Links

Linux supports to create two types of Links.

- Hard Links
- Soft Links

Hard Link: it create a link of the source file with the new file by assigning the i- node number of the source file to new file .

--In case if we remove the source file, we can access the data by using the new file.

syn: ln <original file> <link file>

Softlink(symbolic link):it creates a link of source file with different i-node number from the source file.

--In case if we remove the source file, the can not be accessible, further if we create the name of the source file in the same location the new file will start working.

syn: ln -s <original file> <link file>

Finding Things

locate: To search a particular file

Eg: locate httpd.conf

locate -c httpd.conf #To get the count of number of matching entry

locate -i new.txt #To ignore case sensitivity

locate -l 5 passwd #To display the lines of the file searched

grep - Used to search the file content based on the given string. Matched string lines will display on the screen.

syn: grep [options] <string> <filenames>

ex: grep praveen /etc/passwd

options:

-i - Ignore the case and search for the string

-v - To display the data which doesn't match the keyword

-c - To count the matching number of lines

-n - Matching lines with the line numbers also in file

Input/Output Redirection

Pipe (|) : it is nothing but connect the standard output of one command to the standard input of another command.

how to find total count of files in a directory?

ls –la #displays total files in the directory,

wc # Count of the lines, words and characters of an file

wc file1

To trigger the output in required format

ls -l | wc -l

Input/Output Redirection

> #redirect standard output to a file

< # redirect standard input to a file

2 > # redirect standard error to a file

2 >&1 # merge standard error with standard output to a file

Ex:

ls > file.txt

ls >> file.txt

sort < file.txt

grep examples

- Search for the given string in a single file

```
$ grep "this" demo_file
```

- Checking for the given string in multiple files

```
$ cp demo_file demo_file1

$ grep "this" demo_*
```

- Case insensitive search using grep -i

```
$ grep -i "the" demo_file
```

- Match regular expression in files

```
$ grep "lines.*empty" demo_file
```

- Checking for full words, not for sub-strings using grep -w

```
$ grep -iw "is" demo_file
```

```
$ cat demo_file
THIS LINE IS THE 1ST UPPER CASE LINE IN THIS FILE.
this line is the 1st lower case line in this file.
This Line Has All Its First Character Of The Word With Upper Case.

Two lines above this line is empty.
And this is the last line.
```