Linux-Day-4

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► **grep**
grep command is to search for a particular string or pattern in your file.

unix is great os. unix is opensource. unix is free os.
Unix linux which one you choose.
uNix is easy to learn.unix is a multiuser os.Learn unix .unix is a powerful.

- ○ Let search for a unix string present in a file or
  cat file1.out | grep unix
  Normally Linux is a case sensitive language, so if we search "unix" only the matching string lines only will get printed.

- ○ If you want to ignore the case sensitive while searching unix, you can use the -i flag in the grep command.
  cat file1.out | grep -i unix

- ○ If you want to display the lines that containing in existing and also the print the line number before they each line, you can use -n flag.
  cat file1.out | grep -n unix

- ○ If you want to bring the lines that is not containing the unix word you can use the flag -v
  cat file1.out | grep -v unix

- ○ Print the lines that started only with the Unix string, for this we can use cap^ character before the string during the grep command
  cat file1.out | grep ^unix

- ○ Print the lines that having a Unix keyboard as part of any string.
  cat file1.out | grep unix*

- ○ If you want to search for a multiple strings we can use a egrep command.
  cat temp.txt | egrep 'great|operating'

► **more**
- ○ Normally how do we read files?, we just simply use the cat command.
  cat file2.out
  Suppose file2.out is a very big file so to read all the content you have to scroll up and scroll down am I correct or not?

- ○ The more command also useful to read your file but we can read a file page by page instead of displaying all the content in the screen.
  more file2.out
  - ▪ After running the more file2.out the first page of the file is getting display,
  - ▪ so if you want to read the new line you can press enter.
  - ▪ if you want to go to the new page you can press to space.
  - ▪ if you want to quit the prompt you can press on q.

► **head**
- ○ head command will display top lines of the file.
  cat /etc/passwd | head
  head command by default display the first to 10 lines of the file

- ○ If you want to print them first five lines of the file you can use the command like
  cat /etc/passwd | head -5

► **tail**
- ○ tail command normally display them bottom lines of the file.
  cat /etc/passwd | tail
  tail command by default will display in bottom 10 lines of the file.

- ○ Suppose if you want to display the bottom files of the file you can use they tail command as
  cat /etc/passwd | tail -5

- ○ You can case the tail command in different way also
  tail -n 10 /etc/passwd

► **sort**
- ○ sort command will print the data inside your file in ascending order based on the first letter of the line.
  sort file3.out

- ○ sort - Sort command used to sort the lines of a file & arranges records in particular order.

  cat > file.txt
  abhishek
  chitransh
  satish
  rajan
  naveen
  divyam
  harsh
  abhishek

  sort file.txt

```
abhishek
abhishek
chitransh
satish
rajan
naveen
divyam
harsh
```

▶ **uniq**
- uniq is the tool that helps to detect the adjacent duplicate lines and deletes the duplicate lines.

  cat kt.txt
  ```
  I love music.
  I love music.
  I love music.
  I love cricket.
  I love music.
  ```

- If you want to print only unique lines that are present in a file, we have to use sort & uniq command in combination
  sort file.txt | uniq

▶ **history**
- If you want to see the commands that you have executed since you login you can simply click on history command you will get the list of the commands that we have executed so far.

- History of commands stored in a file called **.bash_history** file which is presented under the home directory of user.

▶ **hostname**
- Every machine will have some name right?
- That name we can call it as a hostname, if you want to find the hostname
  Type on terminal **hostname**

▶ **ifconfig**
- If you want to see the private-ip address of machine we can type the ifconfig command.
- Here we can see lot of data and if you want to print only the private IP address we can use hostname command with -i flag.
  hostname -i

▶ **/etc/os-release**
To find out what operating system where using we can open your file /etc/os-release
cat /etc/os-release

▶ **wc**
- cat file1.out | wc -w
- cat file2.out |wc -c
- cat file2.out | wc -l

▶ **awk**
- Print the particular columns in a file

  ```
  firstName    lastName    age    city    ID

  Thomas       Shelby      30     Rio      400
  Omega        Night       45     Ontario  600
  Wood         Tinker      54     Lisbon   N/A
  Giorgos      Georgiou    35     London   300
  Timmy        Turner      32     Berlin   N/A
  ```

  cat samp.txt | awk '{print $1, $4}'

- Here the default seperator between the columns in **/tab**
- If we want us different separator between the columns
  cat samp.txt | awk -F ':' '{print $1, $4}'

▶ **yum**
- **How do you install software in windows?**
  Just double click on .exe/.msi file & will click on next-next
  Ex: Let's install git on windows

- In Linux to install software/package we use yum/dnf command
  - Install git on Linux
    yum install git -y

  - Remove git package on Linux
    yum remove git -y

  - How to list packages available to install & already installed
    yum list

  - How to list packages installed
    yum list --installed

  - How to upgrade packages to latest version

yum upgrade git -y

- Here I used -y flag to proceed without prompting for Yes