

B Linux Shell Commands

1. File and directory commands

- a. ls, ls -l
- b. cd, cd .., cd /, cd ~
- c. mkdir
- d. cat (displaying, creating, appending options)
- e. cp
- f. mv
- g. chmod
- h. wc
- i. find

- a. ls

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ ls
3vgg10.png          examples.desktop    Music
64loss500.png       face1.py            'Pantech Solutions'
a500.png            Figure_1.png        Pictures
acc1.png            Figure_2.png        Public
accalex150.png      l500.png            snap
accalex20.png       le30acc.png         sskk.png
acce5.png           le30loss.png        ssk.png
alex2.py            lenete30acc.png     Templates
alex3.py            lenete30loss.png    Untitled1.ipynb
anaconda3           logesh              'Untitled Folder'
Anaconda3-5.0.1-Linux-x86_64.sh loss1.png            Untitled.ipynb
AnacondaProjects    lossalex150.png     vgg10l.png
Desktop             lossalex20.png      Videos
Documents           losse5.png          workshop
Downloads           mnist_example.ipynb
```

b. ls -l

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ ls -l
total 539068
-rw-r--r-- 1 student student 28535 Jan 30 2020 3vgg10.png
-rw-r--r-- 1 student student 38998 Feb 14 2020 64loss500.png
-rw-r--r-- 1 student student 34005 Jan 30 2020 a500.png
-rw-r--r-- 1 student student 40418 Jan 28 2020 acc1.png
-rw-r--r-- 1 student student 64114 Feb 1 2020 accalex150.png
-rw-r--r-- 1 student student 40664 Feb 1 2020 accalex20.png
-rw-r--r-- 1 student student 38131 Jan 28 2020 acc5.png
-rw-r--r-- 1 student student 2218 Feb 1 2020 alex2.py
-rw-r--r-- 1 student student 3280 Feb 1 2020 alex3.py
-rwxr-xr-x 24 student student 4096 Jan 23 2020 anaconda3
-rw-rw-r-- 1 student student 550796553 Jan 23 2020 Anaconda3-5.0.1-Linux-x86_64.sh
-rwxrwxr-x 2 student student 4096 Mar 9 2022 AnacondaProjects
-rwxrwxrwx 5 student student 4096 Nov 30 10:22 Desktop
-rwxr-xr-x 8 student student 4096 Nov 1 10:09 Documents
-rwxr-xr-x 22 student student 20480 Dec 17 08:46 Downloads
-rw-r--r-- 1 student student 8980 Jan 7 2020 examples.desktop
-rw-rw-r-- 1 student student 1 Mar 11 2022 face1.py
-rw-r--r-- 1 student student 22822 Jan 31 2020 Figure_1.png
-rw-r--r-- 1 student student 38663 Jan 31 2020 Figure_2.png
-rw-r--r-- 1 student student 21898 Jan 30 2020 l500.png
-rw-r--r-- 1 student student 45337 Feb 19 2020 le30acc.png
-rw-r--r-- 1 student student 32794 Feb 19 2020 le30loss.png
-rw-r--r-- 1 student student 47485 Feb 19 2020 lenete30acc.png
-rw-r--r-- 1 student student 34248 Feb 19 2020 lenete30loss.png
-rwxr-xr-x 5 student student 4096 Jan 22 2020 logesh
-rw-r--r-- 1 student student 33035 Jan 28 2020 loss1.png
-rw-r--r-- 1 student student 50760 Feb 1 2020 lossalex150.png
-rw-r--r-- 1 student student 27286 Feb 1 2020 lossalex20.png
-rw-r--r-- 1 student student 33815 Jan 28 2020 losse5.png
-rw-r--r-- 1 student student 225987 Feb 20 2020 mnist_example.ipynb
-rwxr-xr-x 2 student student 4096 Jan 7 2020 Music
-rwxrwxr-x 3 student student 4096 Nov 22 11:22 'Pantech Solutions'
-rwxr-xr-x 2 student student 20480 Nov 30 09:29 Pictures
-rwxr-xr-x 2 student student 4096 Jan 7 2020 Public
-rwx----- 4 student student 4096 Oct 31 15:21 snap
-rw-r--r-- 1 student student 36514 Jan 28 2020 sskk.png
-rw-r--r-- 1 student student 33989 Jan 28 2020 ssk.png
-rwxr-xr-x 2 student student 4096 Jan 7 2020 Templates
-rw-rw-r-- 1 student student 2416 Aug 3 11:41 Untitled1.ipynb
-rwxrwxr-x 3 student student 4096 Jun 28 10:38 'Untitled Folder'
-rw-rw-r-- 1 student student 22869 Jul 6 11:40 Untitled.ipynb
-rwxr-xr-x 2 student student 38296 Jan 31 2020 vgg10l.png
-rwxr-xr-x 3 student student 4096 Jan 7 2020 Videos
-rwxr-xr-x 3 student student 4096 Feb 20 2020 workshop
```

