

Linux Command Line 1

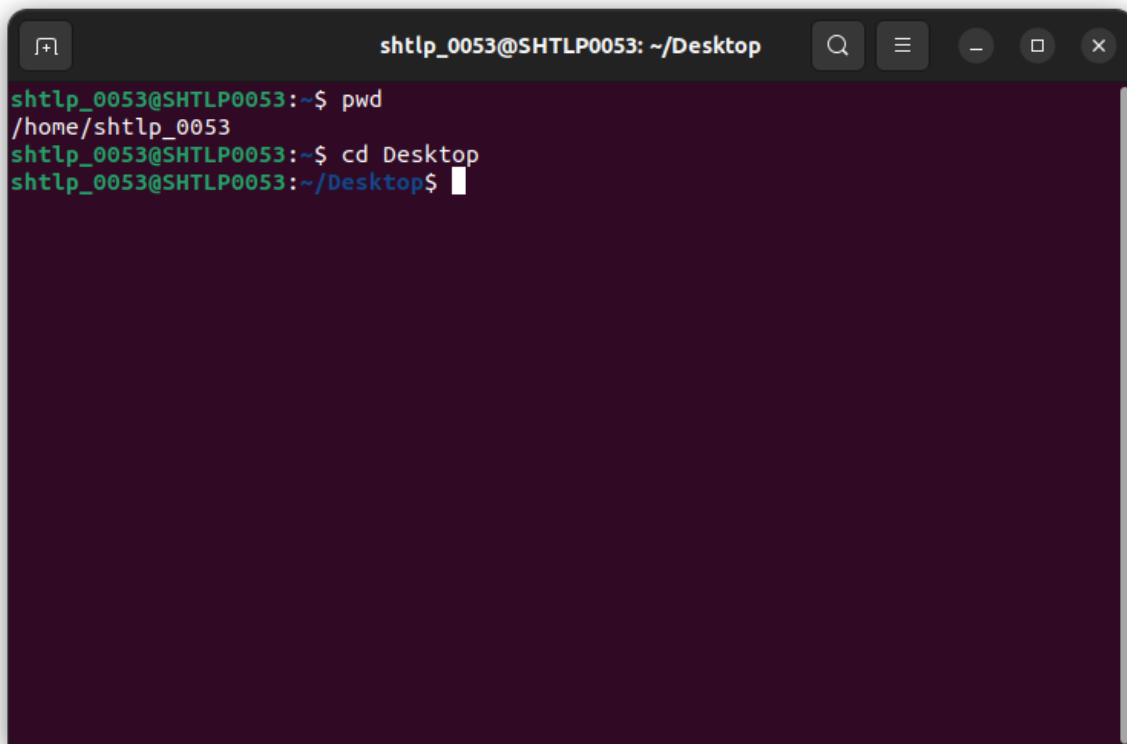
Shell-The shell can be defined as a command interpreter within an operating system like Linux/GNU or Unix. It is a program that runs other programs.

Terminal -tool to process shell command

Some Basic Command Line:

