23/12/22

ssh comand (Secure shell) - used to connect the AWS server with your IP address
pwd Command (print working dir) - used to check the path
ls Command (listing)- used to verify the list
cd command (current working dir)- used to check wch dir is going on present
cntrl+l command (clear scrn)
22-Linux port number
Dir- directories (folder)

*****Creating directories & deleting it***

0) First connect the server and write this command to connect Ubuntu
   ex: ssh -i demo.pem ubuntu@(IP_address)
       type (yes)

1) First check the user
   ex: whoami/{hostnamectl}   solution > Ubuntu

2) create directory {mkdir}
   ex: mkdir test1   (after every command type ls for showing up the lists/ to verify)

3) delete directory {rmdir}
   ex: rmdir test1   (after every command type ls for showing up the lists/ to verify)

4) for creating more number of directory type
   ex: mkdir demo{1..4}

5) for deleting multiple dir
   ex: rmdir demo*

6) create hidden dir
   ex: mkdir .test-hidden

7) check the hidden dir
   ex: ls -a

8) for creating more hidden dir
   ex: mkdir .demo-hidden{1..5}

9) for deleting more hidden dir
   ex: rmdir.hidden *

*if incase the dir is filled with data it wont be deleted, so then we have to delete it forcefully by the command
ex: rm -rf test2/

24/12/22

Creating a notepad and type the content (vi editor)

touch file.txt command - create an empty file

1) touch file.txt

2) vi file.txt
3) it takes you to Linux note pad
4) press "I" for inserting text to notepad
5) type the content
   ex: Hello world
6) the press 'esc' for coming to execution mode (esc-execution mode)
7) the press (:wq) for saving the file (w-save, q- quit)
(:q!) for witout saving file (!- no problem)
8) press enter it directs you out of notepad

---Things can be done at notepad execution mode(esc)---

* to check the number of lines you typed - process same after everthing type (:set number)
  numbers cant be saved it can only be checked.

* to delete the enitre line just keep the cursor on that line and press (d)

* to copy the line and paste it else -keep the cursor on the line and press (yy) and come to the place where u need to paste and press (p)

* to undo the things you done press (u)

* to find the word (:%s/word) in the content

* to replace the word (:%s/word/replaced word)

* to copy the another file (cp)

* to rename the file (mv)

* to delete the file (rm) anf for forcefully delete (rm-f)

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Commands	(detailed info)
ls	(list)
ls -a	(check hidden file)
ls -l	(list with details)
ls -al	(to list the permission of all hidden files)
ls -l filename	(to list permission of particular file)
ls -ld	(to list permission of particular dir)
ls -i	(checking the inode number)
ls- ia	(checking the inode number of hidden files too)
ls -id filename	(to check the particular inode number of the file)
ls -lt	(to check te list in decending order with time and date)
ls -lrt	(to check the list in reverse order)
history	(check the history)
history -c	(delete the history)

28/12/22

User

```
sudo useradd user-1   (add user)

cat /etc /passwd      (check the users)

sudo adduser user-2   (add user)

sudo userdel user-2   (delete the user)

sudo passwd user-1    (set the password to user)

sudo cat /etc/shadow   (check the passwords)

sudo usermod-l <newname> <oldname>  (replace the names of users)

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Groups

first create users
then create groups

1)sudo groupadd group-1 -create group

2)sudo cat /etc/group   - check the groups

3)sudo usermod -G group-1 user-1  - adding users to group
                  <to>    <from>

4)sudo gpasswd -a user-1 user-3   - adding users to primary/ adding users to users
                 <from>  <to>

5)sudo gpasswd -d user-1 group-1  - removing the user from the group

6)sudo groupmod -n development group-1  - renaming the groups
                  <new name>  <old name>

7)sudo gpasswd testing           - set password to group
               <group name>

8)sudo gpasswd -M user-1,user-2,user-3 user-5   - adding multiple users to
group/user
                 <from>,<from>,<from>  <to>

02/1/23

how to find the file or directories

1) first create the dir

2) create some files

3) to find file
  sudo find -type f -name file.txt         (to find from particular folder)

4) to find file
  sudo find / -type f -name file.txt       (to find from home folder)

5) to find dir
   sudo find -type d -name demo.txt
```

6) to find dir
  sudo find / -type d -name demo.txt

7) to check the ram
  free (in kb)
  free (in mb)

