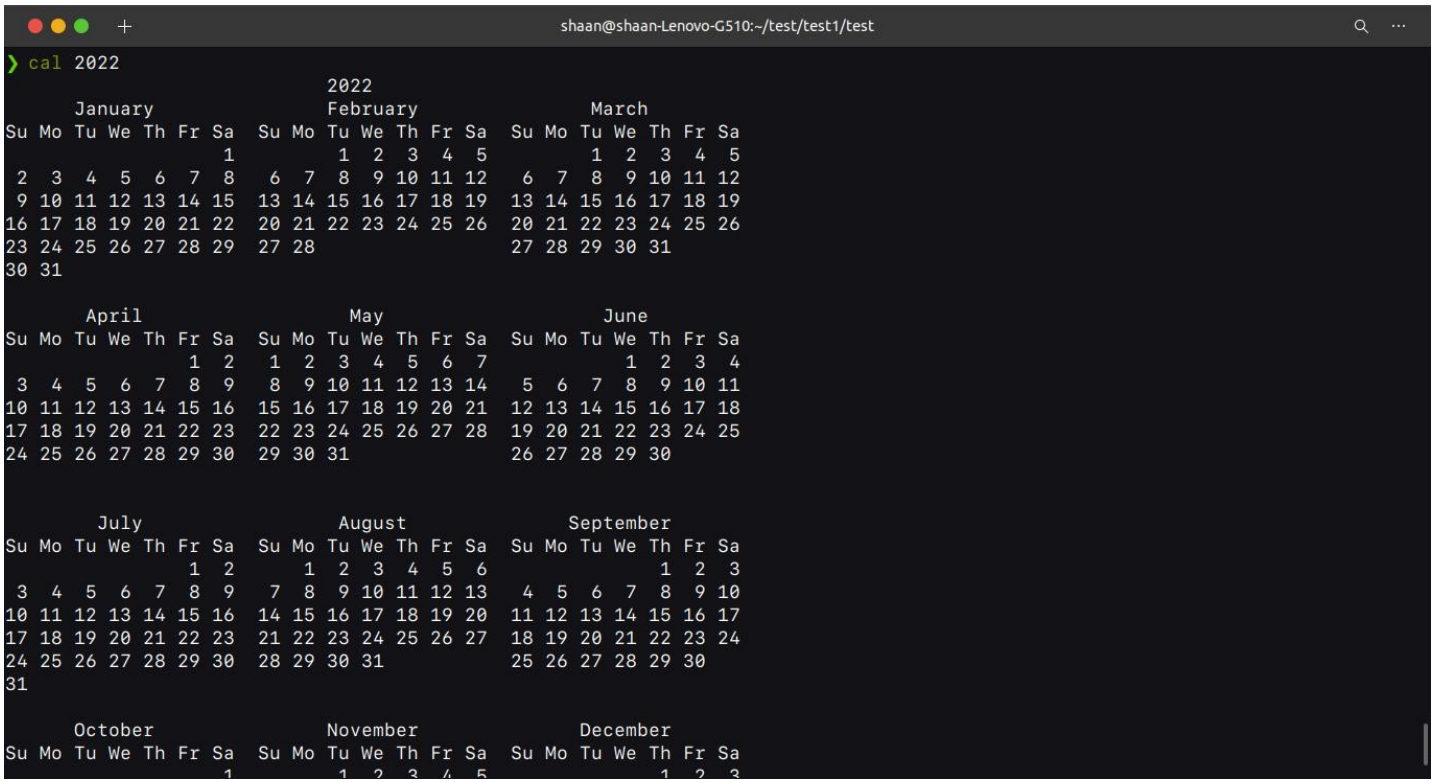
cal

This command will by default show the calendar of current month.



