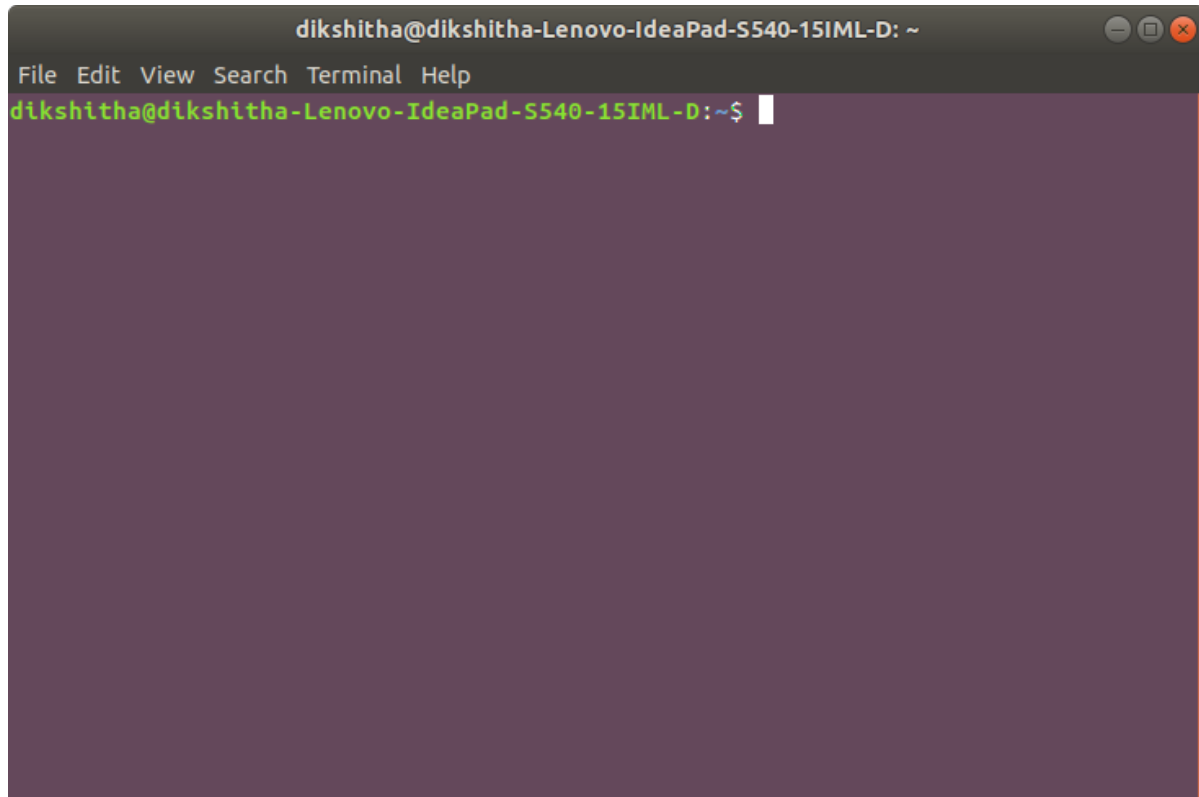


Name:Dikshitha Vani

Roll no: 205001032

## UNIX LAB ASSIGNMENT

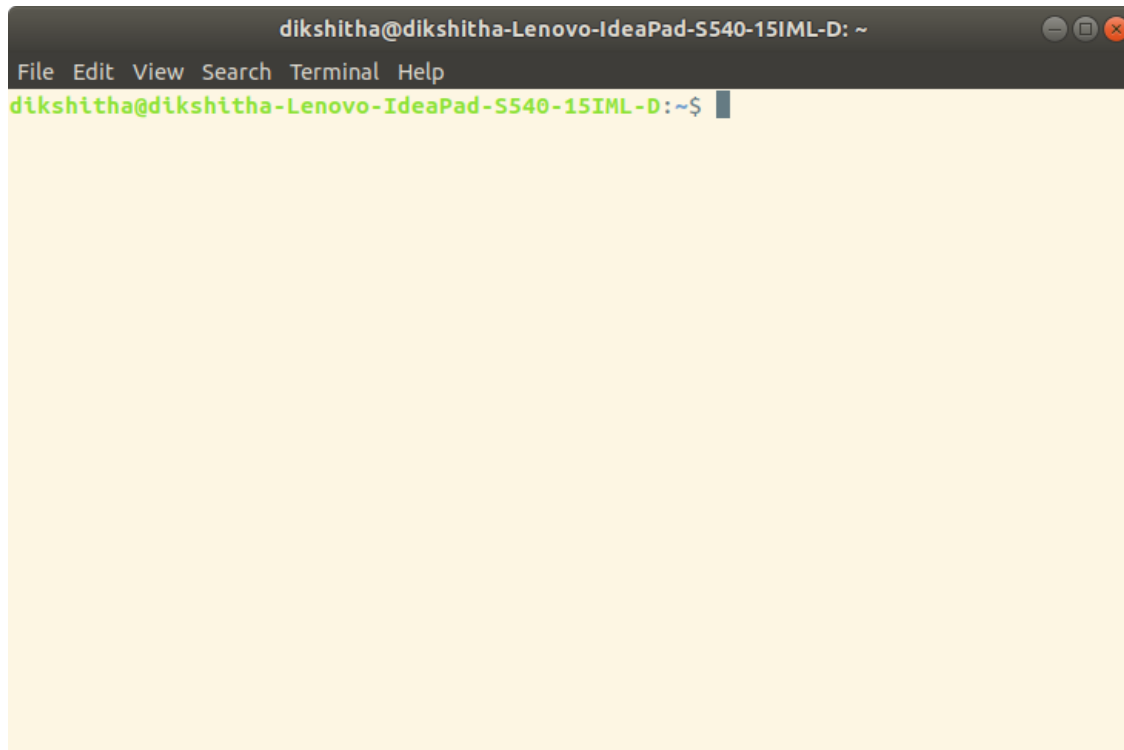
1)Login to the system



2)Launch the terminal. Identify the prompt. What is it?

`dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$`

3)Launch a terminal maximize the window. Define a profile with the color built-in scheme. "Black on light yellow". Set your new profile as the default profile.



4) Try these commands and give your interpretation on it:

a. Echo

i. echo string

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ echo string  
string
```

*Description: echo command outputs the string that is passed as arguments. Here, string is printed.*

ii. echo \*

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ echo *  
a1.c A1.c a1.out A1.out array.h Array.h assignment1.txt Desktop Documents Downloads  
EB.class Employee.class examples.desktop hello hello.c hello.java Music output Pictures  
Public snap sum1.class sum1.java sum2.class sum2.java Templates typescript Videos
```

*Description: echo \* command prints all the files and directories in the pwd.*

iii. echo

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ echo
```

(output is an empty line)

*Description: echo command outputs the string that is passed as arguments. Here, only an empty new line is printed since no arguments have been passed.*

b. date

i. Print date in dd-mm-yyyy format. out the option for this format.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ date "+%d-%m-%Y"  
20-09-2021
```

*Description: date command is used to print the date. Here the following format specifiers are specified to print the date in the given format. %d for the day of the month, %m for the month in numerical format and %Y for the year in YYYY format.*

ii. Print time in hh-mm-ss format, hh is 0-24 hours.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ date "+%H-%M-%S"  
22-06-06
```

iii. Print the date in the following formats

Thursday, 20/08/2020

*Description: date command is used to print the date/time. Here the following format specifiers are specified to print the time in the given format. %H for the Hours in 24 hour format, %M for the minutes and %S for the seconds.*

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ date "+%A, %d/%m/%Y"  
Monday, 20/09/2021
```

*Description: date command is used to print the date. Here the following format specifiers are specified to print the date in the given format. %A for the day of the week in long form, %d for the day of the month, %m for the month in numerical format and %Y for the year in YYYY format.*

c. cal

i. Print the calendar for the current month.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ cal
```

