

NETWORKING & SYSTEM ADMINISTRATION LAB

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 :-

```
student@S37:~$ pwd
/home/student
```

2. mkdir

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

Syntax :- \$ mkdir <directory name>

Output :-

```
/home/student
student@S37:~$ mkdir aamiti
```

3. ls

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

Syntax :- \$ ls

Output :-

```
/home/student
student@S37:~$ ls
'13-2 sd lab.txt'  dictcheck.py  for3.sh  liststring.py  printAsterisks.py  server1.java
'17-2 sdlab'      dictcount.py  for4.sh  listsum.py     Public             Server.class
'3-2 sdlab.txt'   dictionaryconc.py  for5.sh  'moderateDays.py'  PycharmProjects  Server.java
aamiti            Documents     for.sh   mozilla.pdf      pyramid1.py       servers.class
```

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:-

```
student@S37:~$ ls -l
total 940
-rw-rw-r-- 1 student student 2809 Feb 13 2020 '13-2 sd lab.txt'
-rw-r--r-- 1 student student 86634 Feb 17 2020 '17-2 sdlab'
-rw-rw-r-- 1 student student 4460 Feb 3 2020 '3-2 sdlab.txt'
drwxr-xr-x 2 student student 4096 Mar 24 15:17 aamiti
```

Name: Shefany Shanavas

Roll No: 37

Batch: RMCA B

Date: 24-3-2022

6. ls -a

This command is used to list all files including hidden files.

Syntax :- \$ls -a

Output :-

```
student@537:~$ ls -a
.          daniya          for4.sh          listmul.py      pol          server1.class
..         ddd.txt         for5.sh          liststring.py   pom          server1.java
'13-2 sd lab.txt' Desktop       for.sh           listsum.py      prime.py     Server.class
'17-2 sdlab' dictcheck.py  f.txt           'local         printAsterisks.py  Server.java
'3-2 sdlab.txt' dictcount.py  F.txt~          'moderateDays.py' .profile     servers.class
aamiti     dictionaryconc.py 'getContinue.py' .mozilla      Public       servers.java
aamiti     Documents    .gimp-2.8       mozilla.pdf     .PyCharmCE2019.1 serverss.class
```

7. ls -r

It is used to print the list in reverse order.

Syntax :- \$ ls -r

Output:-

```
student@537:~$ ls -r
Zero.py      scripts      pol          listlarge.py   fibona.py     daniya
x.txt        r.txt        poi          listfrequency.py  fibonaccl.sh  daily.py
Videos       reverse.sh   pob          listdiff.py    fact.sh        D3
unique.py    re.txt       pn.sh        listdiff.jy     factor.py      D2
udps.java   qww.txt     pn2.sh       listconcat.py   f2.txt        D1
udps.class  qw.txt      Pictures     listcommon.py   f1.txt        Credits.py
udp.java    qwq.txt     o.txt        leapyear.sh     examples.desktop commstring.py
```

8. ls -t

This command is used to display files in the last modified order.

Syntax :- \$ ls -t

Output :-

```
daily.py      for3.sh      listmtn.py    pol          'sdlab 30-1'
student@537:~$ ls -t
aamiti        alphabet.sh  qww.txt      snap          daily.py      dictcheck.py
aamiti        arg.sh       qwq.txt      eg3.py        'moderateDays.py' '<invalid path>'
Desktop       leapyear.sh  newfile.txt  eg2.py        'getContinue.py' '<invalid path>.layout'
java_error_in_pycharm_2876.log '17-2 sdlab' qqg.txt      eg.py         printAsterisks.py duplistoflist.py
PycharmProjects tf.sh        qqf.txt      eg1.py        Credits.py     listcommon.py
Downloads     '13-2 sd lab.txt' qqe.txt     clientsss.class ordered3.py    listconcat.py
```

9. cd:-

This command is used to change the current directory.