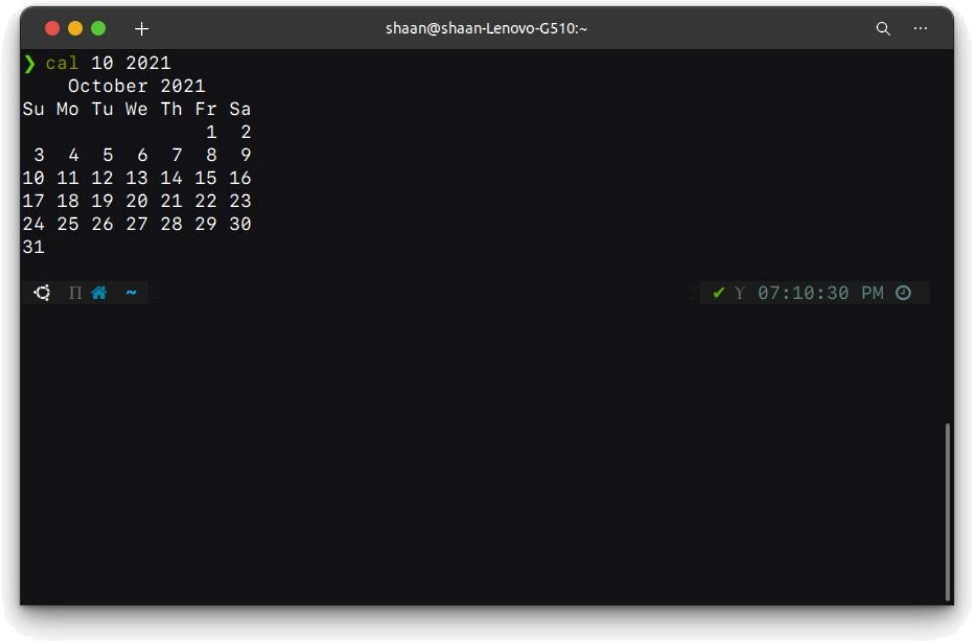
cal *[year]*

This command will show the entire year's calendar as output.



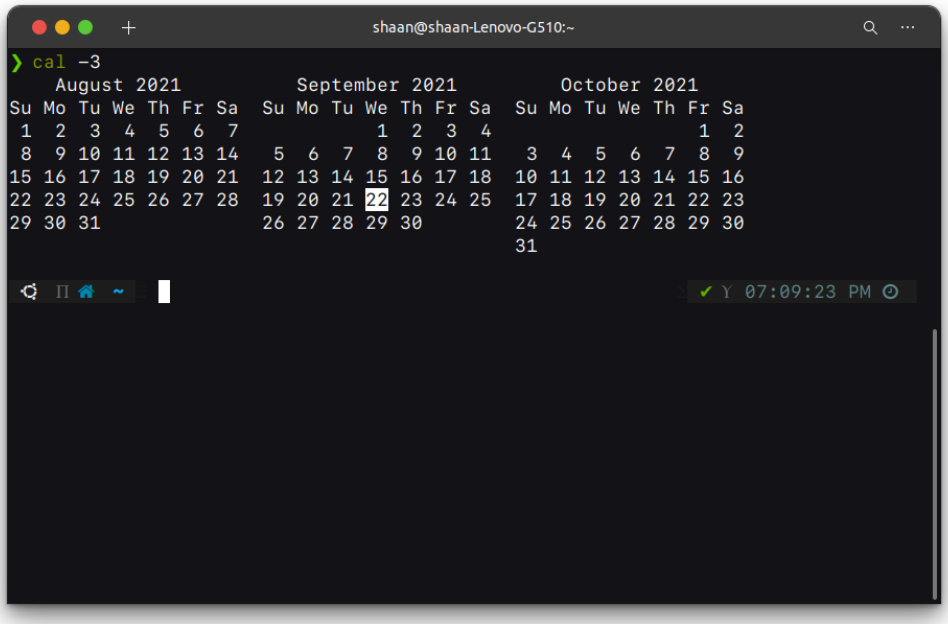
cal *[month] [year]*

This command will print the calendar for the specified month of the year.



cal -3

This command will show the calendar of *previous*, *current*, & *next* month.

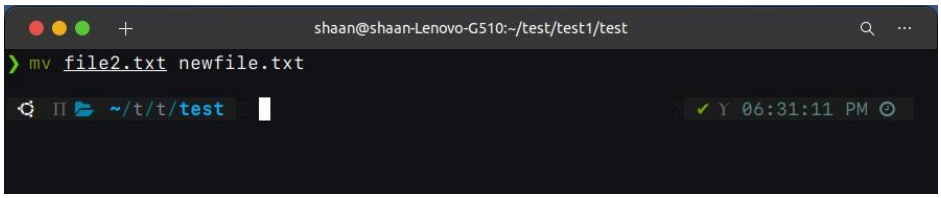


mv

This command is used to rename a file or a directory.

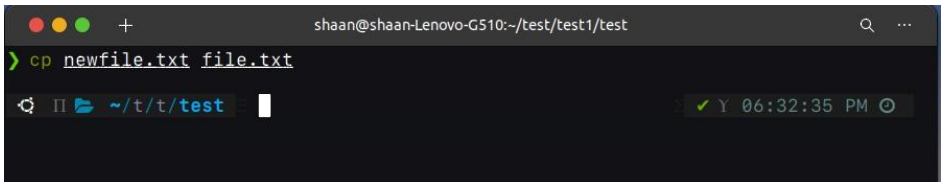
mv

This command can be used to rename a file. The syntax is *mv file_to_be_renamed new_file_name*