```
September 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
```

*Description: date command is used to print the calendar of the given month or year.  
Here the calendar for the current month is printed*

ii. Print the calendar for year 2020.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ cal 2020
```

```
2020
January February March
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1  2  3  4          1  1  2  3  4  5  6  7
 5  6  7  8  9 10 11  2  3  4  5  6  7  8  8  9 10 11 12 13 14
12 13 14 15 16 17 18  9 10 11 12 13 14 15 15 16 17 18 19 20 21
19 20 21 22 23 24 25 16 17 18 19 20 21 22 22 23 24 25 26 27 28
26 27 28 29 30 31  23 24 25 26 27 28 29 29 30 31

April May June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1  2  3  4          1  2  1  2  3  4  5  6
 5  6  7  8  9 10 11  3  4  5  6  7  8  9  7  8  9 10 11 12 13
12 13 14 15 16 17 18 10 11 12 13 14 15 16 14 15 16 17 18 19 20
19 20 21 22 23 24 25 17 18 19 20 21 22 23 21 22 23 24 25 26 27
26 27 28 29 30  24 25 26 27 28 29 30 28 29 30
31

July August September
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1  2  3  4          1  6  7  8  9 10 11 12
 5  6  7  8  9 10 11  2  3  4  5  6  7  8  13 14 15 16 17 18 19
12 13 14 15 16 17 18  9 10 11 12 13 14 15 20 21 22 23 24 25 26
19 20 21 22 23 24 25 16 17 18 19 20 21 22 27 28 29 30
26 27 28 29 30 31  23 24 25 26 27 28 29 30 31

October November December
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
      1  2  3  1  2  3  4  5  6  7  1  2  3  4  5
 4  5  6  7  8  9 10  8  9 10 11 12 13 14  6  7  8  9 10 11 12
11 12 13 14 15 16 17 15 16 17 18 19 20 21 13 14 15 16 17 18 19
18 19 20 21 22 23 24 22 23 24 25 26 27 28 20 21 22 23 24 25 26
25 26 27 28 29 30 31 29 30  27 28 29 30 31
```

*Description: date command is used to print the calendar of the given month or year.*

Here the calendar for the year 2020 (given as argument) is printed

iii. Print the calendar for August 2020.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ cal 08 2020
    August 2020
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
```

*Description: date command is used to print the calendar of the given month or year.*

*Here the calendar for the month of August in 2020, as per the arguments provided is printed.*

d. who and whoami

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ who
dikshitha :0          2021-09-20 19:01 (:0)
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ whoami
Dikshitha
```

*Description: who and whoami display system information*

e. uname with options -a, -s, -r, -sr

*Description: uname command prints the name, version and other details about the current machine and operation system running on it based on the arguments and options provided.*  
*-a prints all the details, -r prints the kernel release, -s prints the kernel name*