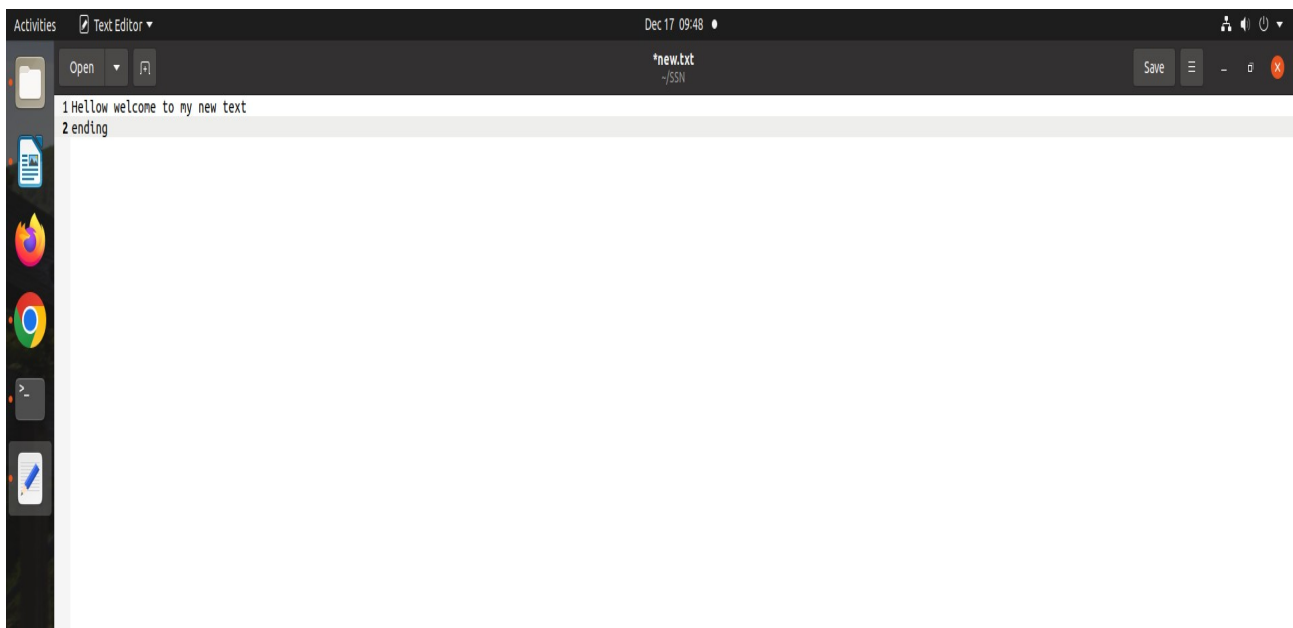
c. mkdir

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ ls
3vgg10.png  accalex20.png  Anaconda3-5.0.1-Linux-x86_64.sh  examples.desktop  le30acc.png  loss1.png  Music  sskk.png  Untitled.ipynb
64loss500.png  acc5.png  AnacondaProjects  face1.py  le30loss.png  lossalex150.png  'Pantech Solutions'  ssk.png  vgg10l.png
a500.png  alex2.py  Desktop  Figure_1.png  lenete30acc.png  lossalex20.png  Pictures  Templates  Videos
acc1.png  alex3.py  Documents  Figure_2.png  lenete30loss.png  losse5.png  Public  Untitled1.ipynb  workshop
accalex150.png  anaconda3  Downloads  l500.png  logesh  mnist_example.ipynb  snap  'Untitled Folder'