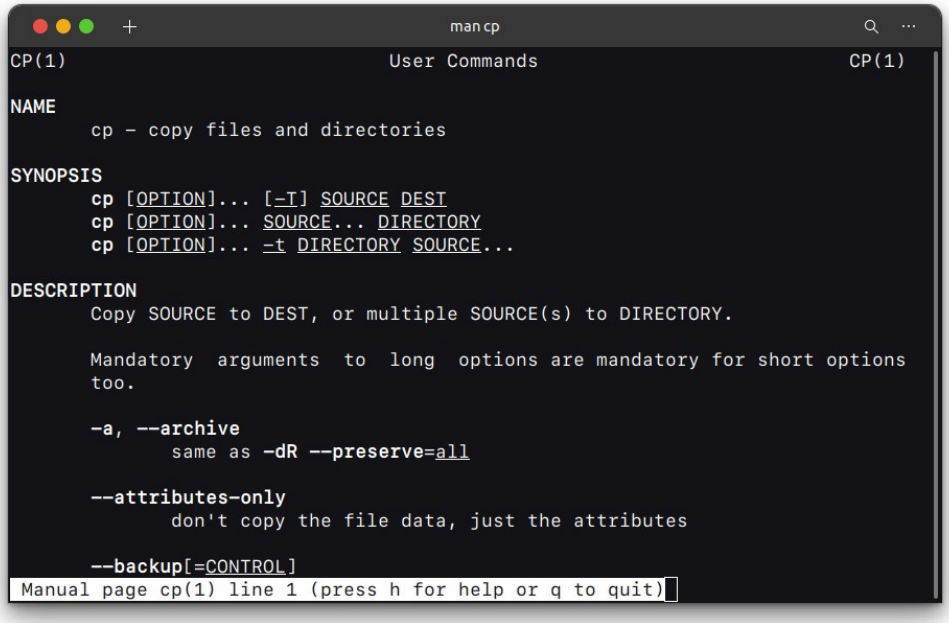
cp

This command is used to copy a file. The syntax is *cp file_to_be_copied new_file_name*



man

This command is used to display a manual for any other shell command. For example, man date will print the **man cp** will print the manual for **cp** command.

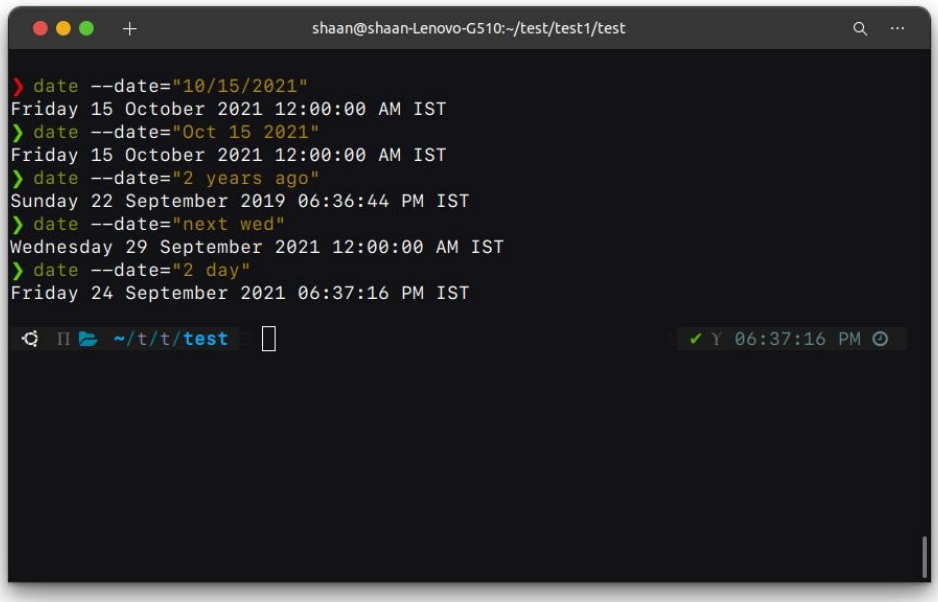


date

Date command is used to display the system date and time. By default **date** command will print the date of the time zone which was configured on the system while installing the operating system.

