NETWORKING & SYSTEM ADMINISTRATION LAB

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Roll No: 53

Batch: B

Date: 21-04-2022

Experiment No.: 6

Aim

Familirization of basic linux commands.

Procedure

1. **read :** It is used to read the contents of a line into a variable.

   Syntax : read [name]

Output :

```
student@S53:~$ read name
My name is Vishnu Vijayakumar
student@S53:~$ echo $name
My name is Vishnu Vijayakumar
student@S53:~$ locate a.txt
```

2. **locate :** It is used to locate the files by name.

   Syntax : locate [filename]

Output :

```
student@S53:~$ locate marvel2
/home/student/marvel2
student@S53:~$ find marvel1
```

3. **locate -i v,txt:** Ignore case distinctions when matching patterns.

   Syntax : locate -i filename.txt

Output:

```
// v.txt
student@S53:~$ locate -i v.txt
/home/student/vishnuv/v.txt
/opt/lampp/licenses/libiconv.txt
```

4. **find :** It supports searching by file, folder, name, creation date, modification date, owner and permissions.

   Syntax : file filename.txt

Output:

5. **grep is v.txt :** It is used to search text and strings in a given file. In other words, grep command searches the given file for lines containing a match to the given strings or words.

   Syntax : grep <word in txt file>< filename.txt>

Output:

6. **grep -i is v.txt :** Ignores, case for matching.

   Syntax : grep -i <word in txt file><filename.txt>

Output:

7. **grep -v is v.txt :** This prints out all the lines that do not matches the pattern.

   Syntax : grep -v <word in txt file><filename.txt>

Output:

8. **grep -A1 vishnu v.txt :** Prints searched line and lines after the result.

   Syntax : grep -A1 <word in txt file><filename.txt>

Output:

```
student@S53:~$ grep -A1 Vishnu v.txt
My Name is Vishnu Vijayakumar
MCA
student@S53:~$ grep -i is v.txt
```

9. **grep -B1 batch b v.txt :** Prints searched line and n line before the result

   Syntax : grep -B1 <word in txt file><filename.txt>

Output:

```
student@S53:~$ grep -B1 Batch v.txt
MCA
Batch B
```

10. **grep -C1 batch v.txt :** Prints searched line and n lines after before the result.

    Syntax : grep -C1 <word in txt file><filename.txt>

Output:

```
student@S53:~$ grep -c1 Batch v.txt
1
student@S53:~$ grep -C1 Batch v.txt
MCA
Batch B
Amal Jyothi College Of Engineering
```

11. **cat h.txt | grep Vishnu vijayakumar :** It is used to search text and strings in a given file.

    Syntax : cat filename.txt | grep word in txt file

Output:

```
student@S53:~$ cat v.txt | grep Vishnu Vijayakumar
grep: Vijayakumar: No such file or directory
student@S53:~$ cat v.txt |grep  Vishnu
My Name is Vishnu Vijayakumar
```

12. **df :** df is used to display the amount of available disk space for file systems.

    Syntax : df

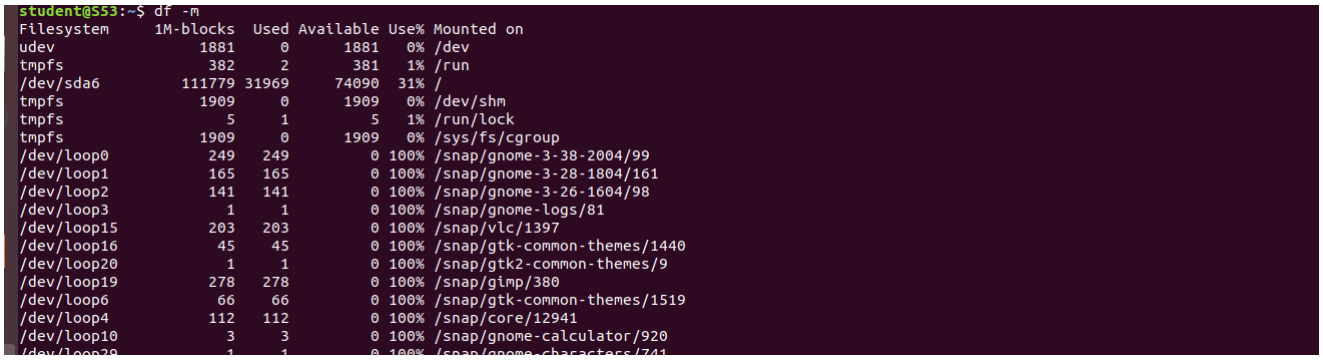
Output:

```
student@S53:~$ df
Filesystem     1K-blocks     Used Available Use% Mounted on
udev             1925304        0   1925304   0% /dev
tmpfs             390960     1836    389124   1% /run
/dev/sda6      114460828 32736144  75867304  31% /
tmpfs            1954792        0   1954792   0% /dev/shm
tmpfs               5120        4      5116   1% /run/lock
tmpfs            1954792        0   1954792   0% /sys/fs/cgroup
/dev/loop0        254848   254848         0 100% /snap/gnome-3-38-2004/99
/dev/loop1        168832   168832         0 100% /snap/gnome-3-28-1804/161
/dev/loop2        144128   144128         0 100% /snap/gnome-3-26-1604/98
/dev/loop3          1024     1024         0 100% /snap/gnome-logs/81
/dev/loop15       207872   207872         0 100% /snap/vlc/1397
/dev/loop16        46080    46080         0 100% /snap/gtk-common-themes/1440
/dev/loop20          256      256         0 100% /snap/gtk2-common-themes/9
/dev/loop19       283776   283776         0 100% /snap/gimp/380
```