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ uname -a
Linux dikshitha-Lenovo-IdeaPad-S540-15IML-D 5.4.0-84-generic #94~18.04.1-Ubuntu SMP
Thu Aug 26 23:17:46 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ uname -s
Linux
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ uname -r
5.4.0-84-generic
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ uname -sr
Linux 5.4.0-84-generic
```

f. df -h

*Description: Reports the file system disk space and usage, -h presents in human readability*

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ df -h**

Filesystem	Size	Used	Avail	Use%	Mounted on
udev	3.8G	0	3.8G	0%	/dev
tmpfs	770M	2.1M	768M	1%	/run
/dev/sda5	115G	14G	95G	13%	/
tmpfs	3.8G	432K	3.8G	1%	/dev/shm
tmpfs	5.0M	4.0K	5.0M	1%	/run/lock
tmpfs	3.8G	0	3.8G	0%	/sys/fs/cgroup
/dev/loop0	244M	244M	0	100%	/snap/gnome-3-38-2004/39
/dev/loop1	219M	219M	0	100%	/snap/gnome-3-34-1804/66
/dev/loop2	56M	56M	0	100%	/snap/core18/2128
/dev/loop3	2.5M	2.5M	0	100%	/snap/gnome-system-monitor/163
/dev/loop4	62M	62M	0	100%	/snap/core20/1081
/dev/loop5	2.5M	2.5M	0	100%	/snap/gnome-calculator/826
/dev/loop6	768K	768K	0	100%	/snap/gnome-characters/723
/dev/loop8	33M	33M	0	100%	/snap/snapd/12883
/dev/loop7	66M	66M	0	100%	/snap/gtk-common-themes/1515
/dev/loop9	2.5M	2.5M	0	100%	/snap/gnome-calculator/884
/dev/loop11	640K	640K	0	100%	/snap/gnome-logs/103
/dev/loop12	640K	640K	0	100%	/snap/gnome-logs/106
/dev/loop13	56M	56M	0	100%	/snap/core18/2074
/dev/loop17	219M	219M	0	100%	/snap/gnome-3-34-1804/72
/dev/loop15	33M	33M	0	100%	/snap/snapd/12704
/dev/loop14	242M	242M	0	100%	/snap/gnome-3-38-2004/70
/dev/loop18	62M	62M	0	100%	/snap/core20/1026
/dev/loop16	2.5M	2.5M	0	100%	/snap/gnome-system-monitor/160
/dev/loop19	768K	768K	0	100%	/snap/gnome-characters/726
/dev/loop10	65M	65M	0	100%	/snap/gtk-common-themes/1514
/dev/nvme0n1p1	256M	33M	224M	13%	/boot/efi
tmpfs	770M	16K	770M	1%	/run/user/121
tmpfs	770M	40K	770M	1%	/run/user/1000

g. History

*Description: displays history of commands used in session*

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ history**

**1 sudo update**

**2 sudo apt-get update**

```
3 firefox-browser
4 sudo apt update
5 $ wget -qO - https://download.sublimetext.com/sublimehq-pub.gpg | sudo apt-key add -
6 wget -qO - https://download.sublimetext.com/sublimehq-pub.gpg | sudo apt-key add -
7 echo "deb https://download.sublimetext.com/ apt/stable/" | sudo tee
/etc/apt/sources.list.d/sublime-text.list
8 sudo apt update
9 sudo apt install sublime-text
.
.
.
389 echo string
390 echo *
391 echo
392 date "+%d-%m-%Y"
393 date "+%H-%M-%S"
394 date "+%A, %d/%m/%Y"
395 cal
396 cal 2020
397 cal 08 2020
398 who
399 whoami
400 uname -a
401 uname -s
402 uname -s
403 uname -r
404 uname -sr
405 df -h
406 history
```

h. clear

*Description: All the previously typed commands are cleared.*

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ clear**



## Files

- cat
  - Create a file lockdown\_story.txt with
  - `cat >lockdown_story.txt` and typing the lines on the stdin (standard input).
  - Print (display) the contents of lockdown\_story.txt on stdout (standard output)

*Description: cat is used to concatenate files and for printing. cat> is used for concatenating data onto said file*

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$**

**cat>lockdown\_story.txt**

**1) Eat sleep play and repeat**

**2)having classes online**

**3)NO FUN**



*Description: cat is used for printing data inside file.*

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ cat lockdown\_story.txt

- 1) Eat sleep play and repeat
- 2)having classes online
- 3)NO FUN

- ls
  - List the contents of your home directory.

*Description: Lists contents of directory*

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ ls

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ ls
a1.c      Array.h      Downloads    hello.c      Pictures     sum2.class
A1.c      assignment1.txt EB.class     hello.java   Public       sum2.java
a1.out    assignment_part2.txt Employee.class lockdown_story.txt snap         Templates
A1.out    Desktop      examples.desktop Music         sum1.class  typescript
array.h   Documents    hello        output       sum1.java   Videos
```