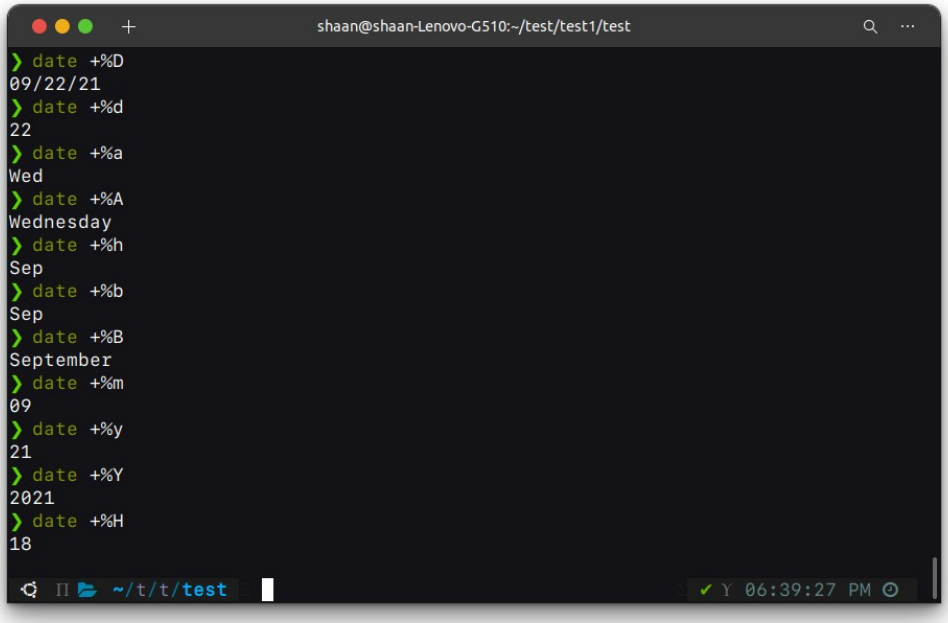
date commands

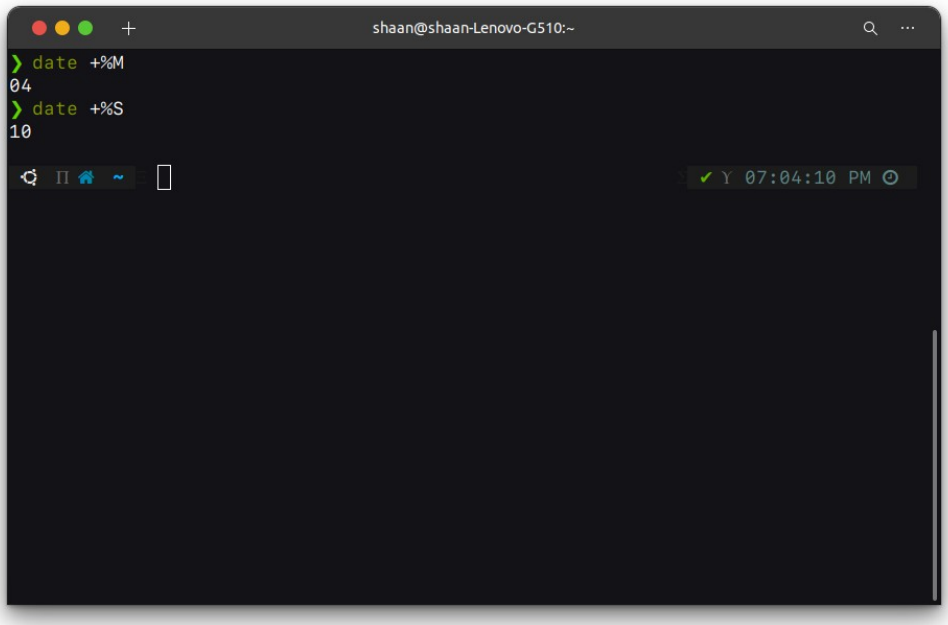
--date - Displays the given date string date format.



- **% D** - Display date as mm/dd/yy.
- **%d** - Display the day of the month (01 to 31).
- **%a** - Displays the abbreviated name for weekdays (Sun to Sat).
- **%A** - Displays full weekdays (Sunday to Saturday).
- **%h** - Displays abbreviated month name (Jan to Dec).
- **%b** - Displays abbreviated month name (Jan to Dec).
- **%B** - Displays full month name(January to December).
- **%m** - Displays the month of year (01 to 12).
- **%y** - Displays last two digits of the year(00 to 99).
- **%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.





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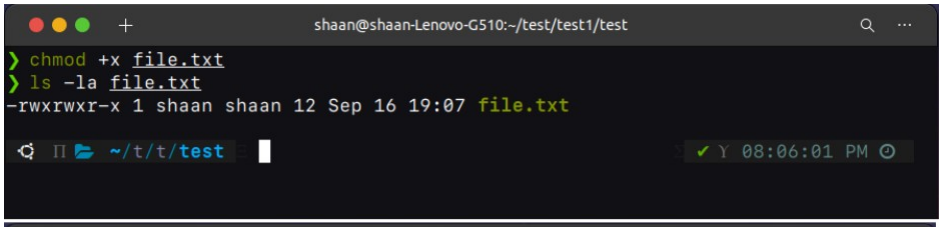
chmod