8) to check the cpu
  nproc

3/1/2023

its written in notes (how to set time and date)

4/1/2023

(How to compress file zip & unzip)

5/1/2023

(How to check the lines of vi file)

*first create a vi file.txt

*then add some contents in line wise
then give the command

{cat -n file.txt > test.txt}
this command means file saved in file.txt to going to save in test.txt because in file.txt numbers can not be printed

*to check the first 10 lines to check the characters of the line from the top

{head -10 test.txt} {head -c 100 test.txt}

*to check the last 10 lines to check the characters of the line from the bottom

{tail -10 test.txt} {tail -c 100 test.txt}

*cat is another editor like vi

*to display the file
{cat file.txt}

*to display the file with numbers (the numbers doesnt save here its only for ref)
{cat -n file.txt}

*for the cat editor (in this editor we can only add and remove data)
{cat > file2.txt}

*add the content again to same file
{cat >> file2.txt} [to save press control+d d(press d 2 times)]

6/1/2023

how to see the content in cat file without scrolling up or down

*first create a vi file and then upload some big content

*then open cat file then type
 {more file_name}

*by entering 'Enter' content runs line by line
             'space' content runs page by page
             'b' content runs back

*to quit from the cat file 'q'

* to skip the first 5 lines
 {more +5 test.txt}

* to find the word in the content
 {grep word file_name}

09/01/2023

to filter row wise

to identify the error   error(word)

{grep word file.txt}   - to find the word in the content

{grep -o word file.txt} - to find the only error word

{grep -v word file.txt} - to remove the error in the content

{grep -i word file.txt} - to find the error and it prints the line which has error

{grep -r word*}   - to find the error word in all the file/checking

{grep -c word file.txt} - to find how much error words are present in numbers

{grep -n word file.txt} - to find the error present in which line

{grep -A2 word file.txt} - to filter the 2 lines after the error line

{grep -B2 word file.txt} - to filter the 2 lines before the error line

{grep -C3 word file.txt} - to filter the 3 lines after & before the error line
[numbers are subjected/can the changed accordingly]

10/01/2023

To filter column wise

{cut -b 1,2,3 file.txt} - search in first 3 bytes   there are two things
bytes and characters [bytes are letters including space]

[characters are only letters]
{cut -c 1,2,3 file.txt} - search in first 3 characters

{cut -b 2- file.txt}   - search after 2 bytes

{cut -f 2 file.txt}   - search the whole column

{cut -f 1,4 file.txt}   - search the both columns [1,4]

{cut --complement -f 2 file.txt} - skips the 2nd column [-2]

{cut --output-delimiter="_" -f 1,2 file.txt} - prints 1 and 2 column with _ [underscore] [@,#,$,%,&,*] any symbols can be given

Sorting the letters/numbers in assending or in decending order

{sort file.txt}   - sort the file in alphabetical order

{sort -r file.txt}   - sort in reverse order

{sort -n number.txt} - sort the numbers in chronological order/ assending order

{sort -nr number.txt}- sort the numbers in reverse order/ desending order

{sort -u file.txt}   - it deletes the duplicates and arrange

{ls -l | sort -k 4} - it sorts the [ls -l] of 4th column

12/1/2023

to replace the word in the line or in content

{sed "s/unix/windows/" file.txt} - for changing the word only at every starting of the line [this change doesnt save]

{sed "s/unix/windows/g" file.txt} - for changing the word where all present [this change doesnt save]

{sed "s/unix/windows/2" file.txt} - for changing the word present at 2nd time in same line in whole file

{sed "4 s/unix/windows/" file.txt} - for changing the word only in 4th line

{sed "4 s/unix/windows/3" file.txt} - for changing the word only in 4th line, 3rd time the word in present

{sed -n "4 s/unix/windows/p" file.txt} - for printing only the 4th line with first time word change

{sed -n "4 s/unix/windows/pg" file.txt} - for printing only the 4th line with change the word everywhere

{ sed "y/un/UN/" file.txt} - replace the un to UN in whole file

{sed "1d" file.txt} - delete the first line

{sed "1,3d" file.txt} - delete the first 3 lines

{sed "/unix/d" file.txt} - delete the lines where all unix is present

{cal} - calender

{date} - today date and time

if this isnt working then update and install

1. {sudo apt update}
2. {sudo apt install ncal}

then try!!

