NETWORKING & SYSTEM ADMINISTRATION LAB

Name: MELBIN

Roll No: 19

Batch: MCA B

Date: 22/03/2022

Experiment No.: 3

Aim

Familiarization of the Linux commands.

Procedure

1. pwd

This command is used to display the location of the current working directory.

Syntax :- $ pwd

Output :-

```
melbin@melbin-VirtualBox:~$ pwd
/home/melbin
melbin@melbin-VirtualBox:~$
```

2. mkdir

This command is used to create a new directory under any directory.

Syntax :- $ mkdir <directory name>

Output : -

```
melbin@melbin-VirtualBox:~$ mkdir melbin
```

3. ls

This command is used to display a list of content of directory.

Syntax :- $ ls

Output :-

```
melbin@melbin-VirtualBox:~$ ls
Desktop    Downloads  Music  Pictures  Templates
Documents  melbin     new    Public    Videos
```

5. ls –l

This command is used to shows file or directory, size, modified date and time, file or folder name and owner of the file, and its permission.

Syntax :- $ ls –l

Output:-

```
melbin@melbin-VirtualBox:~$ ls -l
total 40
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Desktop
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Documents
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Downloads
drwxrwxr-x 2 melbin melbin 4096 Apr  3 10:39 melbin
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Music
drwxrwxr-x 2 melbin melbin 4096 Mar 27 21:53 new
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Pictures
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Public
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Templates
drwxr-xr-x 2 melbin melbin 4096 Mar 27 21:32 Videos
melbin@melbin-VirtualBox:~$
```

6. ls –a
This command is used to list all files including hidden files.
Syntax :- $ls –a
Output :-

```
melbin@melbin-VirtualBox:~$ ls -a
.              .bashrc  Desktop    .gnupg  Music      .profile  Templates
..             .cache   Documents  .local  new        Public    Videos
.bash_logout   .config  Downloads  melbin  Pictures   .ssh
melbin@melbin-VirtualBox:~$
```

7. ls –al
This command is used to
Syntax :- $ ls -al
Output :-

```
melbin@melbin-VirtualBox:~$ ls -al
total 80
drwxr-xr-x 17 melbin melbin 4096 Apr  3 10:39 .
drwxr-xr-x  3 root   root   4096 Mar 27 21:17 ..
-rw-r--r--  1 melbin melbin  220 Mar 27 21:17 .bash_logout
-rw-r--r--  1 melbin melbin 3771 Mar 27 21:17 .bashrc
drwx------ 11 melbin melbin 4096 Mar 27 21:34 .cache
drwx------ 10 melbin melbin 4096 Mar 27 21:35 .config
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Desktop
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Documents
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Downloads
drwx------  3 melbin melbin 4096 Mar 27 21:35 .gnupg
drwxr-xr-x  3 melbin melbin 4096 Mar 27 21:32 .local
drwxrwxr-x  2 melbin melbin 4096 Apr  3 10:39 melbin
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Music
drwxrwxr-x  2 melbin melbin 4096 Mar 27 21:53 new
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Pictures
-rw-r--r--  1 melbin melbin  807 Mar 27 21:17 .profile
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Public
drwx------  2 melbin melbin 4096 Mar 27 21:35 .ssh
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Templates
drwxr-xr-x  2 melbin melbin 4096 Mar 27 21:32 Videos
```

8. ls –t
This command is used to display files in the last modified order.
Syntax :- $ ls –t
Output :-

```
melbin@melbin-VirtualBox:~$ ls -t
melbin   Documents  Music      Public     Videos
new      Downloads  Pictures   Templates  Desktop
melbin@melbin-VirtualBox:~$
```

9. cd
This command is used to change the current directory.
Syntax :- $ cd <directory name>
Output :-

```
melbin@melbin-VirtualBox:~$ cd melbin
melbin@melbin-VirtualBox:~/melbin$
```

10. cd ..

This command is used to move to the parent directory of current directory, or the directory one level up from the current directory.

Syntax :- $ cd ..