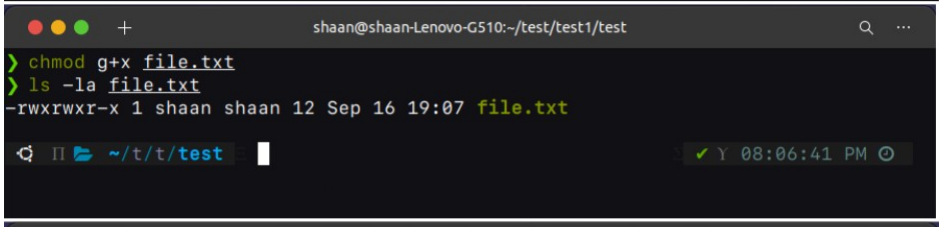
chmod command stands for **change mode** command. There are 3 modes - - +w (write) - +r (read) - +x (execute)

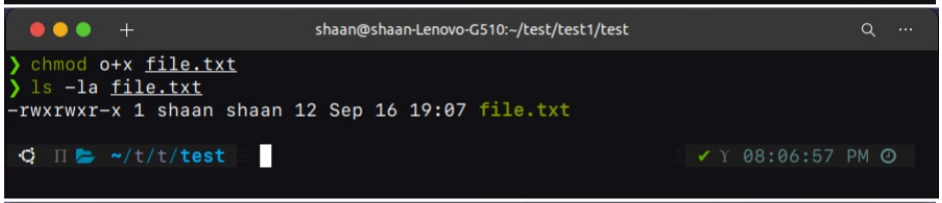
chmod [u/g/o]+[r/w/x]

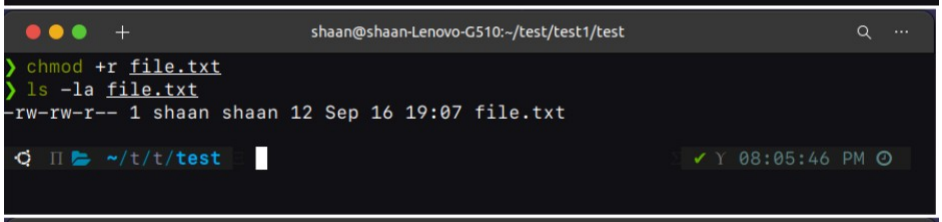
This command will change the modes for **either user, group, others or all** as **either read, write, execute or all.**

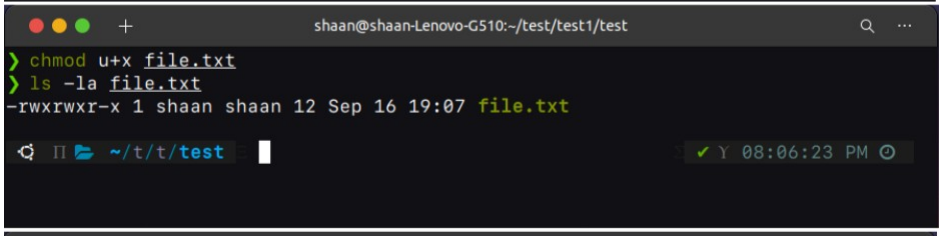
Category	Operation	Permission
u (User)	+ (assign)	r (read)
g (Groups)	- (remove)	w (write)
o (Others)	= (Absolute permission)	x (execute)
a (all)		