1)-pwd-present working directory

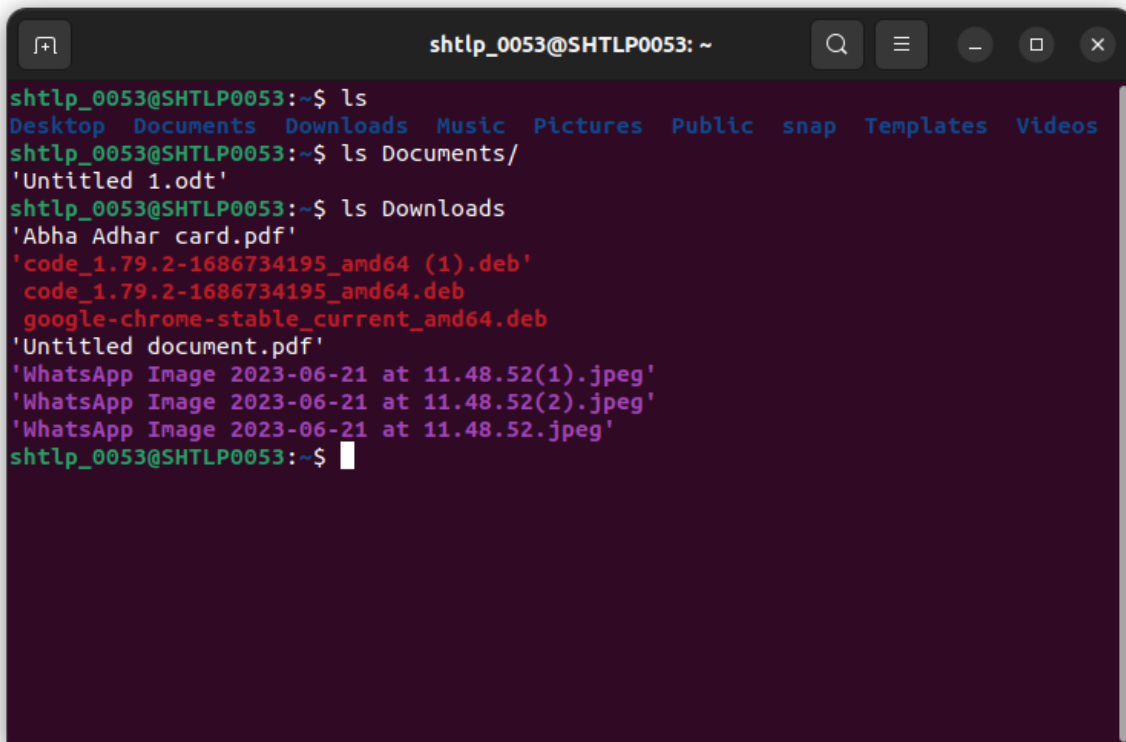
2)-cd-change directory

A terminal window with a dark background and light green text. The window title is 'shlp_0053@SHTLP0053: ~/Desktop'. The terminal shows three lines of command execution: 'shlp_0053@SHTLP0053:~\$ pwd' followed by the output '/home/shlp_0053', 'shlp_0053@SHTLP0053:~\$ cd Desktop', and 'shlp_0053@SHTLP0053:~/Desktop\$' with a cursor at the end.

```
shlp_0053@SHTLP0053: ~/$ pwd
/home/shlp_0053
shlp_0053@SHTLP0053:~$ cd Desktop
shlp_0053@SHTLP0053:~/Desktop$
```

3)- ls-linux shell command

ls [options][file/directory]



```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls  
Desktop Documents Downloads Music Pictures Public snap Templates Videos  
shtlp_0053@SHTLP0053:~$ ls Documents/  
'Untitled 1.odt'  
shtlp_0053@SHTLP0053:~$ ls Downloads  
'Abha Adhar card.pdf'  
'code_1.79.2-1686734195_amd64 (1).deb'  
code_1.79.2-1686734195_amd64.deb  
google-chrome-stable_current_amd64.deb  
'Untitled document.pdf'  
'WhatsApp Image 2023-06-21 at 11.48.52(1).jpeg'  
'WhatsApp Image 2023-06-21 at 11.48.52(2).jpeg'  
'WhatsApp Image 2023-06-21 at 11.48.52.jpeg'  
shtlp_0053@SHTLP0053:~$
```

4)-clear- this command is used to clear the terminal.

5)- ls ~-it will show you root directory

6)- ls ..-this means you want to print outonce that back directory structure

7)- ls ../.- this means you want to print out once that break directory structure

8)-ls -l - you want the list and directory in long format.

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls /  
bin    dev    lib    libx32  mnt    root  snap    sys    var  
boot   etc    lib32  lost+found  opt    run    srv      tmp  
cdrom  home  lib64  media    proc   sbin   swapfile  usr  
shtlp_0053@SHTLP0053:~$ pwd  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$ ls ..  
shtlp_0053  
shtlp_0053@SHTLP0053:~$ ls ../..  
bin    dev    lib    libx32  mnt    root  snap    sys    var  
boot   etc    lib32  lost+found  opt    run    srv      tmp  
cdrom  home  lib64  media    proc   sbin   swapfile  usr  
shtlp_0053@SHTLP0053:~$ ls -l  
total 36  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:58 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 22:28 Downloads  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Music  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
shtlp_0053@SHTLP0053:~$
```

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$
```

