

20 Basic Linux Commands

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Assignment I

Commands

1. To find out the present working directory: `pwd`
2. To list out the directories and files in present directory : `ls`
3. To change directory to specified path : `cd`
4. To make a directory: `mkdir`
5. To create a file: `touch`
6. To edit file: `gedit filename` / `vim filename` / `nano filename`

```
(base) divyansh@divyansh-HP:~$ pwd
/home/divyansh
(base) divyansh@divyansh-HP:~$ ls
anaconda3  Documents  Music      Public     snap       ws2
assignment3 Downloads  Pictures   README.md  Templates
Desktop    Dropbox    prac_rosex rosclass   Videos
(base) divyansh@divyansh-HP:~$ cd Desktop
(base) divyansh@divyansh-HP:~/Desktop$ mkdir Folder
(base) divyansh@divyansh-HP:~/Desktop$ cd Folder
(base) divyansh@divyansh-HP:~/Desktop/Folder$ touch filename.txt
(base) divyansh@divyansh-HP:~/Desktop/Folder$ ls
filename.txt
(base) divyansh@divyansh-HP:~/Desktop/Folder$ vim filename.txt
```

7. To change the modifications of a file: `chmod +`
8. To read or concatenate a file: `cat`
9. To clear the screen : `clear`

```
(base) divyansh@divyansh-HP:~/Desktop/Folder$ chmod +x filename.txt
(base) divyansh@divyansh-HP:~/Desktop/Folder$ ls
filename.txt
(base) divyansh@divyansh-HP:~/Desktop/Folder$ cat filename.txt
My first file
(base) divyansh@divyansh-HP:~/Desktop/Folder$ clear
```

10. To delete a file: `rm`
11. To delete a directory : `rmdir`
12. To see free RAM : `free -h`
13. To find out the date and time : `date`
14. To display calendar: `cal`
15. To find file via names: `find -name 'prefix*'`

```
(base) divyansh@divyansh-HP:~/Desktop$ find -name 'DSA*'
./DSA.pdf
```

```

(base) divyansh@divyansh-HP:~/Desktop/Folder$ rm filename.txt
(base) divyansh@divyansh-HP:~/Desktop/Folder$ ls
(base) divyansh@divyansh-HP:~/Desktop/Folder$ cd ..
(base) divyansh@divyansh-HP:~/Desktop$ rmdir Folder
(base) divyansh@divyansh-HP:~/Desktop$ free -h
               total        used        free      shared  buff/cache   available
Mem:           7.6Gi        3.2Gi        2.5Gi          35Mi        2.0Gi        4.1Gi
Swap:          2.0Gi          0B          2.0Gi
(base) divyansh@divyansh-HP:~/Desktop$ date
Thursday 15 July 2021 03:29:27 PM IST
(base) divyansh@divyansh-HP:~/Desktop$ cal
      July 2021
Su Mo Tu We Th Fr Sa
                1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31

```

A lot of commands have further specifications like:

16. To list all the hidden files and dir within present directory: `ls -a`

```

(base) divyansh@divyansh-HP:~$ ls -a
.          Downloads      Music          .swp
..         .dropbox         Pictures       Templates
.anaconda  Dropbox          .pki           .thunderbird
anaconda3  .dropbox-dist   prac_rosext    Videos
assignment3 .fltk           .profile       .viminfo
.astropy   .gazebo         Public         .vim_mru_files
.bash_history .git            .python_history .vimrc
.bash_logout .gnupg          README.md      .vim_runtime
.bashrc     .ignition       .ros           .vscode
.cache      .ipynb_checkpoints rosclass        .wget-hsts
.conda      .ipython        .rviz          ws2
.condarc    .jupyter        .sdformat      .zoom
.config     .local          snap           .zshrc
Desktop     .mozilla        .ssh
Documents   .mume           .sudo_as_admin_successful