{cal | tee shay.txt} - open calender and save it in new file shay

{date | tee -a shay.txt} - open date and save it in new file

13/01/2023

{sleep 10m} - sleeping the device for 10 min in another compiler under same server

{ps -aux} - process id for all user x [they are the background process running]

{ps -aux |grep sleep} - to filter the background sleep command

{sudo kill <sleep id>} - this kills the command and works normally [(sleep id)PID - process id]

{sudo kill 9 <PID>} - killing forcefully

{cat gre.txt | tr [a-z] [A-Z]} - changing from lower case to upper case [vice-versa]

{wc file.txt} - to check the no. of lines, word, characters

{wc -l file.txt} - to check only the lines

{wc -w file.txt} - to check only the word

{wc -c file.txt} - to check only the character

{#} - dummy command just to write down notes/stuff

&&(AND gate) {cat file.txt && cat test.txt} - it shows both the file A and B, if any wrong in 1st file it stops the execution because its and gate

||(OR gate) {cat file.txt || cat test.txt} - it shows the first A file if its wrong then file B is showed

Softlink and Hardlink

To create a softlink(shortcut):

1. sudo adduser user-1 - to create an user
2. sudo su - to go to root
3. whoami - to check am i root
4. touch demo23.txt - create a file named demo23, now create a shortcut(softlink) of it
5. ln -s demo23.txt /home/user-1 - first step

6. cd /home/user-1 - second step, we are pasting it in user-1 [the file actually doesnt open it only showsnthe file name]
7. ls -l - to check the softlink

To create a Hardlink:

1.

to install & uninstall applications

apt install - ubuntu/debian/etc

yum install - amazon

apt remove - to uninstall app

14/01/2023

**** NETWORKING **** [important]

{ifconfig} - to get the private the IP
LOOP BACK IP [127.0.0.1]

BROAD CAST IP [255.255.240.0]

{curl ifconfig.me} - to get the Public IP

{nslookup flipkart.com} - to get the website through IP address [IPv4- 32 bit, IPv6 - 128 bit]

{traceroute flipkart.com} - to check time to reach the server

{ping google.com} - to check the internet through terminal

{ping -c 10 google.com} - to check the internet through terminal for 10 times

{sudo su} - to get to root folder

{curl} - browse the network / eg: google search

{wget} - download any content from internet with having only link address [mysql port number - 3306]

{telnet IP port} - to check the remote connectivity [connecting source to destination port] [HTTP port number - 80]

{netstat -tunlp} - to check the local connectivity
[Linux port number -22]

Steps
1. sudo apt install apache2
2. telnet localhost 80
3. netstat -tunlp

How to transfer file to server to server [source to destination] [source - gitbash & dest. - AWS terminal]

0. Go to destination (aws website terminal)

1. Go to root folder (sudo su)

2.
   a. vi /etc/ssh/sshd_config -> enable the passwd authentication
   b. systemctl restart sshd

3. To setup password (passwd ubuntu) -> new password, Confirm password

4. Come to source

5. ssh-keygen   then enter

6. go to dest. and copy the IP (curl ifconfig.me) -> copy the starting IP

7. ssh-copy-id ubuntu@IP [paste the IP here]

8. type yes

9. type the password

10. scp file.txt ubuntu@IP:/home/ubuntu   (to transfer the file from source to destination)

11. check in destination (ls)

12. u should get the file name

How to change Linux port number

1. be a root user (sudo su)
2. vi /etc/ssh/sshd_config
3. change the port number then save
4.

19/1/23

AWS
1. ebs -volume
2. create volume
3. attach volume /xvdf

20/01/23

LVM ()
1. go to AWS console
2. go to volume -> create one 50 gb* -> attach the volume to vpc
3. come to bash
4. check lsblk (check the partition)
5. sudo fdisk /dev/xvdf (create partition)
6. m -> n -> p -> give partition number -> leave first sector -> last sector +15G -> wq
7. check lsblk to see the partion
8. same process for one more partition
9. now create file system (sudo mkfs -t ext4 /dev/xvdf1)

10. check the file system (sudo file -s /dev/xvdf1)
11. create directory (mkdir abc)
12. mount to file system (sudo mount /dev/xvdf1 abc)
13. df -h (to check the disk)
14. same process for other xvdf2 (from step 9)

* to delete the content in file {>file_name.txt} it doesnt delete file but deletes the content in file