NETWORKING & SYSTEM ADMINISTRATION LAB

Name: SREELAKSHMI R

Roll No:41

Experiment No: 6

Batch:RMCA S2B

Date:21-04-2022

Aim

Familiarization of linux commands

Procedure

1. **$read: :** This command is used to read the content of a line of a variable

   Output:

   ```
   student@S41:~$ read name
   My name is Sreelakshmi R
   student@S41:~$ echo $name
   My name is Sreelakshmi R
   ```

2. **$locate:** This command is used to locate a particular file or directory

   Output:

   ```
   student@S41:~$ locate b1.txt
   /home/student/sree/b1.txt
   student@S41:~$ locate b2.txt
   /home/student/sree/b2.txt
   /usr/share/doc/qemu-system-common/usb2.txt.gz
   ```

3. **$find :** This command is used to search and locate the list of files in the current directory.

   Output:

4. **$locate -i filename:**This command is used to perform case insensitive search.

   Output:

   ```
   student@S41:~$ locate -i b2.txt
   /home/student/sree/b2.txt
   /usr/share/doc/qemu-system-common/usb2.txt.gz
   ```

5. **$grep:**This command will let you search through all the text in a file.

Output:

```
student@S41:~$ grep -A1 using s2.txt
By default, grep displays the entire line which has the matched string. We can make the grep to display only the matched string by using the -
o option. unix is great os. unix is opensource. unix is free os.
learn operating system.
```

6. **$grep -i**:This command filter output in a case insensitive way.

Output:

7. **$grep -v:**This command displays lines not matching to the specified word.

Output:

```
student@S41:~$ grep -v operating  s2.txt
By default, grep displays the entire line which has the matched string. We can make the grep to display only the matched string by using the -
o option. unix is great os. unix is opensource. unix is free os.
Unix linux which one you choose.
```

8. **$grep -A1:**This command is used to display line after result

Output:

```
student@S41:~$ grep -A1 using s2.txt
By default, grep displays the entire line which has the matched string. We can make the grep to display only the matched string by using the -
o option. unix is great os. unix is opensource. unix is free os.
learn operating system.
```

9. **$grep -B1:**This command is used to display the line before the result.

Output:

```
student@S41:~$ grep -B1 using s2.txt
By default, grep displays the entire line which has the matched string. We can make the grep to display only the matched string by using the -
o option. unix is great os. unix is opensource. unix is free os.
student@S41:~$ grep -v operating
^Z
[10]+  Stopped                 grep --color=auto -v operating
```

10. **$grep -C1:** This command is used to display the line before and after the result

    Output:

11. **$df:** This command is used s used to show the amount of free disk space available and to understand the filesystems that have been mounted.

    Output:

```
student@S41:~$ df
Filesystem     1K-blocks      Used Available Use% Mounted on
udev             3988608         0   3988608   0% /dev
tmpfs             803776      1828    801948   1% /run
/dev/sda6      595171040  36200644 533582344   7% /
tmpfs            4018872     29096   3989776   1% /dev/shm
tmpfs               5120         4      5116   1% /run/lock
tmpfs            4018872         0   4018872   0% /sys/fs/cgroup
/dev/loop5           256       256         0 100% /snap/gtk2-common-themes/5
/dev/loop6        144128    144128         0 100% /snap/gnome-3-26-1604/98
/dev/loop8        419328    419328         0 100% /snap/gimp/227
/dev/loop17       207744    207744         0 100% /snap/vlc/1049
/dev/loop19         3840      3840         0 100% /snap/gnome-system-monitor/111
/dev/loop2         56960     56960         0 100% /snap/core18/2284
/dev/loop24        45312     45312         0 100% /snap/gtk-common-themes/1353
/dev/loop3          2560      2560         0 100% /snap/gnome-calculator/884
/dev/loop29         1024      1024         0 100% /snap/gnome-logs/81
/dev/loop4        113280    113280         0 100% /snap/core/12834
/dev/loop31        15104     15104         0 100% /snap/gnome-characters/367
/dev/loop7        400768    400768         0 100% /snap/gimp/383
/dev/loop9          2688      2688         0 100% /snap/gnome-calculator/920
/dev/loop13       168832    168832         0 100% /snap/gnome-3-28-1804/161
/dev/loop14       302848    302848         0 100% /snap/vlc/2344
/dev/loop22        56960     56960         0 100% /snap/core18/2344
/dev/loop23       253952    253952         0 100% /snap/gnome-3-38-2004/87
/dev/loop21        63488     63488         0 100% /snap/core20/1405
/dev/loop0           768       768         0 100% /snap/gnome-characters/741
/dev/loop25          640       640         0 100% /snap/gnome-logs/106
/dev/loop26       144128    144128         0 100% /snap/gnome-3-26-1604/104
/dev/loop28          256       256         0 100% /snap/gtk2-common-themes/13
/dev/loop30        66816     66816         0 100% /snap/gtk-common-themes/1519
/dev/loop15       540928    540928         0 100% /snap/pycharm-community/274
/dev/loop27          128       128         0 100% /snap/bare/5
/dev/loop11         2688      2688         0 100% /snap/gnome-system-monitor/174
/dev/loop16        63488     63488         0 100% /snap/core20/1376
/dev/loop12       254848    254848         0 100% /snap/gnome-3-38-2004/99
/dev/loop1        113408    113408         0 100% /snap/core/12821
student@S41:~$ df -m
Filesystem     1M-blocks  Used Available Use% Mounted on
udev               3896     0      3896   0% /dev
tmpfs               785     2       784   1% /run
/dev/sda6        581222 35353    521077   7% /
tmpfs              3925    29      3897   1% /dev/shm
tmpfs                 5     1         5   1% /run/lock
tmpfs              3925     0      3925   0% /sys/fs/cgroup
/dev/loop5            1     1         0 100% /snap/gtk2-common-themes/5
/dev/loop6          141   141         0 100% /snap/gnome-3-26-1604/98
/dev/loop8          410   410         0 100% /snap/gimp/227
/dev/loop17         203   203         0 100% /snap/vlc/1049
/dev/loop19           4     4         0 100% /snap/gnome-system-monitor/111
/dev/loop2           56    56         0 100% /snap/core18/2284
/dev/loop24          45    45         0 100% /snap/gtk-common-themes/1353
/dev/loop3            3     3         0 100% /snap/gnome-calculator/884
/dev/loop29           1     1         0 100% /snap/gnome-logs/81
/dev/loop4          111   111         0 100% /snap/core/12834
/dev/loop31          15    15         0 100% /snap/gnome-characters/367
/dev/loop7          392   392         0 100% /snap/gimp/383
/dev/loop9            3     3         0 100% /snap/gnome-calculator/920
/dev/loop13         165   165         0 100% /snap/gnome-3-28-1804/161
/dev/loop14         296   296         0 100% /snap/vlc/2344
/dev/loop22          56    56         0 100% /snap/core18/2344
```