- List the contents of your home directory with :  
long format

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ ls -l

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ ls -l
total 180
-rw-rw-r-- 1 dikshitha dikshitha 1192 Sep 20 19:09 a1.c
-rw-rw-r-- 1 dikshitha dikshitha 783 Sep 19 17:24 A1.c
-rwxrwxr-x 1 dikshitha dikshitha 12688 Sep 20 00:01 a1.out
-rwxrwxr-x 1 dikshitha dikshitha 12776 Sep 19 17:24 A1.out
-rw-rw-r-- 1 dikshitha dikshitha 618 Sep 20 19:14 array.h
-rw-rw-r-- 1 dikshitha dikshitha 520 Sep 19 17:24 Array.h
-rw-rw-r-- 1 dikshitha dikshitha 17556 Sep 20 22:10 assignment1.txt
-rw-rw-r-- 1 dikshitha dikshitha 0 Sep 20 22:11 assignment_part2.txt
drwxr-xr-x 5 dikshitha dikshitha 4096 Sep 20 19:26 Desktop
drwxr-xr-x 2 dikshitha dikshitha 4096 Jul 1 22:33 Documents
drwxr-xr-x 2 dikshitha dikshitha 4096 Sep 18 20:07 Downloads
-rw-rw-r-- 1 dikshitha dikshitha 1306 Sep 18 22:46 EB.class
-rw-rw-r-- 1 dikshitha dikshitha 3482 Sep 18 22:50 Employee.class
-rw-r--r-- 1 dikshitha dikshitha 8980 Dec 10 2020 examples.desktop
-rw-rw-r-- 1 dikshitha dikshitha 734 Sep 16 23:07 hello
-rw-rw-r-- 1 dikshitha dikshitha 774 Sep 19 10:08 hello.c
-rw-rw-r-- 1 dikshitha dikshitha 1670 Sep 18 20:25 hello.java
-rw-rw-r-- 1 dikshitha dikshitha 62 Sep 20 22:13 lockdown_story.txt
drwxr-xr-x 2 dikshitha dikshitha 4096 Dec 10 2020 Music
-rwxrwxr-x 1 dikshitha dikshitha 12736 Sep 20 19:14 output
drwxr-xr-x 3 dikshitha dikshitha 4096 May 7 10:26 Pictures
drwxr-xr-x 2 dikshitha dikshitha 4096 Dec 10 2020 Public
drwxr-xr-x 4 dikshitha dikshitha 4096 Jan 8 2021 snap
-rw-rw-r-- 1 dikshitha dikshitha 1220 Sep 18 22:46 sum1.class
-rw-rw-r-- 1 dikshitha dikshitha 1671 Sep 18 22:45 sum1.java
-rw-rw-r-- 1 dikshitha dikshitha 2307 Sep 18 22:50 sum2.class
-rw-rw-r-- 1 dikshitha dikshitha 4636 Sep 18 22:32 sum2.java
drwxr-xr-x 2 dikshitha dikshitha 4096 Dec 10 2020 Templates
-rw-rw-r-- 1 dikshitha dikshitha 734 Sep 16 22:45 typescript
drwxr-xr-x 3 dikshitha dikshitha 4096 May 7 10:27 Videos
```

hidden files

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ ls -ld .\*?**

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ ls -ld .*?
drwxr-xr-x 3 root root 4096 Dec 10 2020 ..
-rw-r----- 1 dikshitha dikshitha 6566 Sep 20 22:10 .bash_history
-rw-r--r-- 1 dikshitha dikshitha 220 Dec 10 2020 .bash_logout
-rw-r--r-- 1 dikshitha dikshitha 3771 Dec 10 2020 .bashrc
drwx----- 24 dikshitha dikshitha 4096 Jul 5 23:17 .cache
drwx----- 22 dikshitha dikshitha 4096 Sep 20 19:01 .config
drwx----- 3 dikshitha dikshitha 4096 Dec 10 2020 .gnupg
-rw-r----- 1 dikshitha dikshitha 38896 Sep 20 19:01 .ICEauthority
drwx----- 3 dikshitha dikshitha 4096 Dec 10 2020 .local
drwx----- 5 dikshitha dikshitha 4096 Dec 9 2020 .mozilla
drwx----- 3 dikshitha dikshitha 4096 Sep 18 14:23 .pki
-rw-r--r-- 1 dikshitha dikshitha 807 Dec 10 2020 .profile
drwx----- 2 dikshitha dikshitha 4096 Dec 10 2020 .ssh
-rw-r--r-- 1 dikshitha dikshitha 0 Dec 10 2020 .sudo_as_admin_successful
drwx----- 6 dikshitha dikshitha 4096 Jan 28 2021 .thunderbird
```