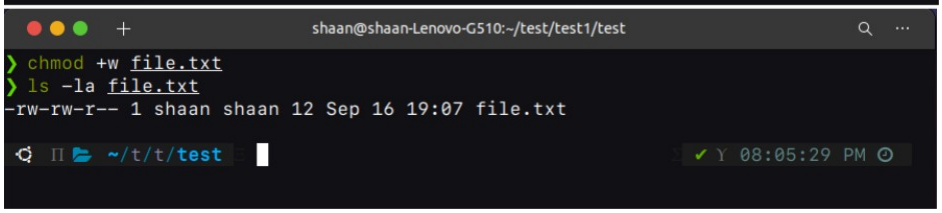




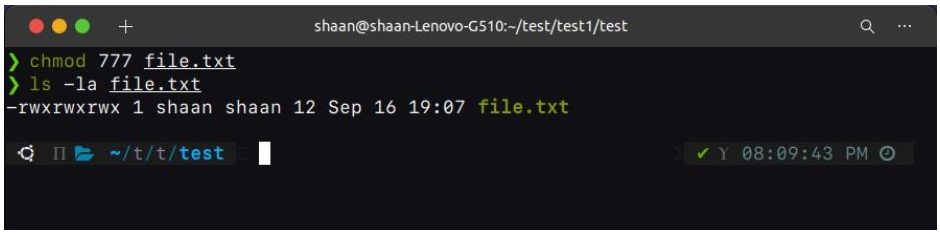








Using chmod with Absolute permission



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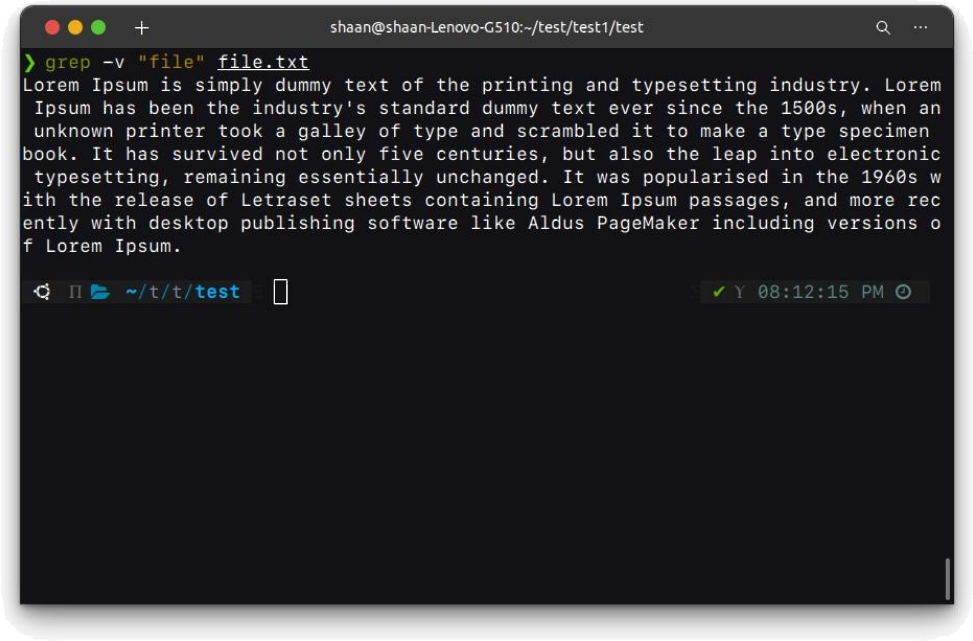
grep

The grep command searched file(s) for lines that match a specified pattern.

---

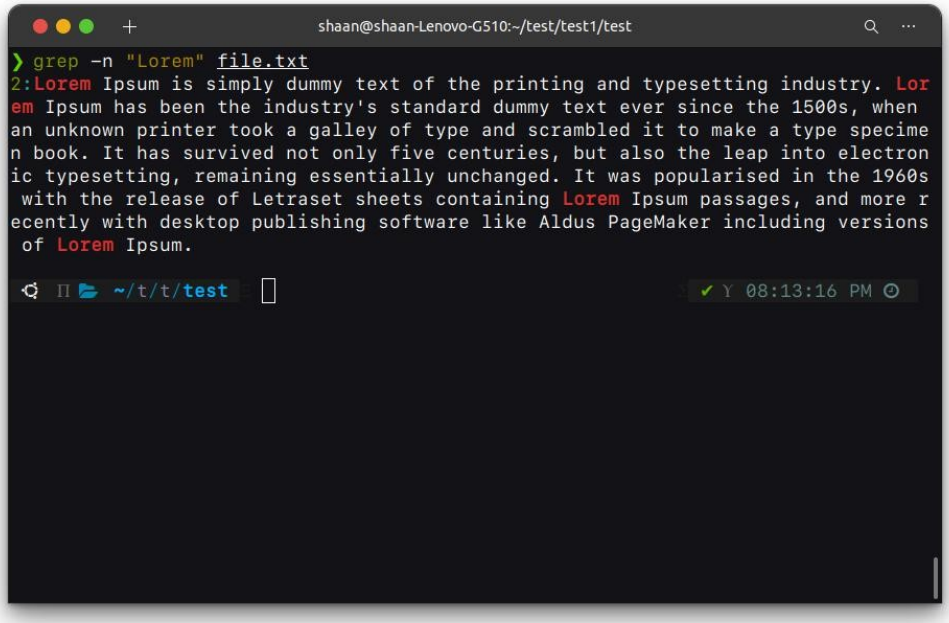
grep -v *[pattern] [filename]*

Print all lines that do not match pattern.