9)-ls -a-this will show you hidden files

10)-Ls -al-this will show you hidden file and long format combined.

```
shctlp_0053@SHTLP0053: ~  
shctlp_0053@SHTLP0053:~$ ls -a  
.  
..  
.bash_history  
.bash_logout  
.bashrc  
.cache  
.config  
Desktop  
Documents  
Downloads  
.gnupg  
.local  
Music  
Pictures  
.pki  
.profile  
Public  
snap  
.ssh  
.sudo_as_admin_successful  
Templates  
.thunderbird  
Videos  
.vscode  
shctlp_0053@SHTLP0053:~$ ls  
Desktop Documents Downloads Music Pictures Public snap Templates Videos  
shctlp_0053@SHTLP0053:~$ ls -al  
total 96  
drwxr-x--- 20 shctlp_0053 shctlp_0053 4096 Jun 21 21:56 .  
drwxr-xr-x  3 root        root        4096 Jun 12 18:47 ..  
-rw-----  1 shctlp_0053 shctlp_0053  967 Jun 22 00:02 .bash_history  
-rw-r--r--  1 shctlp_0053 shctlp_0053  220 Jun 12 18:47 .bash_logout  
-rw-r--r--  1 shctlp_0053 shctlp_0053 3771 Jun 12 18:47 .bashrc  
drwx----- 16 shctlp_0053 shctlp_0053 4096 Jun 21 21:56 .cache  
drwx----- 18 shctlp_0053 shctlp_0053 4096 Jun 22 12:48 .config  
drwxr-xr-x  4 shctlp_0053 shctlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x  2 shctlp_0053 shctlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x  2 shctlp_0053 shctlp_0053 4096 Jun 21 22:28 Downloads  
drwx-----  2 shctlp_0053 shctlp_0053 4096 Jun 21 23:53 .gnupg  
drwx-----  3 shctlp_0053 shctlp_0053 4096 Jun 12 18:49 .local  
drwx-----  3 shctlp_0053 shctlp_0053 4096 Jun 21 21:56 .mozilla  
drwxr-xr-x  2 shctlp_0053 shctlp_0053 4096 Jun 12 18:49 Music
```

```
shctlp_0053@SHTLP0053: ~  
shctlp_0053@SHTLP0053:~$ ls -a  
.  
..  
.bash_history  
.bash_logout  
.bashrc  
.cache  
.config  
Desktop  
Documents  
Downloads  
.gnupg  
.local  
Music  
Pictures  
.pki  
.profile  
Public  
snap  
.ssh  
.sudo_as_admin_successful  
Templates  
.thunderbird  
Videos  
.vscode  
shctlp_0053@SHTLP0053:~$ ls  
Desktop Documents Downloads Music Pictures Public snap Templates Videos  
shctlp_0053@SHTLP0053:~$ ls -al  
total 96  
drwxr-x--- 20 shctlp_0053 shctlp_0053 4096 Jun 21 21:56 .  
drwxr-xr-x  3 root        root        4096 Jun 12 18:47 ..  
-rw-----  1 shctlp_0053 shctlp_0053  967 Jun 22 00:02 .bash_history  
-rw-r--r--  1 shctlp_0053 shctlp_0053  220 Jun 12 18:47 .bash_logout  
-rw-r--r--  1 shctlp_0053 shctlp_0053 3771 Jun 12 18:47 .bashrc  
drwx----- 16 shctlp_0053 shctlp_0053 4096 Jun 21 21:56 .cache  
drwx----- 18 shctlp_0053 shctlp_0053 4096 Jun 22 12:48 .config  
drwxr-xr-x  4 shctlp_0053 shctlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x  2 shctlp_0053 shctlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x  2 shctlp_0053 shctlp_0053 4096 Jun 21 22:28 Downloads  
drwx-----  2 shctlp_0053 shctlp_0053 4096 Jun 21 23:53 .gnupg  
drwx-----  3 shctlp_0053 shctlp_0053 4096 Jun 12 18:49 .local  
drwx-----  3 shctlp_0053 shctlp_0053 4096 Jun 21 21:56 .mozilla  
drwxr-xr-x  2 shctlp_0053 shctlp_0053 4096 Jun 12 18:49 Music
```

11)- ls -lS-this will sort your directory by size.

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls -ls  
total 36  
drwxr-xr-x 4 shtlp_0053 shtlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 22:28 Downloads  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Music  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
shtlp_0053@SHTLP0053:~$
```

12)-ls [Directory]/*.[format]

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ pwd  
/home/shtlp_0053  
shtlp_0053@SHTLP0053:~$ ls Downloads/  
'Abha Adhar card.pdf'  
'code_1.79.2-1686734195_amd64 (1).deb'  
code_1.79.2-1686734195_amd64.deb  
google-chrome-stable_current_amd64.deb  
'Untitled document.pdf'  
'WhatsApp Image 2023-06-21 at 11.48.52(1).jpeg'  
'WhatsApp Image 2023-06-21 at 11.48.52(2).jpeg'  
'WhatsApp Image 2023-06-21 at 11.48.52.jpeg'  
shtlp_0053@SHTLP0053:~$ ls Downloads/*.pdf  
'Downloads/Abha Adhar card.pdf' 'Downloads/Untitled document.pdf'  
shtlp_0053@SHTLP0053:~$
```

