**Imp Note:- There my maby user,group and otheres may exsist in the system but uid is the only thing that differnetiate them.**

**UID of any user can be checked by first going into that user window and write command echo $UID**

**.The UID of the user will be printed.**

**UID of root is always 0**

mkdir

rmdir

cp

mv

cd

ls

pwd

sudo apt-get install

sudo apt-get update

sudo apt-get upgrade

sudo apt-get remove filename/sofware

touch file name

cat

clear

touch . :-create a hidden file

ls - a ~~:-~~lsit all file

history:-gives the histroy

ls-l :-list all long files

ls-r:- list all the files in reverse order

ls-t:-list all the file as per time

sudo su:- makes the user as super user .User can acess the root priviliges without usig sudo again and again.

Note:-To exit frm the user mode press ctrl+D

chmod permissions filename

top :-It will list all the process running iin the environment

ps:-list all the running process

kill process id:-This kills the process id .

Kill - 9 <process id>:-It kills the process abruptly

sudo nano:-opens the editor

free -g :- Tells the memory in gb

Note:-for getting the memory into kilobytes,meagabytes,bytes use k,m,b respectively in place of g.

Sudo ./ software name which needs to be run

ls -al filename (to check the permissions)

man cmdName:-will tell the history of the command.

hostname:-will tell the name of host server

hostname - i:- will tell the ip address

echo Hello>>note.txt :-It will add hello to note.txt

date:-Prints the date

**cut command**:-It is used to get the particular byte,char,word,adding delimeter between words.

File name:-name.txt

1.cut -b 1,2,3 name.txt

For more knowledge

<https://www.geeksforgeeks.org/cut-command-linux-examples/>

**Cmd to set environment in linux**

set :-gives the list of environment variables

export <variblename>=<path>

Sets shows al the global variable names in operating system.

Env:- env cmd shows the environment variables only

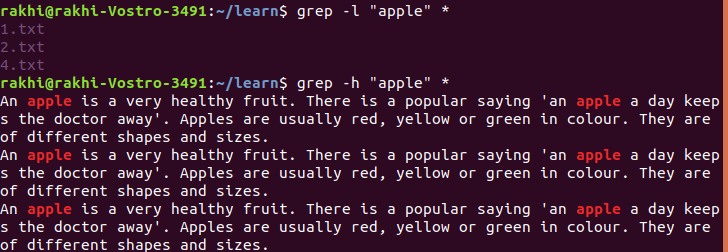
unset variable name

delets the environment variable

**Grep cmd:**-It is used to get the particular sequene of characters

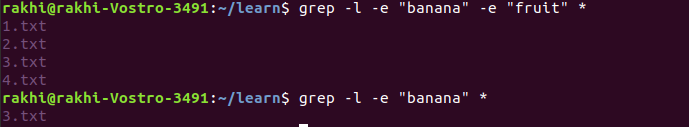
There are many options used with grep cmd like -i , -c,-o,-w,-E,-l,-h

-l list all the files which have common word present in a directory.

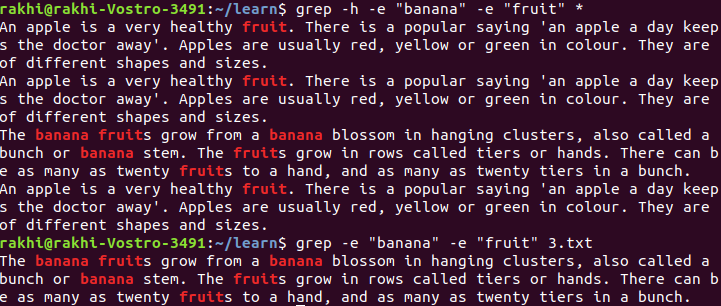


-l :- is used for listing only file names.

-h used for highliting the word but it do not print the file name



-e :- it used for finding many words.