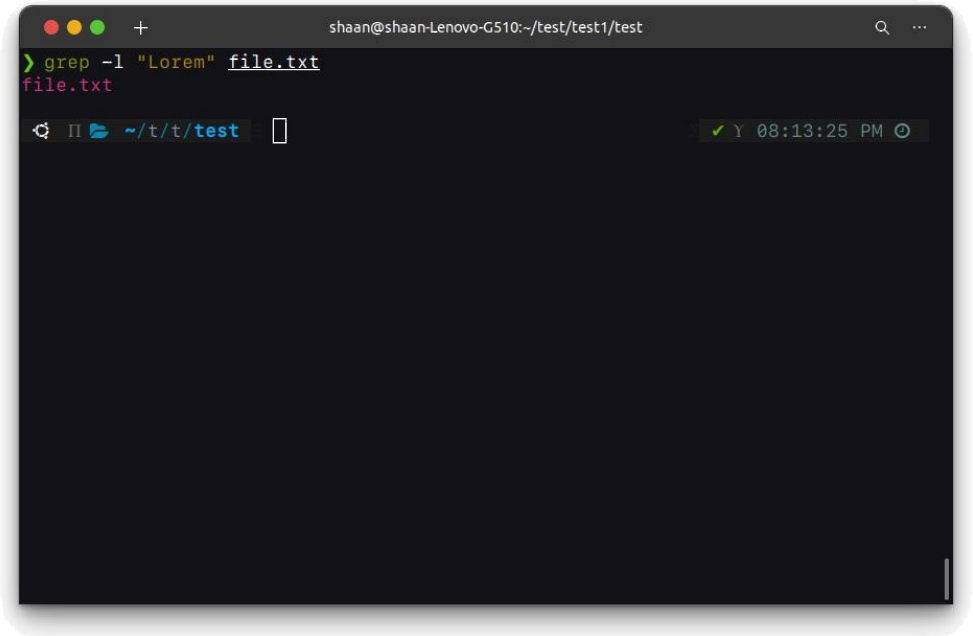
grep -n *[pattern] [filename]*

Print the matched line and its line number.



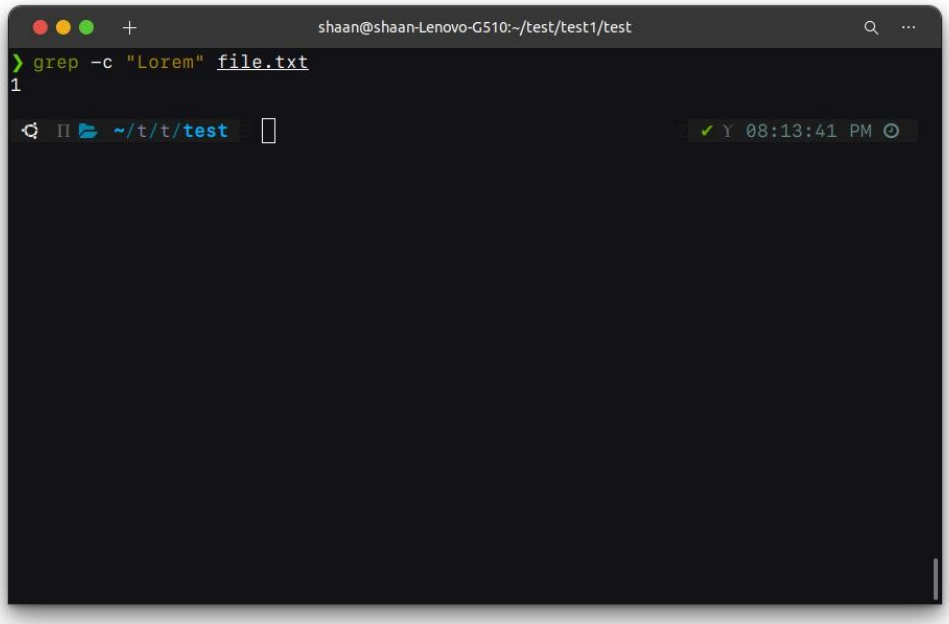
grep -l *[pattern] [filename]*

Print only the names of files with matching lines.



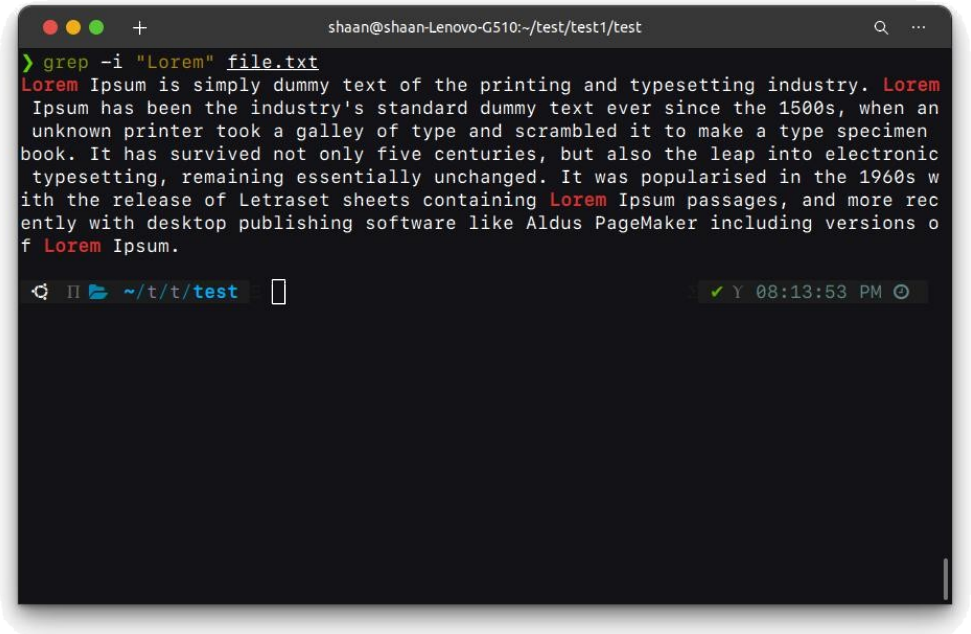
grep -c *[pattern] [filename]*

Print only the count of matching lines.