Syntax :- \$ cd <directory name>

Output :-

```
student@538:~$ cd st
```

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 :-

```
student@537:~$ cd ..
```

11. cd -

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

Syntax :- \$ cd -

Output :-

```
student@S37:/home$ cd -  
home/student  
student@S37:~$ cat > aamiii.txt
```

12. cat > filename

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

Syntax :- \$ cat > filename.txt

Output :-

```
/home/student  
student@S37:~$ cat > aamiii.txt  
network and administration  
^Z  
[1]+  Stopped                  cat > aamiii.txt  
student@S37:~$ cat aamiii.txt
```

13. cat >> filename

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

Syntax :- \$ cat >> filename.txt

Output :-

```
student@S37:~$ cat >> aamiii.txt  
amal jyothi  
^Z  
[2]+  Stopped                  cat >> aamiii.txt  
student@S37:~$ cat aamiii.txt  
network and administration  
amal jyothi  
student@S37:~$
```

NETWORKING & SYSTEM ADMINISTRATION LAB**Experiment No.: 4****Aim**

Familiarization of the linux commands.

Procedure

Name: Shefany Shanavas

Roll No: 37

Batch: S2MCA -B

Date: 31/03/2022

1. -n

This command is used to displays line numbers in contents.

Syntax :- \$ cat -n filename

Output :-

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ cat > text.txt
hello world
welcome to coding
c++
java

python
android
seguel
ruby

[1]+  Stopped                  cat > text.txt
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ cat -n text.txt
 1 hello world
 2 welcome to coding
 3 c++
 4 java
 5
 6 python
 7 android
 8 seguel
 9 ruby
```

2. -b

This command is used to removes the empty lines.

Syntax :- \$ cat -b filename

Output :-

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ cat -b text.txt
 1 hello world
 2 welcome to coding
 3 c++
 4 java

 5 python
 6 android
 7 sequel
 8 ruby
```

3.Touch

This command is used to create an empty file.

Syntax :- \$ touch filename

Output :-

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ touch text.txt
```

4. \$echo //contents// >>text.txt:

it is used to add contents to an empty file.

Output:-

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ echo hello world >> text.txt
```

5. head

This head command is used to display the first ten line of contents and head -4 which displays the first four lines of contents.

Syntax :- \$ head filename

\$ head -4 filename

Output:-

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ head text.txt
hello world
welcome to coding
c++
java

python
android
sequel
ruby
hello world

user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ head -4 text.txt
hello world
welcome to coding
c++
java
```

6. Tail

This tail command is used to displays the last ten lines of contents and tail -4 which displays the last 4 lines of contents.

Syntax :- \$ tail filename.txt

\$ tail -4 filename.txt

Output:-

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ tail text.txt
hello world
welcome to coding
c++
java

python
android
sequel
ruby
hello world

user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ tail -4 text.txt
android
sequel
ruby
hello world
```

7. Cut f2,Cut f1

This cut f2 command is used to display the second column contents and f1 which displays the first column contents.

Syntax :- \$cut -d- -f2 filename.txt

\$cut -d- -f1 filename.txt

Output :-

```
$ cat > b1.txt
English 78
Maths 80
Science 79
Hindi 76
[3]+ Stopped          cat > b1.txt
```

```
user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ cut -d' ' -f1 b1.txt
English
Maths
Science

user@LAPTOP-0Q30FFON MINGW64 ~ (master)
$ cut -d' ' -f2 b1.txt
78
80
79
```

NETWORKING & SYSTEM ADMINISTRATION LAB

Experiment No.: 5

Aim

Familiarization of the Linux commands.

Procedure

1. cut ' '

This command is used cut the spaces.

Syntax :- `$cut -d ' ' -f2 filename.txt`

Output:-

```
student@T70:~$ cat > mark1
English 67
maths 69
science 76
^Z
[1]+  Stopped                  cat > mark1
```

```
student@T70:~$ cut -d ' ' -f2 mark1
67
69
76
```

2. cut -b 2

This command is used to displays the second letters.

