

5th April 2021

Previous Day:-

Introductory Class

Terminal-1

Lecture Flow:-

- Computers and stuff
- Terminal Commands-1
 - ls(list)
 - ls -l (list with details)
 - ls -a (list with hiddenfolder)
 - pwd
 - Absolute and relative path
 - cd (change directory)
 - mkdir (make directory)
 - rmdir (remove directory)
- MCQs

Topics & Explanation

[Click here](#) to get all the class resources made by Priyesh sir. “Fork” it or “star” it to get the updates.

Computers and Stuff

- So what is a computer? It is basically anything that can do task which human feel repetitive eg., calculator, atm, mobile device, havells fan(that sense temperature and adjust speed itself).
- It also acts as an assistant, it only does what humans tell them to do.
- We need a set of instructions to communicate with computers which is called programming language.
- C, C++, Java, Python are some of the programming languages.
- Python is an easy language and it is also called Swiss Knife.
- Computer works on electric current either it is there (1/True) or not (0/False).
To even say “Hi” we need to tell them in too many 1’s and 0’s. Imagine telling

it a sentence.

- Hardware understands 1's and 0's whereas Software-operating system(OS) is something that can interact with the hardware. Software is like a steering wheel that can drive cars.
- DOS-is a useless operating system and is hard for the people to use. Also known as CUI(command user interface).
Windows/Mac-is a useful operating system and is very easy for the people to use. It is also known as GUI(graphical user interface).
- Terminal- is one of the CUI which is present in linux as well as mac. • Git Bash- is also one of the CUI which is present in windows. [Click here to download git bash.](#)

Terminal Commands-1

1. ls(list):-

[Click here for reference link](#)

Concept

ls is a Linux shell command that lists directory contents of files and directories. In simple terms it shows all the files present in a [path]. Path is the address of a location in your hard disk.

Syntax

ls

Ex:-

```
(base) priyesh@priyesh-Inspiron-5567:~ $ ls
1606634170246.jpeg      jfk_quote_parody.jpg
4dd0h0.jpg              'Masters in US'
aa                      monitor_pdf.pdf
anaconda3               Music
Android                 my_informal_photo.jpg
android-studio           nginx-rtmp-module-dev
AWS                     Nutanix.pdf
barry_memes.jpg          nyu_cs_questions.pdf
biden_voter.jpg          payment_transcript.pdf
boto_install.sh          Pictures
cathy_newman_biden.jpg  pkmn_wallpaper.jpg
CODE                    Postman
columbia-instructions.pdf PS-2
commies_rainbow_memes.jpg Public
'COVER_LETTER - Google Docs.pdf' RiceLetter.pdf
```

Is -l (list with detail):-

[Click here for reference link](#)

Concept

Is -l is a Linux shell command that lists directory contents of files and directories with details. In simple terms it shows all the files present in a [path].

Syntax

ls -l

Ex:-

```
(base) priyesh@priyesh-Inspiron-5567:~/Downloads $ ls -l
-rw-rw-r-- 1 priyesh priyesh 1836083 Jul  6  2020 'THE $680 BILLION MESS IN TECH.zip'
-rw-rw-r-- 1 priyesh priyesh 10100650 Jun 22  2020 'Thomas Jefferson.zip'
-rw-rw-r-- 1 priyesh priyesh 7006401 Mar 26 22:52 'Time Table-20 feb 21.pdf'
-rw-rw-r-- 1 priyesh priyesh 4108203 Dec  9 15:55 Transcript-form-Continuing-Students.doc
-rw-rw-r-- 1 priyesh priyesh 131725 Jan 30 20:04 Transcript-form-Continuing-Students.docx.pdf
-rw-rw-r-- 1 priyesh priyesh 70917 Dec 10 02:45 Transcript-form-Continuing-Students.cdt
-rw-rw-r-- 1 priyesh priyesh 34004272 Dec 27  2019 tsetup.1.8.15.tar.xz
```

The above output display tells us the complete details like author, time, date.

Is -a (list with hiddenfolder):-

[Click here for reference link](#)

Concept

Is -a is a Linux shell command that lists directory contents of files and directories also with hidden folders as well. In simple terms it shows all the files present in a [path].

Syntax

ls -a

Ex:-

Let's suppose we made a hidden folder name starting with the "." is ".hiddenfolder". Now with the command "ls or ls -l" we won't be able to see the ".hiddenfolder", to see this folder we need to use "ls -a" like as shown in the image below.

```
(base) priyesh@priyesh-Inspiron-5567:~/Downloads $ ls -a
```

The output is in the below image

```
Harry_Lewis_Papadimitriou.png  
[Harry_Lewis,_Christos_H._Papadimitriou]_  
HASURA_COVER_LETTER.pdf  
.hiddenfolder  
Ian Goodfellow, Yoshua Bengio, Aaron Cour  
Indus Insights_JD.pdf '  
'Insta Post.zip'  
Introduction_to_lambda_calculus.pdf  
.ipynb_checkpoints
```

Note:- you can use “ls -la” combination of both “ls -a” and “ls -l” .

