

Embedded Linux (D)

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-Commands.

- Tail :
 - Tail is used to display the last part of the file.
 - List by default shows 10 lines at a time.
 - But this syntax `tail -(number) (file_name)` shows the last (number) lines in this file.

```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC: ~  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ touch task1  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ cd task1  
bash: cd: task1: Not a directory  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ cat task1  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ tail task1  
-line1  
-line2  
-line3  
-line4  
-line5  
-line6  
-line7  
-line8  
-line9  
-line10  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ tail -2 task1  
-line9  
-line10  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ █
```

-Head :

- Head is used to display the first part of the file.
- List by default shows 10 lines at a time.
- But this syntax `head -(number) (file_name)` shows the first (number) lines in this file.

nareman@nareman-HP-Pavilion-dv6-Notebook-PC: ~

```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ head task1
```

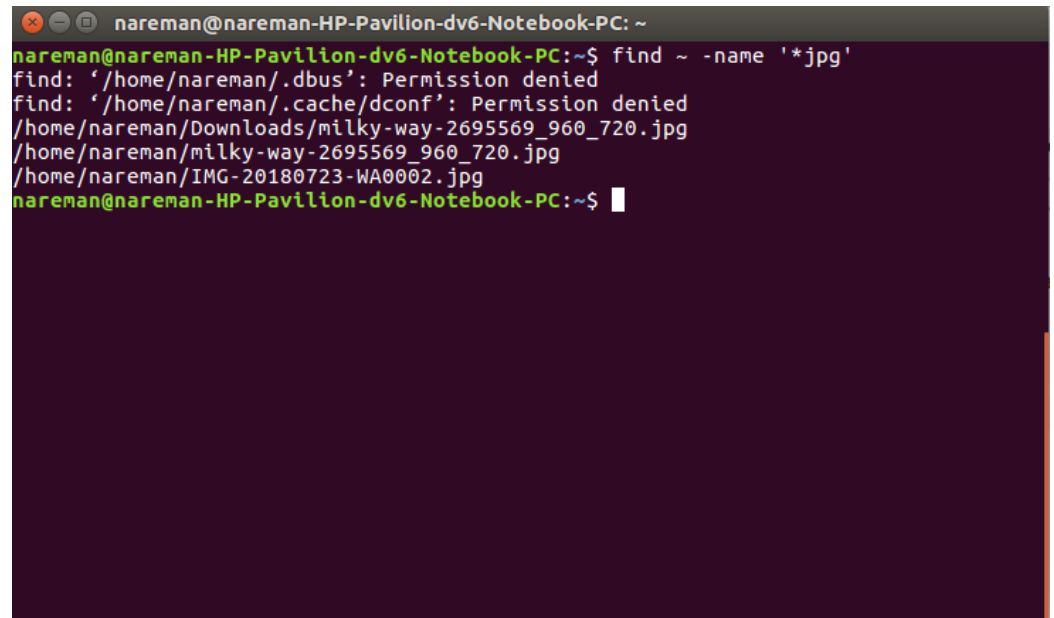
```
-line1  
-line2  
-line3  
-line4  
-line5  
-line6  
-line7  
-line8  
-line9  
-line10
```

```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ head -2 task1
```

```
-line1  
-line2
```

```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$
```

- Find :
- -Takes a path to find things.
- -Find/ will find and print every file on the system.
- -find ~ -name '*.jpg' will find all jpg files.