13) ls -lS > out.txt - save the output in out.txt

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls -ls>out.txt  
shtlp_0053@SHTLP0053:~$
```

14) ls -d */- lists directory

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ ls -d*/  
ls: invalid option -- '*'  
Try 'ls --help' for more information.  
shtlp_0053@SHTLP0053:~$ ls -d */  
Desktop/  Downloads/  Pictures/  snap/      Videos/  
Documents/ Music/      Public/    Templates/  
shtlp_0053@SHTLP0053:~$
```

15)- cat options file1 file2 -cat echos anything written

16)- cat file1.txt file2.txt

17)- `cat -b file1.txt` - this command adds line no to the text file and skips the blank lines

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ cat out.txt  
total 36  
drwxr-xr-x 4 shtlp_0053 shtlp_0053 4096 Jun 22 12:45 Desktop  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 16:51 Documents  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 21 22:28 Downloads  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Music  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 15:04 Pictures  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Public  
drwx----- 6 shtlp_0053 shtlp_0053 4096 Jun 21 12:04 snap  
drwxr-xr-x 2 shtlp_0053 shtlp_0053 4096 Jun 12 18:49 Templates  
drwxr-xr-x 3 shtlp_0053 shtlp_0053 4096 Jun 21 23:37 Videos  
-rw-rw-r-- 1 shtlp_0053 shtlp_0053 0 Jun 22 14:01 out.txt  
shtlp_0053@SHTLP0053:~$ cat list1.txt  
list 1 line 1  
list 1 line 2  
  
list 1 line 3  
shtlp_0053@SHTLP0053:~$ cat -b list1.txt  
  1 list 1 line 1  
  2 list 1 line 2  
  
  3 list 1 line 3  
shtlp_0053@SHTLP0053:~$
```

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ cat -b list1.txt  
  1 list 1 line 1  
  2 list 1 line 2  
  
  3 list 1 line 3  
shtlp_0053@SHTLP0053:~$
```

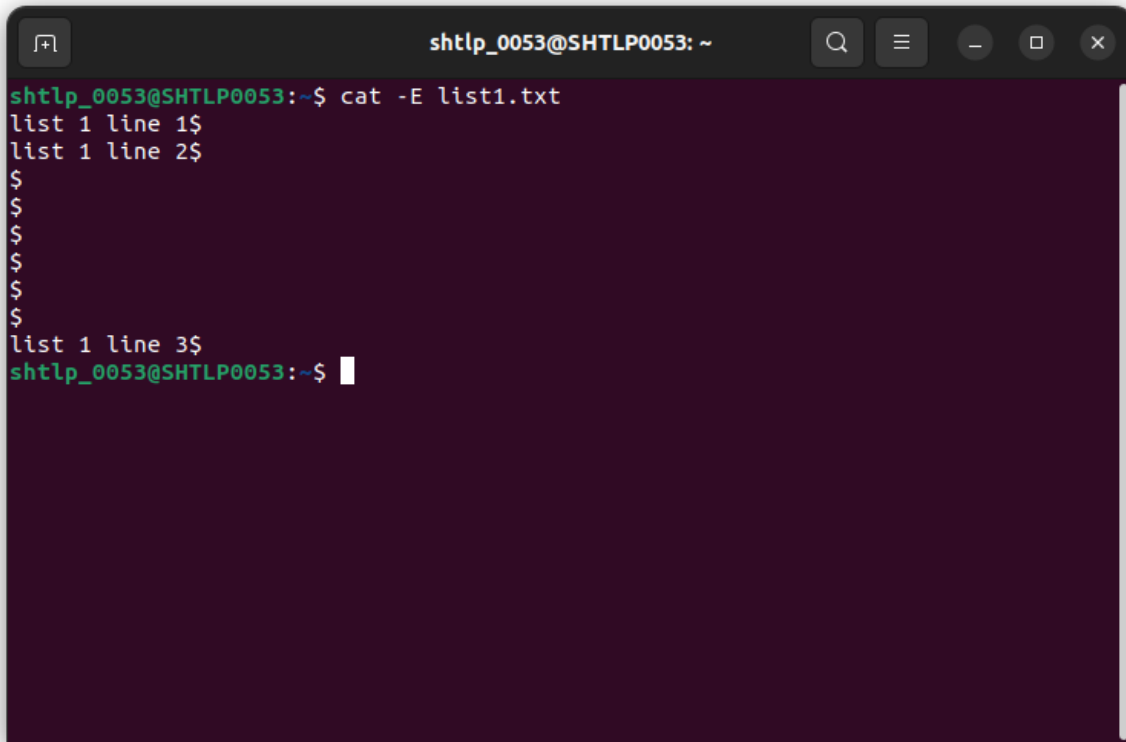
18)-`cat -n file.txt`- this command lie adds line no to the text file and including blank lines.