Syntax :- `$ cut -b 2 filename.txt`

Output :-

```
student@T70:~$ cut -b 2 mark1
n
a
c
```

3. cut -complement -c 1

This command is used to displays the contents except the first letter .

Syntax :- `$ cut -complement -c 1 filename.txt`

Output :-

Name: Shefany Shanavas

Roll No:37

Batch: MCA-B

Date: 21-03-2022


```
student@T70:~$ cut --complement -c 1 mark1
nglish 67
aths 69
cience 76
```

4. Paste

This command is used to paste one file contents to another.

Syntax :- `$ paste filename1.txt filename2.txt`

Output :-

```
student@T70:~$ cat > marvel1
captain amerca
iron man
black widow
hulk
spider man
goot
^Z
[2]+  Stopped                  cat > marvel1
```

```
student@T70:~$ cat > marvel2
reubla
gamora
panda
dr strange
^Z
[3]+  Stopped                  cat > marvel2
```

```
student@T70:~$ paste marvel1 marvel2
captain amerca reubla
iron man       gamora
black widow   panda
hulk          dr strange
spider man
goot
```

```
student@T70:~$ cat marvel3
student@T70:~$ paste marvel1 marvel2 >marvel3
student@T70:~$ paste marvel1 marvel2 > marvel3
student@T70:~$ cat marvel3
captain amerca reubla
iron man       gamora
black widow   panda
hulk          dr strange
spider man
goot
```

5. Paste -d '-' file1 file2, Paste -d '%' file1 file2

This command is used to displays '-' and '%' in between the contents.

Syntax :- `$ paste -d '-' file1.txt file2.txt`

`$ paste -d '%' file1.txt file2.txt`

Output :-

```
student@T70:~$ paste -d '-' marvel1 marvel2
captain america-reubla
iron man-gamora
black widow-panda
hulk-dr strange
spider man -
goot-
student@T70:~$ paste -d '%' marvel1 marvel2 marvel1
captain america%reubla|captain america
iron man%gamora|iron man
black widow%panda|black widow
hulk%dr strange|hulk
spider man %|spider man
goot%|goot
```

6. Paste -s file1 file2

This command is used to display the contents as a single line.

Syntax :- \$ paste -s file1.txt file2.txt Output :-

```
student@T70:~$ paste -s marvel1 marvel 2
captain america iron man black widow hulk spider man goot
```

7. More, more -3 filename, +3 filename

This more command displays the output one screenful at a time, more -3 command which displays the first 3 lines of contents and +3 displays the lines excepts the first three lines.

Syntax :-

- \$ more filename.txt
- \$ more -3 filename.txt
- \$ more +3 filename.txt
- \$ more filename.txt
- \$ more -s filename.txt

Output :-

```
student@T70:~$ cat > demo
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
^Z
[4]+ Stopped cat > demo
student@T70:~$ more demo
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
```

```
student@T70:~$ more -3 demo
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
--More--(86%)
[S]+ Stopped more -3 demo
student@T70:~$ more +3 demo
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
student@T70:~$ more -s demo
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
ntry by area, the second-most populous country, and the most populous democracy in the world. Bounded by the Indian Ocean on the
south, the Arabian Sea on the southwest, and the Bay of Bengal on the southeast, it shares land borders with Pakistan to the we
st;[f] China, Nepal, and Bhutan to the north; and Bangladesh and Myanmar to the east. In the Indian Ocean, India is in the vicini
ty of Sri Lanka and the Maldives; its Andaman and Nicobar Islands share a maritime border with Thailand, Myanmar and Indonesia.
India, officially the Republic of India (Hindi: Bhārat Gaṇarājya),[24] is a country in South Asia. It is the seventh-largest cou
```

1. In more command:

<space>-Press space bar to advance to next page.

<enter>- Press enter to advance to the next line.