```

17. To get a detailed list of all the files: `ls -al`

```
(base) divyansh@divyansh-HP:~$ ls -al
total 276
drwxr-xr-x 44 divyansh divyansh 4096 Jul 15 15:21 .
drwxr-xr-x  3 root      root      4096 Jul  1 15:15 ..
drwxrwxr-x  3 divyansh divyansh 4096 Jul  2 19:13 .anaconda
drwxrwxr-x 26 divyansh divyansh 4096 Jul  2 19:12 anaconda3
drwxrwxr-x  5 divyansh divyansh 4096 Jul 13 17:00 assignment3
drwxrwxr-x  4 divyansh divyansh 4096 Jul  5 17:19 .astropy
-rw-r--r--  1 divyansh divyansh 20178 Jul 15 15:22 .bash_history
-rw-r--r--  1 divyansh divyansh  220 Jul  1 15:15 .bash_logout
-rw-r--r--  1 divyansh divyansh 4489 Jul 14 17:27 .bashrc
drwx----- 32 divyansh divyansh 4096 Jul 12 17:06 .cache
drwxrwxr-x  2 divyansh divyansh 4096 Jul  5 17:36 .conda
-rw-rw-r--  1 divyansh divyansh  40 Jul  5 17:07 .condarc
drwx----- 28 divyansh divyansh 4096 Jul 14 19:04 .config
drwxr-xr-x  4 divyansh divyansh 4096 Jul 15 15:26 Desktop
drwxr-xr-x  2 divyansh divyansh 4096 Jul  1 21:00 Documents
drwxr-xr-x  4 divyansh divyansh 4096 Jul 14 22:52 Downloads
drwx-----  8 divyansh divyansh 4096 Jul 15 2021 .dropbox
drwx-----  3 divyansh divyansh 4096 Jul 15 2021 Dropbox
drwxrwxr-x  3 divyansh divyansh 4096 Jul  3 16:01 .dropbox-dist
drwx-----  3 divyansh divyansh 4096 Jul 14 18:53 .fltk
drwxr--r--  6 divyansh divyansh 4096 Jul 14 19:07 .gazebo
drwxrwxr-x  7 divyansh divyansh 4096 Jul 13 19:26 .git
drwx-----  3 divyansh divyansh 4096 Jul  2 16:52 .gnupg
drwxr--r--  2 divyansh divyansh 4096 Jul 14 18:52 .ignition
drwxrwxr-x  2 divyansh divyansh 4096 Jul  6 18:16 .ipynb_checkpoints
drwxr-xr-x  5 divyansh divyansh 4096 Jul  2 19:15 .ipython
drwxrwxr-x  3 divyansh divyansh 4096 Jul  6 18:47 .jupyter
drwx-----  3 divyansh divyansh 4096 Jul  1 21:00 .local
drwx-----  5 divyansh divyansh 4096 Jul  1 15:30 .mozilla
drwxrwxr-x  2 divyansh divyansh 4096 Jul 12 17:27 .mume
drwxr-xr-x  2 divyansh divyansh 4096 Jul  1 21:00 Music
drwxr-xr-x  2 divyansh divyansh 4096 Jul 14 21:54 Pictures
drwx-----  3 divyansh divyansh 4096 Jul  2 18:01 .pki
drwxrwxr-x  6 divyansh divyansh 4096 Jul 13 18:47 prac_rosext
```

18. To directly goto the home directory: `cd /` `cd ~`
19. To just go back one level in directory: `cd ..`
20. To auto complete some commands press `tab` or to list press double `tab`

```
(base) divyansh@divyansh-HP:~$ ls -al
total 276
drwxr-xr-x 44 divyansh divyansh 4096 Jul 15 15:21 .
drwxr-xr-x  3 root     root     4096 Jul  1 15:15 ..
drwxrwxr-x  3 divyansh divyansh 4096 Jul  2 19:13 .anaconda
drwxrwxr-x 26 divyansh divyansh 4096 Jul  2 19:12 anaconda3
drwxrwxr-x  5 divyansh divyansh 4096 Jul 13 17:00 assignment3
drwxrwxr-x  4 divyansh divyansh 4096 Jul  5 17:19 .astropy
-rw-r--r--  1 divyansh divyansh 20178 Jul 15 15:22 .bash_history
-rw-r--r--  1 divyansh divyansh  220 Jul  1 15:15 .bash_logout
-rw-r--r--  1 divyansh divyansh 4489 Jul 14 17:27 .bashrc
drwx----- 32 divyansh divyansh 4096 Jul 12 17:06 .cache
drwxrwxr-x  2 divyansh divyansh 4096 Jul  5 17:36 .conda
-rw-rw-r--  1 divyansh divyansh  40 Jul  5 17:07 .condarc
drwx----- 28 divyansh divyansh 4096 Jul 14 19:04 .config
drwxr-xr-x  4 divyansh divyansh 4096 Jul 15 15:26 Desktop
drwxr-xr-x  2 divyansh divyansh 4096 Jul  1 21:00 Documents
drwxr-xr-x  4 divyansh divyansh 4096 Jul 14 22:52 Downloads
drwx-----  8 divyansh divyansh 4096 Jul 15 2021 .dropbox
drwx-----  4 divyansh divyansh 4096 Jul 15 2021 Dropbox
drwxrwxr-x  3 divyansh divyansh 4096 Jul  3 16:01 .dropbox-dist
drwx-----  3 divyansh divyansh 4096 Jul 14 18:53 .fltk
drwxr--r--  6 divyansh divyansh 4096 Jul 14 19:07 .gazebo
drwxrwxr-x  7 divyansh divyansh 4096 Jul 13 19:26 .git
drwx-----  3 divyansh divyansh 4096 Jul  2 16:52 .gnupg
drwxr--r--  2 divyansh divyansh 4096 Jul 14 18:52 .ignition
drwxrwxr-x  2 divyansh divyansh 4096 Jul  6 18:16 .ipynb_checkpoints
drwxr-xr-x  5 divyansh divyansh 4096 Jul  2 19:15 .ipython
drwxrwxr-x  3 divyansh divyansh 4096 Jul  6 18:47 .jupyter
drwx-----  3 divyansh divyansh 4096 Jul  1 21:00 .local
drwx-----  5 divyansh divyansh 4096 Jul  1 15:30 .mozilla
drwxrwxr-x  2 divyansh divyansh 4096 Jul 12 17:27 .mume
drwxr-xr-x  2 divyansh divyansh 4096 Jul  1 21:00 Music
drwxr-xr-x  2 divyansh divyansh 4096 Jul 14 21:54 Pictures
drwx-----  3 divyansh divyansh 4096 Jul  2 18:01 .pki
drwxrwxr-x  6 divyansh divyansh 4096 Jul 13 18:47 prac_rosext
```