13.df -m : du is used to get report on a system in megabytes

Syntax : df -m

Output:

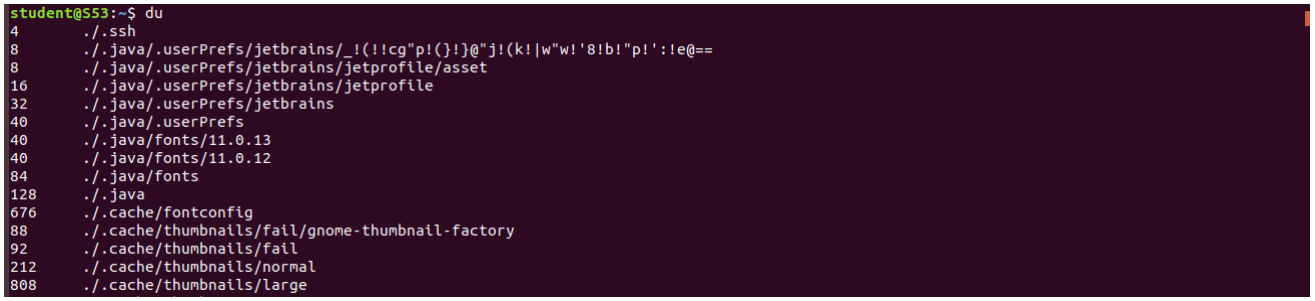


```
student@S53:~$ df -m
Filesystem     1M-blocks  Used Available Use% Mounted on
udev                1881     0      1881   0% /dev
tmpfs                382     2       381   1% /run
/dev/sda6         111779 31969     74090  31% /
tmpfs               1909     0      1909   0% /dev/shm
tmpfs                  5     1         5   1% /run/lock
tmpfs               1909     0      1909   0% /sys/fs/cgroup
/dev/loop0           249   249         0 100% /snap/gnome-3-38-2004/99
/dev/loop1           165   165         0 100% /snap/gnome-3-28-1804/161
/dev/loop2           141   141         0 100% /snap/gnome-3-26-1604/98
/dev/loop3             1     1         0 100% /snap/gnome-logs/81
/dev/loop15          203   203         0 100% /snap/vlc/1397
/dev/loop16           45    45         0 100% /snap/gtk-common-themes/1440
/dev/loop20            1     1         0 100% /snap/gtk2-common-themes/9
/dev/loop19          278   278         0 100% /snap/gimp/380
/dev/loop6            66    66         0 100% /snap/gtk-common-themes/1519
/dev/loop4           112   112         0 100% /snap/core/12941
/dev/loop10            3     3         0 100% /snap/gnome-calculator/920
```

14.du : du is use to check directory/file ,space usage.

Syntax : du

Output:



```
student@S53:~$ du
4       ./.ssh
8       ./.java/.userPrefs/jetbrains/_!(!!cg"p!(}!}@"j!(k!|w"w!'8!b!"p!':!e@==
8       ./.java/.userPrefs/jetbrains/jetprofile/asset
16      ./.java/.userPrefs/jetbrains/jetprofile
32      ./.java/.userPrefs/jetbrains
40      ./.java/.userPrefs
40      ./.java/fonts/11.0.13
40      ./.java/fonts/11.0.12
84      ./.java/fonts
128     ./.java
676     ./.cache/fontconfig
88      ./.cache/thumbnails/fail/gnome-thumbnail-factory
92      ./.cache/thumbnails/fail
212     ./.cache/thumbnails/normal
808     ./.cache/thumbnails/large
```

15.wc : wc stands for word count**.** It is used to find out number of lines, word count, byte and characters count in the files specified in the file arguments.

wc -l v,txt : This option prints the number of lines present in a file.

Syntax : wc -l filename.txt

Output :

```
student@S53:~$ wc -l v.txt
4 v.txt
```

16. wc -w v.txt : This option prints the number of words present in a file.

Syntax : wc -w filename.txt

Output:


4 v.txt
student@S53:~$ wc -w v.txt
13 v.txt

17.wc -c v.txt: This option displays number of characters present in a file.

Syntax : wc -c filename.txt

Output:

18.wc -m v.txt : This option displays count of bytes present in a file.

Syntax : wc -m filename.txt

Output :