In grep when we want to search multiple words ina file then the cmd is

grep ‘the\|those\|that\|then’

The above cmd will serch for all the words

for more check her

<https://www.geeksforgeeks.org/grep-command-in-unixlinux/>

**tr cmd**

It is used for the transformation or deletion of words.

Many options are used along with tr cmd

- c :- complements the output asked

for eg:- cat learn.txt| tr -cd ‘n’

This cmd will delete all words except n.

- d:- deletes the given value from the file and prints the output

for eg:- cat learn.txt| tr -d ‘n’

-s :- squeeze the various occurences into one

for eg:- cat learn.txt| tr -s ‘n’

**sort command**

It is used to sort the file.

Many options are used along with it

1-o

It is used to transfer the sorted answer into another file.

sort -o learn.txt>learn1.txt

This will sort the contet of learn and store the content in learn1.txr.

Cmd can also be written as

sort learn.txt>learn1.txt

2-r

Sort in reverse order

3.-n

sort the numbers

4.-k Option :

Unix provides the feature of sorting a table on the basis of any column number by using -k option.

5.-c

checks whetehr the file is sorted or not .

If the file is sorted then nothing will print else the first unsorted line will print.

6.-u

It removes the duplicates

7.-M

sort as per month name

8.-t :-

to give deilimeter along with -k

for eg sort -t$’\t’ -k 2 -n -r <filename>

this will sort list in descending order as per second column where tab is differentiating two column.

**head cmd**

It is used to print the top lines of file.

Options used along with it are:-

1. - n:- It tells the no of top lines to be printed

for eg:- head -n 10 learn.txt

2.-c :-It is used to print the chearacters from first to specified position

head -c 20 <filename>

**tail cmd**

It is used to print the lines from downward

**ssh command**

It is used to login to remote linux(which is probablty on cloud).

It provides a public key to lauch the remote linux system so the command is

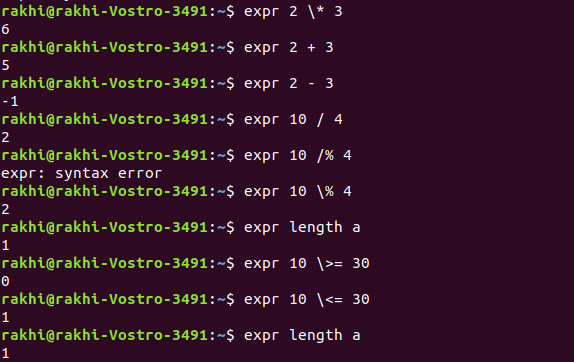
ssh -i <public key file location> <username>@<ipaddress>

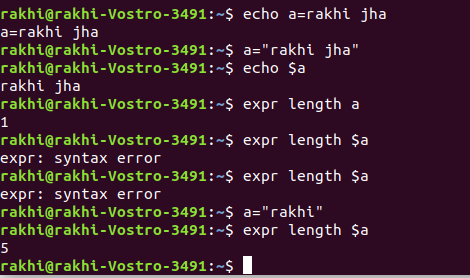
Now the remote linux will be visible on terminal and we can write the commands on that remote linux server.

No gui will be there for remote linux.

**expr cmd**

**It s used for mathematicla operation**

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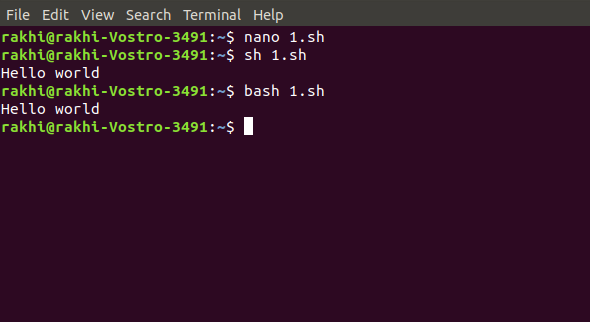
**Header file of shell script is shebang**