Output :-

```
melbin@melbin-VirtualBox:~/melbin$ cd ..
melbin@melbin-VirtualBox:~$
```

11. cd –

This command is used to switch back to previous directory we were working earlier.

Syntax :- $ cd –

Output :-

```
melbin@melbin-VirtualBox:~$ cd -
/home/melbin/melbin
melbin@melbin-VirtualBox:~/melbin$
```

12. cat > filename

This command is used to create a file and add contents to that file.

Syntax :- $ cat > filename.txt

Output :-

```
melbin@melbin-VirtualBox:~/melbin$ cat > kali.txt
hello kali...
^C
melbin@melbin-VirtualBox:~/melbin$ cat kali.txt
hello kali...
```

13. cat>>filename

This command is used to add contents to an existing file.

Syntax :- $ cat >> filename.txt

Output :-

```
melbin@melbin-VirtualBox:~/melbin$ cat >> kali.txt
how is your works
^C
melbin@melbin-VirtualBox:~/melbin$ cat kali.txt
hello kali...
how is your works
melbin@melbin-VirtualBox:~/melbin$
```

14. cat filename1 > filename2

This command is used to copy the content from one file to another file.

Syntax :- $ cat filename1 > filename2

Output :-

```
melbin@melbin-VirtualBox:~/melbin$ cat kali.txt > copy.txt
melbin@melbin-VirtualBox:~/melbin$ cat copy.txt
hello kali...
how is your works
melbin@melbin-VirtualBox:~/melbin$
```

NETWORKING & SYSTEM ADMINISTRATION LAB

Name: MELBIN M P

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Experiment No.: 4

Aim

Familiarization of the Linux commands.

Procedure

1. cat -n

This command return contents with line numbers.

Syntax:- $ cat -n filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat -n kali.txt
     1  hello kali...
     2  how is your works
melbin@melbin-VirtualBox:~/melbin$
```

2. cat -b

This Returns contents with line numbers but excludes the empty lines

Syntax:- $ cat -b filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat -b kali.txt
     1  hello kali...
     2  how is your works
melbin@melbin-VirtualBox:~/melbin$
```

3. touch

This command is used to create a empty file

Syntax:- $ touch filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ touch b1.txt
melbin@melbin-VirtualBox:~/melbin$
```

4. echo command >> filename

This command helps to add lines on the empty file

Syntax:- $ echo command>> filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ echo hello boy >> b1.txt
melbin@melbin-VirtualBox:~/melbin$ cat b1.txt
hello boy
melbin@melbin-VirtualBox:~/melbin$
```

5. head

This command returns first 10 lines in the file

Syntax:- $ head filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat >> b1.txt
hello
where
go
just
kill
happy
like
moooo
run
^C
melbin@melbin-VirtualBox:~/melbin$ head b1.txt
hello boy
hello
where
go
just
kill
happy
like
moooo
run
melbin@melbin-VirtualBox:~/melbin$
```

6. head – (No. of lines)

This will return beginning lines specified in the command

Syntax:- $ head -4 filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ head -4 b1.txt
hello boy
hello
where
go
melbin@melbin-VirtualBox:~/melbin$
```

7. tail

This returns the last 10 lines in the file

Syntax $ tail filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ tail b1.txt
hello boy
hello
where
go
just
kill
happy
like
moooo
run
melbin@melbin-VirtualBox:~/melbin$
```

8. tail – (No. of lines)

This will return last no of lines specified in the command

Syntax:- $ tail -4 filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ tail -4 b1.txt
happy
like
moooo
run
melbin@melbin-VirtualBox:~/melbin$
```

9. cut -f2

This commands in Linux allows you to select the second part of the content that split by ' - ' delimiter.