12.$du: The du command is used to gain disk usage information quickly.It is applied to current working directory.

Output:

```
student@S41:~$ du
4        ./.ssh
8        ./.java/.userPrefs/jetbrains/_!(!!cg"p!(}!}@"j!(k!|w"w!'8!b!"p!':!e@==
16       ./.java/.userPrefs/jetbrains
24       ./.java/.userPrefs
40       ./.java/fonts/11.0.4
44       ./.java/fonts
72       ./.java
12       ./.cache/fontconfig
88       ./.cache/thumbnails/normal
788      ./.cache/thumbnails/large
880      ./.cache/thumbnails
308      ./.cache/.fr-MNsKjo
4        ./.cache/thunderbird/2gddhb7x.default/cache2/entries
4        ./.cache/thunderbird/2gddhb7x.default/cache2/doomed
12       ./.cache/thunderbird/2gddhb7x.default/cache2
4        ./.cache/thunderbird/2gddhb7x.default/safebrowsing
792      ./.cache/thunderbird/2gddhb7x.default/startupCache
812      ./.cache/thunderbird/2gddhb7x.default
816      ./.cache/thunderbird
4        ./.cache/ibus-table
872      ./.cache/gnome-software/fwupd/remotes.d/lvfs
876      ./.cache/gnome-software/fwupd/remotes.d
880      ./.cache/gnome-software/fwupd
716      ./.cache/gnome-software/shell-extensions
572      ./.cache/gnome-software/cssresource
716      ./.cache/gnome-software/icons
2888     ./.cache/gnome-software
216      ./.cache/wallpaper
4        ./.cache/gnome-screenshot
20       ./.cache/ibus/bus
24       ./.cache/ibus
340      ./.cache/gstreamer-1.0
4        ./.cache/evolution/memos/trash
8        ./.cache/evolution/memos
4        ./.cache/evolution/calendar/trash
8        ./.cache/evolution/calendar
```

13. $wc: This command is used counting purpose.It is used to find the number of lines ,the number of words ,number of charcters and number of bytes.

14. $wc -l: Count number of lines

Output:

```
student@S41:~$ wc -l s2.txt
3 s2.txt
```

15. $wc -w: Count number of words

Output:

```
student@S41:~$ wc -w s2.txt
48 s2.txt
```

16. $wc -c: Count number of characters

Output:

```
student@S41:~$ wc -c s2.txt
264 s2.txt
```

17. $wc-m: Count number of lines.

Output:

```
student@S41:~$ df  -m
Filesystem     1M-blocks  Used Available Use% Mounted on
udev                3896     0      3896   0% /dev
tmpfs                785     2       784   1% /run
/dev/sda6         581222 35353   521077   7% /
tmpfs               3925    29      3897   1% /dev/shm
tmpfs                  5     1         5   1% /run/lock
tmpfs               3925     0      3925   0% /sys/fs/cgroup
/dev/loop5             1     1         0 100% /snap/gtk2-common-themes/5
/dev/loop6           141   141         0 100% /snap/gnome-3-26-1604/98
/dev/loop8           410   410         0 100% /snap/gimp/227
/dev/loop17          203   203         0 100% /snap/vlc/1049
/dev/loop19            4     4         0 100% /snap/gnome-system-monitor/111
/dev/loop2            56    56         0 100% /snap/core18/2284
/dev/loop24           45    45         0 100% /snap/gtk-common-themes/1353
/dev/loop3             3     3         0 100% /snap/gnome-calculator/884
/dev/loop29            1     1         0 100% /snap/gnome-logs/81
/dev/loop4           111   111         0 100% /snap/core/12834
/dev/loop31           15    15         0 100% /snap/gnome-characters/367
/dev/loop7           392   392         0 100% /snap/gimp/383
/dev/loop9             3     3         0 100% /snap/gnome-calculator/920
/dev/loop13          165   165         0 100% /snap/gnome-3-28-1804/161
/dev/loop14          296   296         0 100% /snap/vlc/2344
/dev/loop22           56    56         0 100% /snap/core18/2344
```