**Shebang is #! :-This represents which interpreter should be used for interpreting**

**#!/bin/bash:- This is headre file which represents it is a bash/shell script**

**#!/bin/bash is this is not provided it often considers #!/bin/sh which would be same in mot cases.When you put #!/bin/bash in your script,even if you run the script in a different shell ,the kernel will know which shell to interpret it with.**

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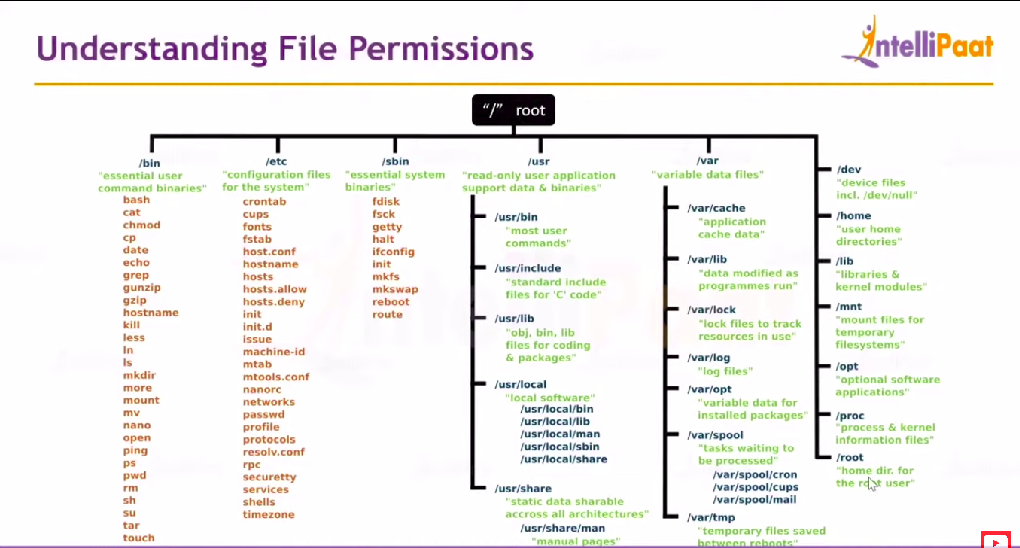
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**How to add another user**

sudo useradd <username>

**How to add group**

sudo groupadd grp1



**Ownership Permission**

chown is used

chown username filename :- gives permission of file to the mentioned user.

chown groupname filename :- gives permission of file to the mentioned group.

chown username:groupname filename :- gives permission of file to the mentioned userand group both.

**Find cmd**

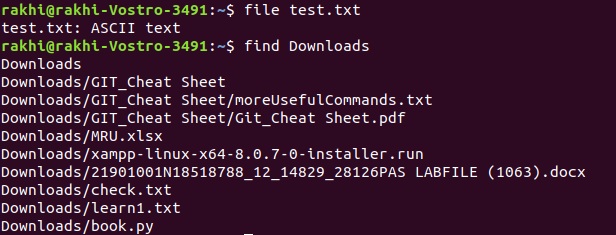
find <filename>

It will search whether the file exsist in the directory or not.

**File cmd**

It will tell what type of file it is like directory,text,shell script.

Find <name of file>

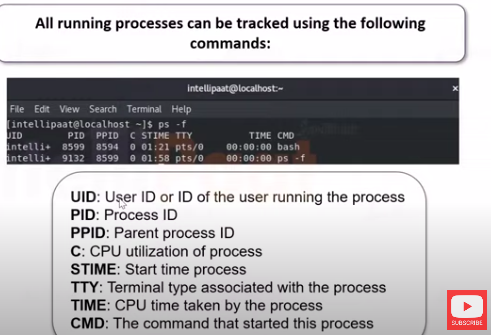


**Unix Process Control Commands**

**A command issued in unix/linux starts a new process which invokes a 5 digit unique id called pid.Using pid the process can be tracked.**

**ps aux**

**shows all the process running**

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**ps -u username**

**It shows all the process running in the mentioned user account**