

Experiment 1

1. Display following messages on your terminal (including quotes and newline).

“God bless us!

We are starting with basic linux command”

```
jithu@jithu-VirtualBox:~$ echo -e "\"God bless us! \n We are starting with basic linux command\""
"God bless us!
We are starting with basic linux command"
```

2. Read your name from the keyboard and display it.

```
jithu@jithu-VirtualBox:~$ read name
Jithu
jithu@jithu-VirtualBox:~$ echo $name
Jithu
```

3. Create the directory structure dir1/dir4 and dir1/dir2/dir3 with a single command and then change directory to dir3

```
jithu@jithu-VirtualBox:~$ mkdir -p dir1/dir4 dir1/dir2/dir3 && cd dir1/dir2/dir3/
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ pwd
/home/jithu/dir1/dir2/dir3
```

4. Create some files using nano and touch

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ nano file1
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ touch file2
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls
file1 file2
```

5. Display the current directory

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ pwd
/home/jithu/dir1/dir2/dir3
```

6. Listing files and folders

a) List the contents of dir1 and all its descendants

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls -R /home/jithu/dir1/
/home/jithu/dir1/:
dir2  dir4

/home/jithu/dir1/dir2:
dir3

/home/jithu/dir1/dir2/dir3:
file1  file2  lsoutput

/home/jithu/dir1/dir4:
```

- b) List the contents of dir3 in
- Alphabetic order

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls
file1  file2  lsoutput
```

- Sorted on time of modification, newest first

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls -lt
total 8
-rw-rw-r-- 1 jithu jithu 204 Feb 25 14:13 file1
-rw-rw-r-- 1 jithu jithu  21 Feb 25 14:12 lsoutput
-rw-rw-r-- 1 jithu jithu   0 Feb 25 14:00 file2
```

- Sorted on size

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls -ls
total 8
-rw-rw-r-- 1 jithu jithu 204 Feb 25 14:13 file1
-rw-rw-r-- 1 jithu jithu  21 Feb 25 14:12 lsoutput
-rw-rw-r-- 1 jithu jithu   0 Feb 25 14:00 file2
```

- Reverse order

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls -r
lsoutput  file2  file1
```

- Long listing of files sorted on size with smallest first

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls -lSr
total 8
-rw-rw-r-- 1 jithu jithu   0 Feb 25 14:00 file2
-rw-rw-r-- 1 jithu jithu  21 Feb 25 14:12 lsoutput
-rw-rw-r-- 1 jithu jithu 204 Feb 25 14:13 file1
```

- Displayed in human readable form

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls -lh
total 8.0K
-rw-rw-r-- 1 jithu jithu 204 Feb 25 14:13 file1
-rw-rw-r-- 1 jithu jithu   0 Feb 25 14:00 file2
-rw-rw-r-- 1 jithu jithu  21 Feb 25 14:12 lsoutput
```

7. Execute ls and store the output to a file lsoutput

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ ls > lsoutput
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ cat lsoutput
file1
file2
lsoutput
```

8. Display the file

(i) starting with the first 10 lines and

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ head -10 file1
.
f
dr
hg
h
t
f
fg
h
fgf
```

(ii) starting with the 10th line with provision for

a) Scrolling Up

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ more +10 file1
fgf
h
s
s
h
h
tr
rthts
x
g
h
sh
ghs
fghfgj
dhgrt
dtyty
etrtdg
dfgrgr
dfgdfh
xvrb
nny
t
t
--More-- (53%)
```

b) Scrolling Up and Down

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ less +10 file1
[1]+  Stopped                  less +10 file1
```

```
fgf
h
s
s
h
h
tr
rthts
x
g
h
sh
ghs
fghfgj
dhgrt
dtyty
etrtdg
dfgrgr
dfgdfh
xvrb
nny
t
t
file1
```

9. Get the manual page of 'ls' command. Search for the word "alphabetic". Find the next occurrence and then find the previous occurrence.

```
jithu@jithu-VirtualBox:~/dir1/dir2/dir3$ man ls | less +/alphabetic
[7]+  Stopped                  man ls | less +/alphabetic
Sort entries alphabetically if none of -cftuvSUX nor --sort is specified.

Mandatory arguments to long options are mandatory for short options too.

-a, --all
    do not ignore entries starting with .

-A, --almost-all
    do not list implied . and ..

--author
    with -l, print the author of each file

-b, --escape
    print C-style escapes for nongraphic characters

--block-size=SIZE
    with -l, scale sizes by SIZE when printing them; e.g.,
    '--block-size=M'; see SIZE format below

-B, --ignore-backups
```