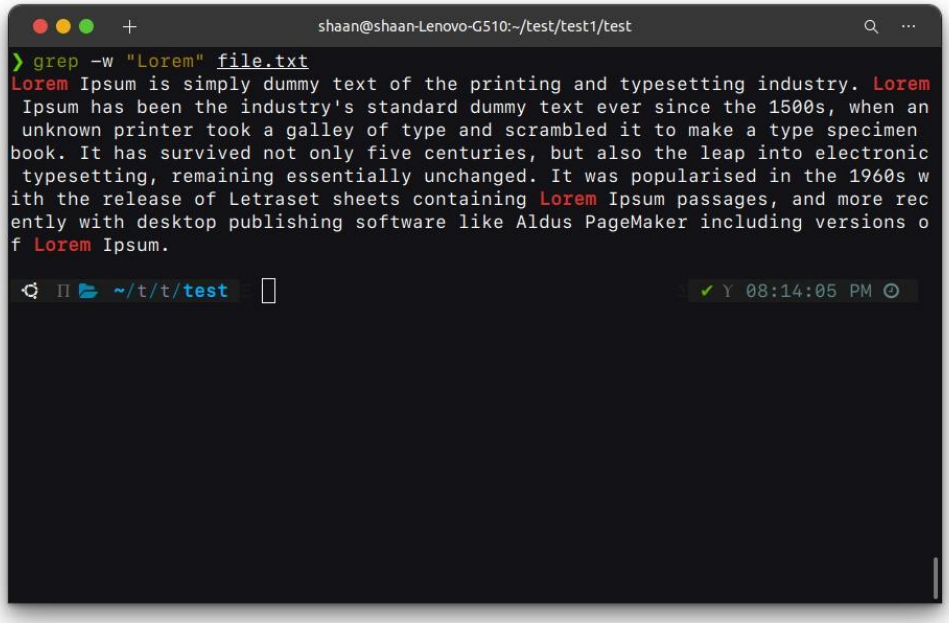
grep -i *[pattern] [filename]*

Match either upper- or lowercase.



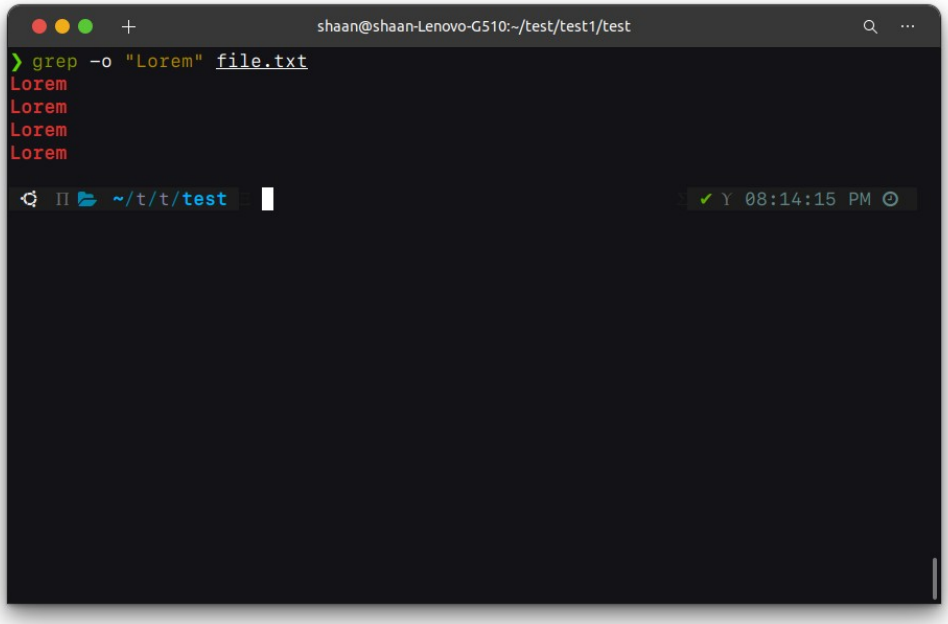
grep -w *[pattern] [filename]*

Match whole word



grep -o *[pattern] [filename]*

Print only the matched parts of a matching line, with each such part on a separate output line.



bc

bc stands for *basic calculator* . It is a simple calculator using which we can perform basic arithmatic operations.