Syntax:- $ cut -d- f2 filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat > test.txt
computer-95
network-90
english-77
chemistry-69
^C
melbin@melbin-VirtualBox:~/melbin$ cut -d- -f2 test.txt
95
90
77
69
melbin@melbin-VirtualBox:~/melbin$
```

10. cut -f1

This commands in Linux allows you to select the First part of the content that split by ' - ' delimiter.

Syntax:- $ cut -d- f1 filename

Output:

```
melbin@melbin-VirtualBox:~/melbin$ cut -d- -f1 test.txt
computer
network
english
chemistry
melbin@melbin-VirtualBox:~/melbin$
```

NETWORKING & SYSTEM ADMINISTRATION LAB

Name: MELBIN MP

Roll No: 19

Batch: MCA B

Date: 31/03/2022

Experiment No.: 5

Aim

Familiarization of the Linux commands.

Procedure

1. cut -d ‘ ‘ f2

This commands in Linux allows you to select the second part of the content that split by ‘ ‘ delimiter.

Syntax:- $ cut -d ‘ ‘ f2 filename.txt

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat demo.txt
english 48
hindi 40
malayalam 50
melbin@melbin-VirtualBox:~/melbin$ cut -d ' ' -f2 demo.txt
48
40
50
melbin@melbin-VirtualBox:~/melbin$
```

2. cut -b 2

This command in Linux allows to select only these bytes.

Syntax:- $ cut -b 2 filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat demo.txt
english 48
hindi 40
malayalam 50
melbin@melbin-VirtualBox:~/melbin$ cut -b 2 demo.txt
n
i
a
melbin@melbin-VirtualBox:~/melbin$
```

3. cut –complement

This command helps to exclude given bytes.

Syntax:- $ cut –complement -c 1 filename

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cut --complement -c 1 demo.txt
nglish 48
indi 40
alayalam 50
melbin@melbin-VirtualBox:~/melbin$
```

4. paste

This command helps to paste contents to other file

Syntax:- $ paste filename > filename2

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ paste demo.txt > test1.txt
melbin@melbin-VirtualBox:~/melbin$ cat test1.txt
english 48
hindi 40
malayalam 50
melbin@melbin-VirtualBox:~/melbin$
```

5. paste a b > c

This command helps to paste from multiple files.

Syntax:- $ paste file1 file2 > file3

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ cat > demo1.txt
do
it
skil
evry
^C
melbin@melbin-VirtualBox:~/melbin$ cat > demo2.txt
where
can
we
succes
^C
melbin@melbin-VirtualBox:~/melbin$ paste demo1.txt demo2 > demo3.txt
paste: demo2: No such file or directory
melbin@melbin-VirtualBox:~/melbin$ paste demo1.txt demo2.txt > demo3.txt
melbin@melbin-VirtualBox:~/melbin$ cat demo3.txt
do      where
it      can
skil    we
evry    succes
melbin@melbin-VirtualBox:~/melbin$
```

6. paste -d ‘ ‘

This command helps to paste contents with ‘ ‘ delimiter.

Syntax:- $ paste -d ‘ ‘ file1 file 2 > file3

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ paste -d ' ' demo1.txt demo2.txt > demo3.txt
melbin@melbin-VirtualBox:~/melbin$ cat demo3.txt
do where
it  can
skil we
evry succes
melbin@melbin-VirtualBox:~/melbin$
```

7. paste -d '-'

This command helps to contents from multiple files with '-' delimiter.

Syntax:- $ paste -d '-' file1 file2 > file3

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ paste -d '-' demo1.txt demo2.txt > demo3.txt
melbin@melbin-VirtualBox:~/melbin$ cat demo3.txt
do-where
it -can
skil-we
evry-succes
melbin@melbin-VirtualBox:~/melbin$
```

8. paste -s

This command helps to paste on file at a time instead of in parallel.

Syntax:- $ paste -s file1 file2 > file3.

Output:-

```
melbin@melbin-VirtualBox:~/melbin$ paste -s  demo1.txt demo2.txt > demo3.txt
melbin@melbin-VirtualBox:~/melbin$ cat demo3.txt
do      it      skil    evry
where   can     we      succes
melbin@melbin-VirtualBox:~/melbin$
```

9. more

More command is used to view the text files in the command prompt, displaying one screen at a time in case the file is large.

Syntax:- $ more filename.