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ cat -n list1.txt  
1 list 1 line 1  
2 list 1 line 2  
3  
4  
5  
6  
7  
8  
9 list 1 line 3  
shtlp_0053@SHTLP0053:~$
```

19)-cat -s file.txt- this command line squeezes all the blank lines in 1 (only displaying not changing).

```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ cat -s list1.txt  
list 1 line 1  
list 1 line 2  
  
list 1 line 3  
shtlp_0053@SHTLP0053:~$
```

20)-cat -E file.txt- this command line puts \$ sign at end of lines.

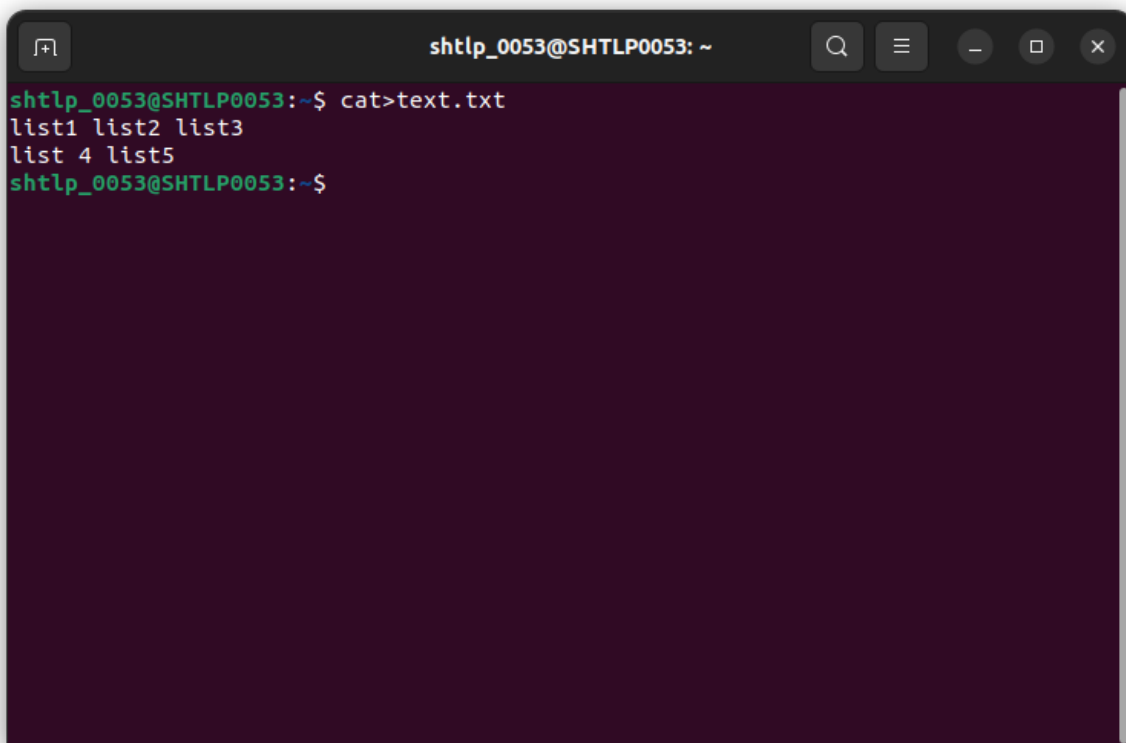


```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ cat -E list1.txt  
list 1 line 1$  
list 1 line 2$  
$  
$  
$  
$  
$  
$  
list 1 line 3$  
shtlp_0053@SHTLP0053:~$
```

21) man cat:-

man: dictionary of linux, it gives all the ways you can use cat command.

22)-cat > text.txt- this command helps to create new file and exit using ctrl d.



```
shtlp_0053@SHTLP0053: ~  
shtlp_0053@SHTLP0053:~$ cat>text.txt  
list1 list2 list3  
list 4 list5  
shtlp_0053@SHTLP0053:~$
```