student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ mkdir SSN
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ ls
3vgg10.png  accalex20.png  Anaconda3-5.0.1-Linux-x86_64.sh  examples.desktop  le30acc.png  loss1.png  Music  sskk.png  'Untitled Folder'
64loss500.png  acc5.png  AnacondaProjects  face1.py  le30loss.png  lossalex150.png  'Pantech Solutions'  ssk.png  Untitled.ipynb
a500.png  alex2.py  Desktop  Figure_1.png  lenete30acc.png  lossalex20.png  Pictures  SSN  vgg10l.png
acc1.png  alex3.py  Documents  Figure_2.png  lenete30loss.png  losse5.png  Public  Templates  Videos
accalex150.png  anaconda3  Downloads  l500.png  logesh  mnist_example.ipynb  snap  Untitled1.ipynb  workshop
```

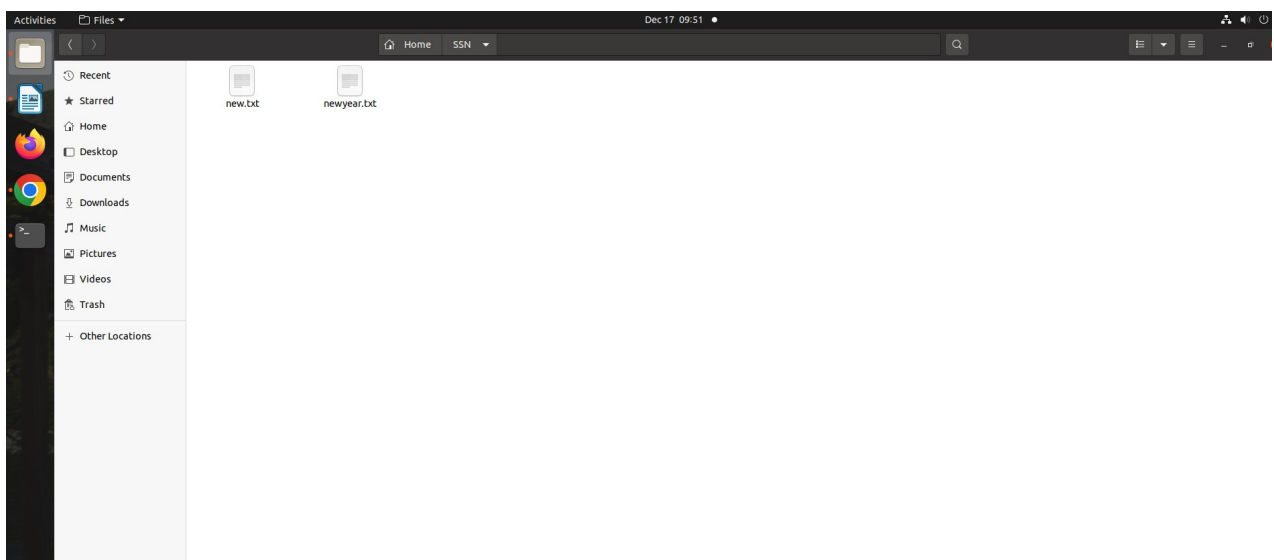
d. cat (displaying, creating, appending options)

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ cd SSN
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/SSN$ cat>new.txt
Hellow welcome to my new text
ending
^Z
[2]+  Stopped                  cat > new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/SSN$
```