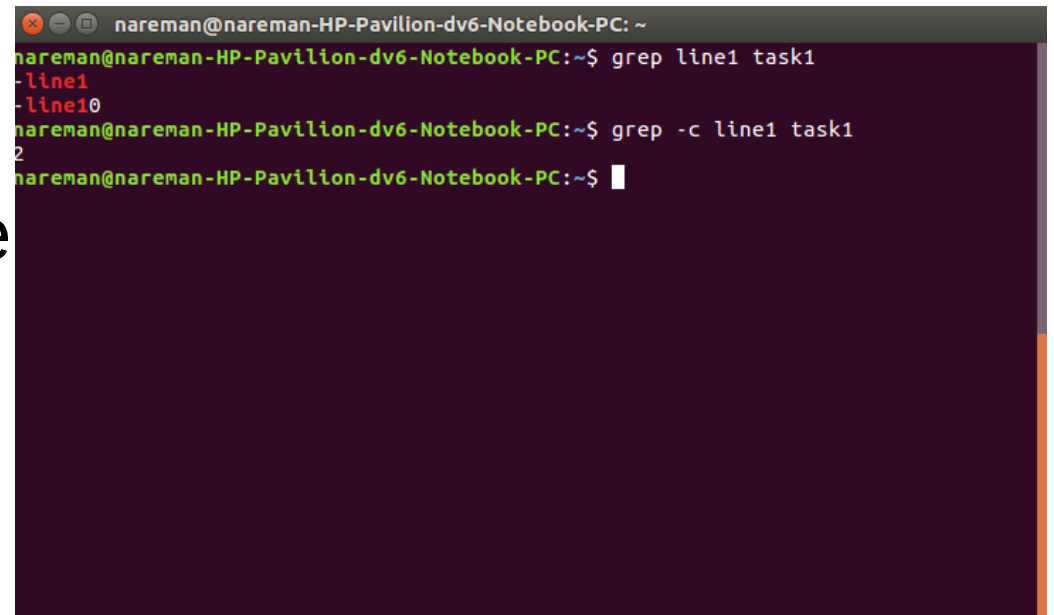
```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC: ~  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ find ~ -name '*.jpg'  
find: '/home/nareman/.dbus': Permission denied  
find: '/home/nareman/.cache/dconf': Permission denied  
/home/nareman/Downloads/milky-way-2695569_960_720.jpg  
/home/nareman/milky-way-2695569_960_720.jpg  
/home/nareman/IMG-20180723-WA0002.jpg  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$
```

- Grep :

- Print lines which matching a certain pattern.

- Grep (pattern)(file name) search and display the results for the pattern in the file.

- grep -c (pattern)(file name) count the number of results.

A terminal window with a dark purple background and green text. The window title is 'nareman@nareman-HP-Pavilion-dv6-Notebook-PC: ~'. The first command is 'grep line1 task1', which outputs 'line1' and 'line10'. The second command is 'grep -c line1 task1', which outputs '2'.

```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC: ~  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ grep line1 task1  
- line1  
- line10  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ grep -c line1 task1  
2  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$
```

- Rm :
 - rm -r (file name)
removes file.
 - rm (folder_name*)
removes all files inside
this folder.

```
nareman@nareman-HP-Pavilion-dv6-Notebook-PC: ~  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ rm task1  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$ cat task1  
cat: task1: No such file or directory  
nareman@nareman-HP-Pavilion-dv6-Notebook-PC:~$
```


-File System

- /media :
 - This directory contains mount points for removable media such as CD and DVD disks or USB sticks.
- /opt :
 - This directory should contain add-on packages that contain static files.
- /tmp :
 - This directory contains temporary files which may be deleted with no notice.
- /var :
 - This directory contains files which may change in size, such as spool and log files.

-Mount :

- The mount command mounts a storage device or filesystem, making it accessible and attaching it to an existing directory structure.

-Unmount :

- The umount command "unmounts" a mounted filesystem

-Difference between sudo and su

- The su command switches to the super user – or root user – when you execute it with no additional options. You'll have to enter the root account's password. This isn't all the su command does, though – you can use it to switch to any user account. If you execute the su bob command, you'll be prompted to enter Bob's password and the shell will switch to Bob's user account.
- Once you're done running commands in the root shell, you should type exit to leave the root shell and go back to limited-privileges mode.
- Sudo runs a single command with root privileges. When you execute sudo command, the system prompts you for your current user account's password before running command as the root user. By default, Ubuntu remembers the password for fifteen minutes and won't ask for a password again until the fifteen minutes are up.

-Variable \$PATH

- When you type a command into the shell, the shell needs to find that program. If you say `"/bin/ls"` then the shell goes to the `/bin` directory to find it. If you just say `"ls"` then it needs to look for it. There are too many places it could be, and possibly multiple things with that name, so you must give the shell a list of places to look. That list is the `PATH` variable. The `PATH` variable is a list of directories, separated by the colon character. The shell looks in those directories, in order, to find the command you just typed.
- It is needed to both allow the shell to find a command and to direct the shell to the version of the command you want it to choose, sometimes.
- You can see the value of your `PATH` variable by doing `"echo $PATH"`.