Output:-

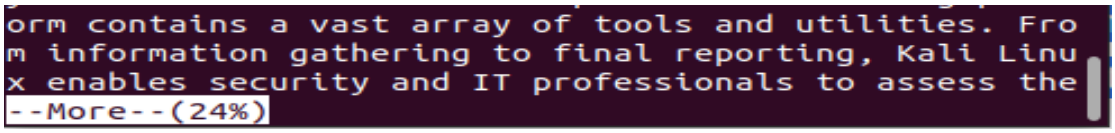
```
melbin@melbin-VirtualBox:~/melbin$ more happy1.txt
A computer is a machine that uses electronics to input,
 process, store, and output data. Data is information s
uch as numbers, words, and lists. Input of data means t
o read information from a keyboard, a storage device li
ke a hard drive, or a sensor. The computer processes or
 changes the data by following the instructions in soft
ware programs. A computer program is a list of instruct
--More--(27%)
```

```
orm contains a vast array of tools and utilities. Fro
m information gathering to final reporting, Kali Linu
--More--(22%)
```

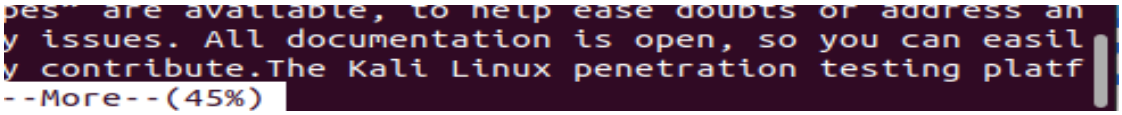
SPACE Key is act as a NEXT button.

```
y issues. All documentation is open, so you can easil
y contribute.The Kali Linux penetration testing platf
orm contains a vast array of tools and utilities. Fro
--More--(46%)
```

B Key act as a PREVIOUS button.



ENTER key is used to view line by line.

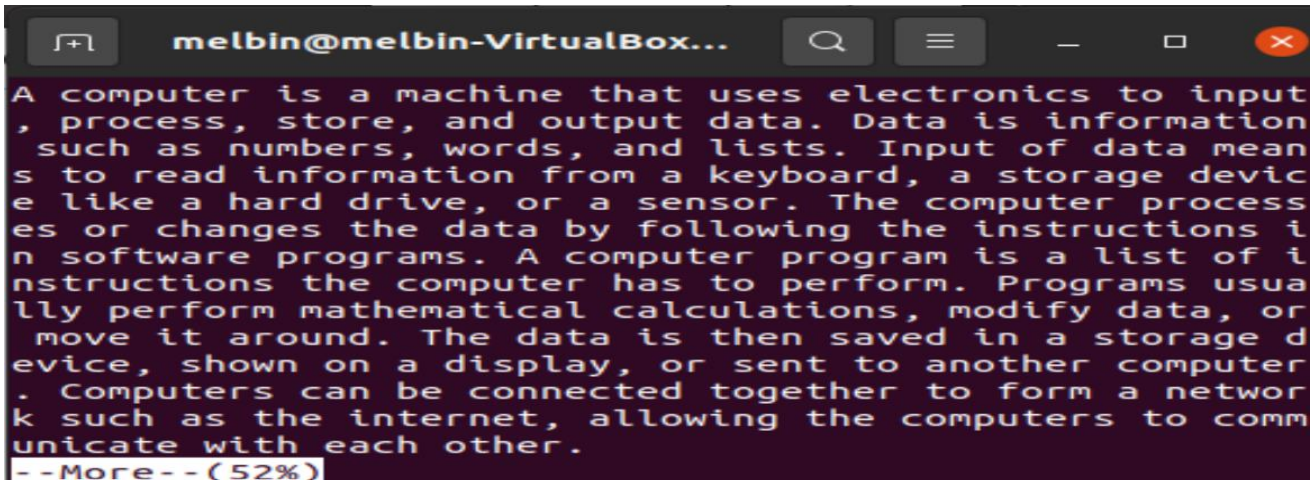


10. more -s

This command is used to squeeze multiple blank lines into one.

Syntax:- $ more -s filename.

Output:-



11. more –(no.)

This command helps to view content based on specified number of lines.

Syntax:- $ more -4 filename.

Output:-