e. cp

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/SSN$ cp new.txt newyear.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/SSN$
```

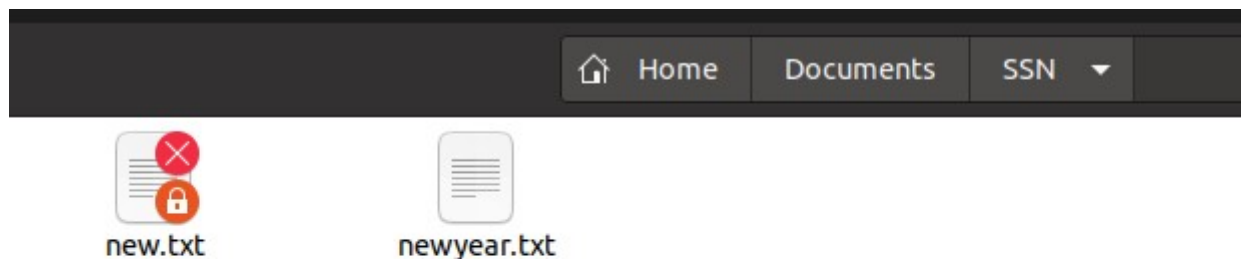


f. mv

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/SSN$ cd -  
/home/student  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ ls  
3vgg10.png  accalex20.png  Anaconda3-5.0.1-Linux-x86_64.sh  examples.desktop  le30acc.png  loss1.png  Music  ssk.png  'Untitled Folder'  
64loss500.png  accex5.png  AnacondaProjects  face1.py  le30loss.png  lossalex150.png  'Pantech Solutions'  ssk.png  Untitled.ipynb  
a500.png  alex2.py  lesson  Figure_1.png  lenete30acc.png  lossalex20.png  Pictures  SSN  vgg10l.png  
acc1.png  alex3.py  Documents  Figure_2.png  lenete30loss.png  losse5.png  Public  Templates  Videos  
accalex150.png  anaconda3  Downloads  l500.png  logesh  mnist_example.ipynb  snap  Untitled1.ipynb  workshop  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ mv SSN/ ~/Documents/  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~$ cd Documents  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ ls  
Dhivya 'lenet out' 'output trial' pythonpr SSK SSN 'Untitled Folder'  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$
```

g. chmod

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 0 new.txt  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt  
wc: new.txt: Permission denied  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 1 new.txt  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt  
wc: new.txt: Permission denied
```



new.txt Properties

Basic

Permissions

Open With

Owner:

Me

Access:

no read, no write

Group:

student

Access:

None

Others

Access:

None

Execute:

☒ Allow executing file as program

Security context:

unknown

h. wc --> Number of lines, words, characters

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 0 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 1 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 001 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 010 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 011 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 100 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 101 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 110 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 111 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
 2  7 37 new.txt
```