recursive list

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ ls -R**

```

./Desktop:
antiknap          ch.cpp          checkn.cpp:tests  codin.cpp:tests  cpp3-3.cpp
CSES_PROBLEM_SET      imp.cpp          neww
word
antiknap.cpp      ch.cpp:tests    che.cpp          coding2          cpp3.cpp:tests
FastOlympicCoding-master  imp.cpp:tests    neww.cpp
antiknap.cpp:tests che          che.cpp:tests    coding2.cpp      cpp_files
fhg.cpp:tests      longtime        neww.cpp:tests
a.out             checkn          codin            coding2.cpp:tests  cppppp3.cpp
hello             longtime.cpp    output.txt
ch                checkn.cpp      codin.cpp        cpp3-3           'cppppp3.h>'
imp              longtime.cpp:tests 'Screenshot from 2021-09-26 15-33-04.png'

```

modified time order

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ ls -t

```

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ ls -t
send.txt      files.txt      lockdown_story.txt  sum1.java
myfolder      new            assignment1.txt      sum2.java
Desktop       hello.txt      output              hello.java
ln.txt        inclass2.class array.h             Downloads
hardlink.txt  student.class  a1.c               hello
newmv.txt     inclass2.java  a1.out             typescript
labb.java     Pictures       A1.out             Documents
labb.class    application.class  Array.h            Videos
he            inclass.class   A1.c               snap
cpy.txt       inclass.java    hello.c            Music
remve.txt     assig_1_5.txt   sum2.class          Public
mv.txt        assig_1_4.txt   Employee.class      Templates
rmdir.txt     assig_1_3.txt   sum1.class          examples.desktop
cp.txt        assignment_part2.txt  EB.class

```

*Description:-l is used for long listing format, “.” is used to display all hidden files, -R is used to list subdirectories recursively, -t is used to sort by time*

## Filesystem

a) Move to your Root directory.

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ cd /

b) Check the system files present in the Root directory.

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:/\$ ls

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:/$ ls
bin      dev      initrd.img      lib64      mnt      root      snap      sys      var
boot     etc      initrd.img.old  lost+found  opt      run      srv      tmp      vmlinuz
cdrom    home     lib             media      proc     sbin     swapfile  usr      vmlinuz.old
```

c) Display your home directory?

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:/\$ ls home  
dikshitha

d) Move to your home directory.

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:/\$ cd ~

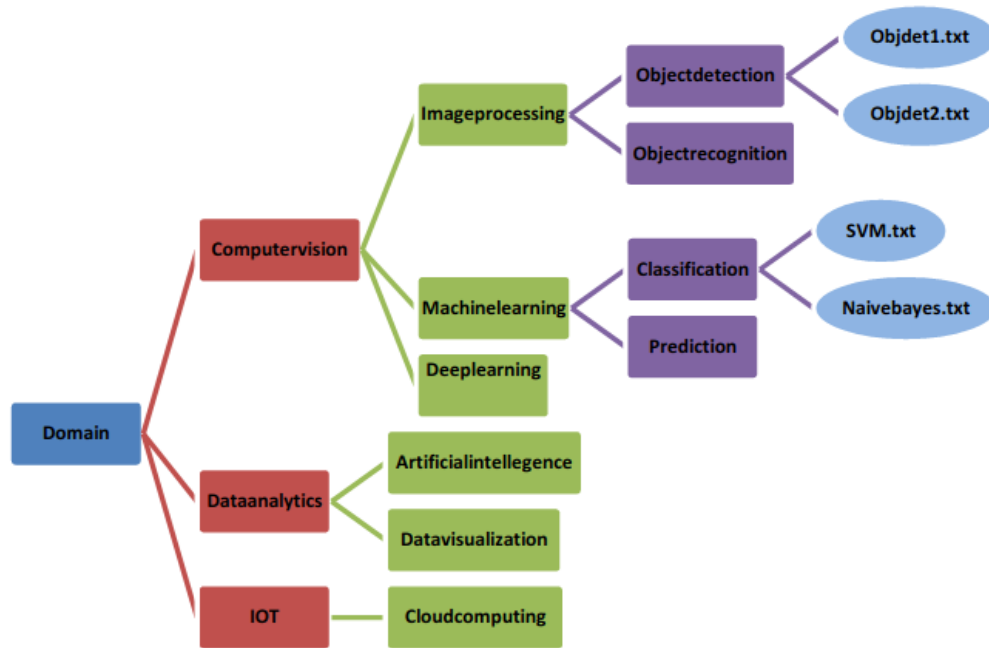
e) Create a directory myfolder in your home.

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ mkdir  
myfolder

f) Move to myfolder

dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~\$ cd  
myfolder

g) In myfolder, create the following directory structure. Check with tree.