2. pwd:-

[Click here for reference link](#)

Concept

pwd stands for **P**rint **W**orking **D**irectory. It prints the path of the working directory, starting from the root.

Syntax

pwd

Ex:-

```
(base) priyesh@priyesh-Inspiron-5567:~ $ pwd  
/home/priyesh
```

3. Absolute path/Relative paths:-

[Click here for reference link](#)

Concept

Paths which begin from the root are called absolute paths.

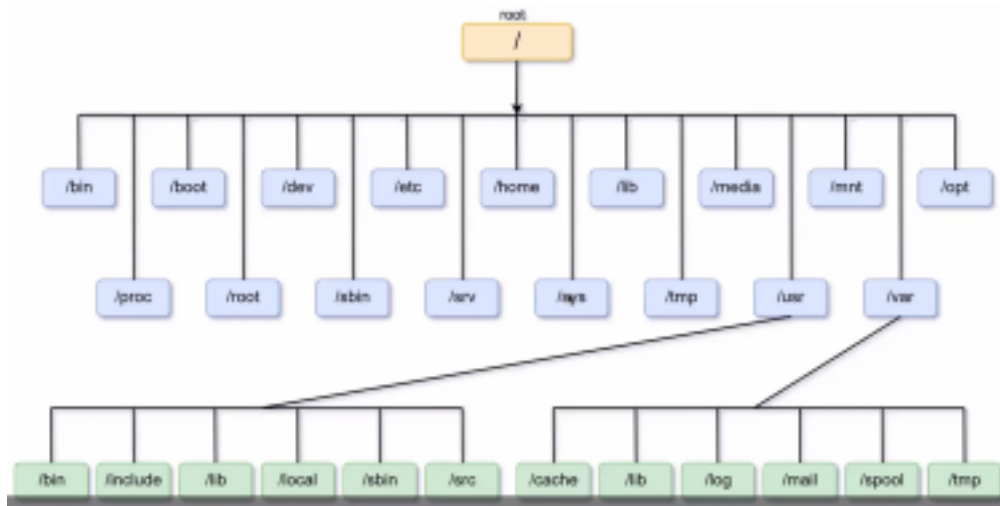
Paths relative to my “pwd” are called relative paths.

“/”:- the beginning of all paths.

Syntax

ls

Ex:-



- . :- stay wherever you are
- .. :-go to my parent
- ~ (tilda):-/home/<username> - home directory

4. cd(change directory):-

[Click here for reference link](#)

Concept

cd command in linux known as change directory command. It is used to change current working directory.

Syntax

cd <absoluter_path or relative_path>

Ex:-

```
(base) priyesh@priyesh-Inspiron-5567:~ $ cd Desktop/
```

In this above image we are changing directory with the relative path.

```
(base) priyesh@priyesh-Inspiron-5567:~/Desktop/Mup $ cd ~/Downloads/
```

In this above image we are changing the directory with home directory path with tilda.

```
cd /home/gator/one/two/three/four/five
```

In this above image we are changing the directory with absolute path.

5. mkdir(make directory):-

[Click here for reference link](#)

Concept

mkdir command in Linux allows the user to create directories (also referred to as folders in some operating systems). This command can create multiple directories at once as well as set the permissions for the directories.

Note:- to make a hidden folder you need to use “.” before the name eg., “.hiddenfolder”.

Syntax

mkdir <folder_name>

Ex:-

```
(base) priyesh@priyesh-Inspiron-5567:~/Downloads $ mkdir .hiddenfolder2
```

In this above image we are making a hidden directory name “.hiddenfolder”. Use “ls -a” command to see the hidden folder.

6. rmdir(remove directory):-

[Click here for reference link](#)

Concept

rmdir command is used to remove empty directories from the filesystem in Linux. The rmdir command removes each and every directory specified in the command line only if these directories are empty.

Syntax

rmdir <folder_name>

Ex:-

```
(base) priyesh@priyesh-Inspiron-5567:~/Downloads $ rmdir .hiddenfolder
(base) priyesh@priyesh-Inspiron-5567:~/Downloads $ rmdir .hiddenfolder2
```

In this above image we are deleting two files name “.hiddenfolder” and “.hiddenfolder2”

MCQs:-

Which option of the ls command used to view hidden files?

EASY



- ☒ -a
- ☐ -l
- ☐ -o
- ☐ -i

Which command is used to remove directories?

Attempted - 26 (50%)

EASY



- ☒ rmdir 100%
- ☐ dmdir
- ☐ delete
- ☐ erase

Which of the following sign represents the user home directory?

Attempted - 28 (53.85%)

EASY



- ☐ . 14.29%
- ☐ .. 7.14%
- ☐ / 14.29%
- ☒ ~ 64.29%

What are the different types of OS?

Attempted - 29 (55.77%)

EASY



- ☐ GUI 10.34%
- ☐ CUI 3.45%
- ☒ Both (a) and (b) 68.97%
- ☐ None of the above 17.24%