i. find

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ cd -  
/home/student/Documents  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ find . -name "*.py"  
./pythonpr/helloworld.py  
./Dhivya/Colab Notebooks-20221007T043252Z-001/Colab Notebooks/simple_linear_regression.py  
./Dhivya/EEG_Bird/code/EEG_feature_extraction.py  
./Dhivya/EEG_Bird/code/EEG_generate_training_matrix.py  
./Dhivya/EEG_Classification-master/Feature_selection.py  
./Dhivya/EEG_Classification-master/Build_and_test_classifier.py  
./Dhivya/EEG_Classification-master/EEG_feature_extraction.py  
./Dhivya/EEG_Classification-master/main.py  
./Dhivya/EEG_Classification-master/EEG_generate_training_matrix.py  
./Dhivya/boilerplate-rock-paper-scissors-master/RPS.py  
./Dhivya/boilerplate-rock-paper-scissors-master/RPS_game.py  
./Dhivya/boilerplate-rock-paper-scissors-master/test_module.py  
./Dhivya/boilerplate-rock-paper-scissors-master/main.py  
./Dhivya/Freecodecamp/freeccknn.py  
./Dhivya/Course Work/Machine Learning/simple_linear_regression.py  
./Dhivya/Spider project/EEGLinear.py  
./Dhivya/Spider project/Pear1.py  
./Dhivya/Spider project/EEG_feature_extraction.py  
./Dhivya/Spider project/EEGLogistic.py  
./Dhivya/Spider project/EEG_featureextraction.py  
./Dhivya/EEG_aramado18/src/test1.py  
./Dhivya/EEG_aramado18/src/generateTrainingMatrix.py  
./Dhivya/EEG_aramado18/src/armada18eeg.py
```

2. System related commands

- a. who
- b. whoami
- c. pwd
- d. date
- e. man
- f. echo
- g. cal
- h. bc

- a. who

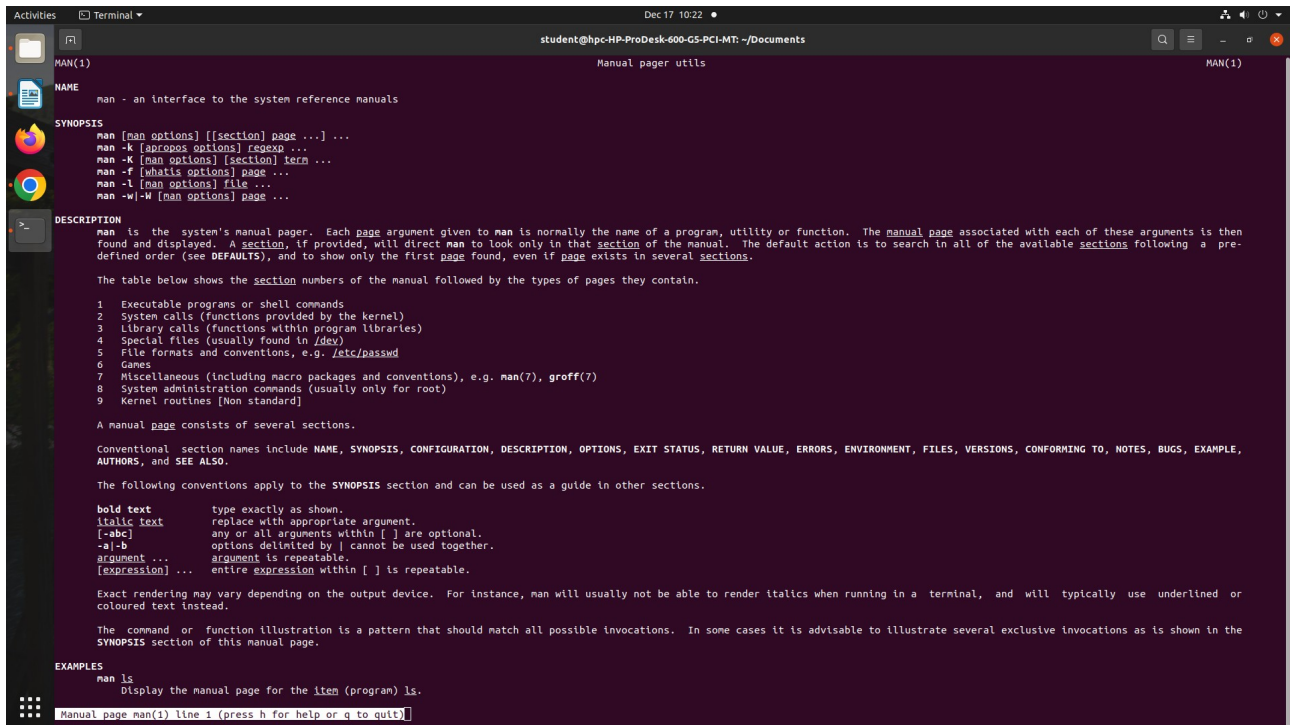
```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ who
student  :1          2022-12-17 08:33 (:1)
```

- b. whoami
- c. pwd
- d. date

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ whoami
student
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ pwd
/home/student/Documents
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ date
Saturday 17 December 2022 10:19:58 AM IST
```


e. man

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ man
What manual page do you want?
For example, try 'man man'.
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ man man
```



```
MAN(1)
Manual pager utils
NAME
man - an interface to the system reference manuals
SYNOPSIS
man [man options] [[section] page ...] ...
man -k [apropos options] regexp ...
man -K [man options] [section] term ...
man -f [whatIs options] page ...
man -l [man options] file ...
man -W-W [man options] page ...
DESCRIPTION
man is the system's manual pager. Each page argument given to man is normally the name of a program, utility or function. The manual page associated with each of these arguments is then found and displayed. A section, if provided, will direct man to look only in that section of the manual. The default action is to search in all of the available sections following a pre-defined order (see DEFAULTS), and to show only the first page found, even if page exists in several sections.
The table below shows the section numbers of the manual followed by the types of pages they contain.
1 Executable programs or shell commands
2 System calls (functions provided by the kernel)
3 Library calls (functions within program libraries)
4 Special files (usually found in /dev)
5 File formats and conventions, e.g. /etc/passwd
6 Games
7 Miscellaneous (including macro packages and conventions), e.g. man(7), groff(7)
8 System administration commands (usually only for root)
9 Kernel routines [Non standard]
A manual page consists of several sections.
Conventional section names include NAME, SYNOPSIS, CONFIGURATION, DESCRIPTION, OPTIONS, EXIT STATUS, RETURN VALUE, ERRORS, ENVIRONMENT, FILES, VERSIONS, CONFORMING TO, NOTES, BUGS, EXAMPLE, AUTHORS, and SEE ALSO.
The following conventions apply to the SYNOPSIS section and can be used as a guide in other sections.
bold text      type exactly as shown.
italic text    replace with appropriate argument.
[-abc]        any or all arguments within [ ] are optional.
-a|-b         options delimited by | cannot be used together.
argument ...  argument is repeatable.
[expression] ... entire expression within [ ] is repeatable.
Exact rendering may vary depending on the output device. For instance, man will usually not be able to render italics when running in a terminal, and will typically use underlined or coloured text instead.
The command or function illustration is a pattern that should match all possible invocations. In some cases it is advisable to illustrate several exclusive invocations as is shown in the SYNOPSIS section of this manual page.
EXAMPLES
man ls
Display the manual page for the ls (program) ls.
Manual page man(1) line 1 (press h for help or q to quit)
```

f. echo

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ echo
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ echo
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ echo Dhivya
Dhivya
```