```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder$ mkdir Domain
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder$ cd Domain
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$ mkdir Computervision Dataanalytics IOT
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$ cd Computervision
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Computervision$ mkdir Imageprocessing Machinelearning Deeplearning
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Computervision$ cd Imageprocessing
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Imageprocessing$ mkdir Objectdetection Objectrecognition
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Imageprocessing$ cd Objectdetection
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Imageprocessing/Objectdetection$ touch Objdet1.txt  
Objdet2.txt
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Imageprocessing/Objdetection$ cd ../../
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision$ cd Machinelearning
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning$ mkdir Classification Prediction
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning$ cd Classification
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning/Classification$ touch SVM.txt Naivebayes.txt
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning/Classification$ cd ../../..
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$  
cd Dataanalytics
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Dat  
aanalytics$ mkdir Artificialintelligence Datavisualisation
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Dat  
aanalytics$ cd ..
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$  
cd IOT
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT  
$ mkdir Cloudcomputing
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/  
Domain/IOT$ cd
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$
```

Move to Classification Directory using absolute path.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning/Classification
```

Move to Prediction Directory using relative path

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning/Classification$cd ../Prediction
```

Move to myfolder

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co  
mputervision/Machinelearning/Prediction$ cd ../../..
```

rmdir

*Description: Removes directories*

Create a file cloud1.txt in Cloudcomputing.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ cd  
/home/dikshitha/myfolder/Domain/IOT/Cloudcomputing
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT  
/Cloudcomputing$ touch cloud1.txtcomputing
```

Remove directory Cloudcomputing

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT  
$ rmdir Cloudcomputing
```

**rmdir: failed to remove 'Cloudcomputing': Directory not empty**

What should you do to Remove the Cloudcomputing?

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT
$ cd Cloudcomputing
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT
/Cloudcomputing$ rm cloud1.txt
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT
/Cloudcomputing$ cd ..
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/IOT
$ rmdir Cloudcomputing
```

Cp

*Description: Copies directories to different location*

- Copy the directory Classification along with its files in the Dataanalytics directory.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co
mputervision/Machinelearning$ cp -r Classification
~/myfolder/Dataanalytics
```

- List the contents of Svm.txt present in the Dataanalytics directory

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/Co
mputervision/Machinelearning/Classification$ cat SVM.txt
```

- List the content of the directory Domain using Recursive list option

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Computervi
sion/Machinelearning/Classification$ cd ../../..
```



dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain\$ ls  
-R

```
..:  
Domain  
./Domain:  
Computervision Dataanalytics IOT  
./Domain/Computervision:  
DeepLearning Imageprocessing Machinelearning  
./Domain/Computervision/DeepLearning:  
./Domain/Computervision/Imageprocessing:  
Objectdetection Objectrecognition  
./Domain/Computervision/Imageprocessing/Objectdetection:  
Objdet1.txt Objdet2.txt  
./Domain/Computervision/Imageprocessing/Objectrecognition:  
./Domain/Computervision/Machinelearning:  
Classification Prediction  
./Domain/Computervision/Machinelearning/Classification:  
Naivebayes.txt SVM.txt  
./Domain/Computervision/Machinelearning/Prediction:  
./Domain/Dataanalytics:  
Artificialintelligence Classification Datavisualisation  
./Domain/Dataanalytics/Artificialintelligence:./Domain/Dataanalytics/Classification  
:  
Naivebayes.txt SVM.txt  
./Domain/Dataanalytics/Datavisualisation:  
./Domain/IOT:
```

mv:

*Description: Moves directories and also used to rename files within the same directory.*

- Rename Computervision to CV, and Dataanalytics to DA.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~$ cd  
myfolder/Domain
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$  
mv Computervision CV
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$  
mv Dataanalytics DA
```

- Move the available two files of Objectdetection directory to Objectrecognition

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/CV/Image  
processing/Objectdetection/objdet1.txt  
~/myfolder/CV/Imageprocessing/Objectrecognition
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/CV/Image  
processing/Objectdetection$ mv Objdet2.txt  
~/myfolder/CV/Imageprocessing/Objectrecognition
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/CV/Image  
processing/Objectdetection$ ls  
(has no files)
```

**Showing that Objectrecognition has the files now!!**

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/CV/Image  
processing$ cd Objectrecognition
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/CV/Image  
processing/Objectrecognition$ ls
```

**Objdet1.txt Objdet2.txt**

**rm**

*Description:Removes files*

- Remove the files from classification directory available in Dataanalytics.

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/DA/Classification$ rm *.txt
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/DA/Classification$ ls
```

(no files,so prints an empty line)

In

*Description:Used to make links between files*

- Create a hard link for the file Svm.txt

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/DA/Classification$ ln SVM.txt hardlink.txt
```

- Show the inode number for both the original file and the hard link

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/DA/Classification$ ls -li SVM.txt hardlink.txt
```

.txt

```
6031307 -rw-rw-r-- 2 dikshitha dikshitha 0 sep 26 15:28 hardlink.txt
```

```
6031307 -rw-rw-r-- 2 dikshitha dikshitha 0 sep 26 15:28 SVM.txt
```

- Remove the file and check if the link is deleted

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/DA/Classification$ rm SVM.txt
```

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain/DA/Classification$ ls -li hardlink.txt
```

```
6031307 -rw-rw-r-- 2 dikshitha dikshitha 0 sep 26 15:28 hardlink.txt
```

- Create a hard link for the directory DA, OOPS!!! Not able to create hard link!!

Why? -> **Not possible as it disrupts the file structure**

```
dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain$ ln DA directory
```

**In: DA: hard link not allowed for directory**

- Create a soft link for the directory DA

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain\$ ln -s DA directory**

- Show the inode number for both the original file and the shortcut

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain\$ ls -li DA directory**

**5904194 lrwxrwxrwx 1 dikshitha dikshitha 2 sep 26 15:07 directory -> DA**

**DA:**

**total 12**

**6031192 drwxrwxr-x 2 dikshitha dikshitha 2 dikshitha dikshitha 4096 sep 21 20:35 Artificialintelligence**

**6031189 drwxrwxr-x 2 dikshitha dikshitha 2 dikshitha dikshitha 4096 sep 21 20:35 Artificialintelligence**

**6031319 drwxrwxr-x 2 dikshitha dikshitha 2 dikshitha dikshitha 4096 sep 21 20:35 Artificialintelligence**

- Remove the directory DA

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain\$ rm -r DA**

- Check that the shortcut has become dangling link!!

**dikshitha@dikshitha-Lenovo-IdeaPad-S540-15IML-D:~/myfolder/Domain\$ ls -li directory**

**5904194 lrwxrwxrwx 1 dikshitha dikshitha 2 sep 26 15:07 directory -> DA**