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ echo "35+40"
35+40
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ echo 35+40
35+40
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ echo Dhivya "Dhiv"
Dhivya Dhiv
```

g. cal

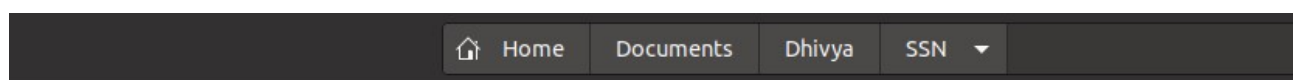
```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ cal
    December 2022
Su Mo Tu We Th Fr Sa
                1  2  3
 4  5  6  7  8  9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

h. bc – binary calculator

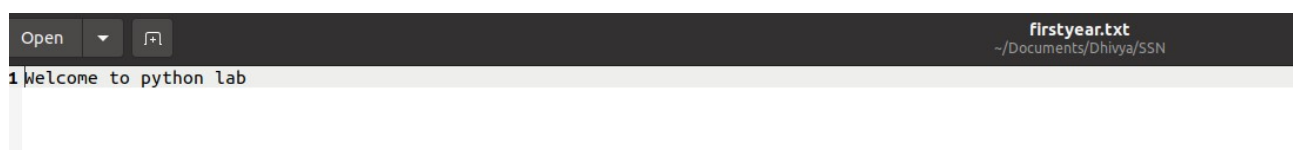
```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents$ bc
bc 1.07.1
Copyright 1991-1994, 1997, 1998, 2000, 2004, 2006, 2008, 2012-2017 Free Software Foundation, Inc.
This is free software with ABSOLUTELY NO WARRANTY.
For details type `warranty'.
9+8
17
5-9
-4
```

3. Create a new directory named “SSN”, a subdirectory “BE” under SSN and create a file named “firstyear.txt” and write about the SSN orientation programme.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya$ mkdir SSN
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya$ cd SSN
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cat> firstyear.txt
Welcome to python lab
^Z
[4]+  Stopped                  cat > firstyear.txt
```



firstyear.txt



4. Rename the firstyear.txt file as orientation.txt

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ mv firstyear.txt orientation.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ ls
orientation.txt
```

5. Give all permissions to user and only reading permission to others

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 0 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 1 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 001 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 010 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 011 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 100 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 101 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 110 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ chmod 111 new.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
wc: new.txt: Permission denied
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/SSN$ wc new.txt
 2  7 37 new.txt
```

6. Create a file "AboutMe.txt". Write about yourself and your ambitions.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cat> AboutMe.txt
My ambitions became a Animation Director
```

7. Create two directories namely "dept_x" (x being your dept name), "SEC_X" inside "SSN" folder.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ mkdir dept_CSE, SEC_Ph.D
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ ls
AboutMe.txt  dept_CSE,  orientation.txt  SEC_Ph.D
```


8. Create a file named “dept.txt” and write about your department in that file.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cd dept_CSE,
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ cat>dept.txt
welcome my dept
^Z
[9]+  Stopped                  cat > dept.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ ls
dept.txt
```

9. Copy the file named “first_year.txt” to “SEC_X” folder.

```
[9]+  Stopped                  cat > dept.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cd SEC_Ph.D
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ cat>first_year.txt
Welcome to my class
^Z
[7]+  Stopped                  cat > first_year.txt
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ ls
first_year.txt
```

10. Move the file “dept.txt” to “SEC_X” folder.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ mv dept.txt ~/Documents/Dhivya/SSN/SEC_Ph.D
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ cd -
/home/student/Documents/Dhivya/SSN
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cd SEC_Ph.D
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ ls
dept.txt  first_year.txt
```

11. Enter into folder “SEC_X” and list the folder content.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ mv dept.txt ~/Documents/Dhivya/SSN/SEC_Ph.D
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ cd -
/home/student/Documents/Dhivya/SSN
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cd SEC_Ph.D
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ ls
dept.txt  first_year.txt
```

12. Move to “SSN” folder and list all the contents.

```
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/dept_CSE,$ cd -  
/home/student/Documents/Dhivya/SSN  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cd SEC_Ph.D  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ ls  
dept.txt  first_year.txt  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ mv dept.txt firstyear.txt ~/Documents/Dhivya/SSN  
mv: cannot stat 'firstyear.txt': No such file or directory  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ mv SEC_Ph.D ~/Documents/Dhivya/SSN  
mv: cannot stat 'SEC_Ph.D': No such file or directory  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ mv dept.txt ~/Documents/Dhivya/SSN  
mv: cannot stat 'dept.txt': No such file or directory  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ cd -  
/home/student/Documents/Dhivya/SSN  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ ls  
AboutMe.txt  dept_CSE  dept_CSE,  dept.txt  orientation.txt  SEC_Ph.D  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ cd SEC_Ph.D  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ mv firstyear.txt ~/Documents/Dhivya/SSN  
mv: cannot stat 'firstyear.txt': No such file or directory  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN/SEC_Ph.D$ cd -  
/home/student/Documents/Dhivya/SSN  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$ ls  
AboutMe.txt  dept_CSE  dept_CSE,  dept.txt  orientation.txt  SEC_Ph.D  
student@hpc-HP-ProDesk-600-G5-PCI-MT:~/Documents/Dhivya/SSN$
```


C. Working in Python Interactive Mode:

1. Create a variable named num1 with some integer value and display the value & its datatype.

```
>>> num1=10
>>> print("Value ",num1)
Value 10
>>> type(num1)
<class 'int'>
```

2. Create another variable named num2 with some integer value and display its datatype. Use the same variable to store a floating value and write your inference.

```
>>> num2=20
>>> print("Another value is ",num2)
Another value is 20
>>> type(num2)
<class 'int'>
>>> num2=30.23
>>> print("Another value is ",num2)
Another value is 30.23
>>> type(num2)
<class 'float'>
```

3. Create a variable name with your name as input

```
>>> name="Dhivya"
```

4. Display the value of num1, num2 and name.

```
>>> print("Value 1 is ",num1," Value 2 is ",num2," Name is ",name)
Value 1 is 10 Value 2 is 30.23 Name is Dhivya
```

5. Display the type of num1, num2 and name.

```
>>> type(num1)
<class 'int'>
>>> type(num2)
<class 'float'>
>>> type(name)
<class 'str'>
```

6. Display "Hello " along with your name.

```
>>> a="Hello"
>>> name="Dhivya"
>>> print(a+name)
HelloDhivya
>>> print("Hello ",name)
Hello  Dhivya
>>> print("Hello "+name)
Hello Dhivya
```

7. Find the output of $4+6*7/2$ directly.

8. Find the output of $4+5*7/3$ directly.

9. Find the output of $4+5*7//3$ directly.

```
>>> 4+6*7 /2
25.0
>>> 4+5*7 /3
15.666666666666666
>>> 4+5*7 //3
15
```

10. Find the output of num1 raised to power of num2

```
>>> num1**num2
1.698243652461746e+30
>>> print(num1**num2)
1.698243652461746e+30
>>> pow(num1,num2)
1.698243652461746e+30
>>> print(pow(num1,num2))
1.698243652461746e+30
```

11. Get the input from the user and display the value.

```
>>> x=input("Enter value")
Enter value 10
>>> x=input("Enter your name")
Enter your name Dhivya
```