AIM: Familiarization of Linux Commands

PROCEDURE

1. pwd

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

Syntax:

```
student@S28:~$ pwd
```

Output:

```
student@S28:~$ pwd
/home/student
```

2. mkdir

The mkdir command is used to create a new directory under any directory.

Syntax:

```
student@S28:~$ mkdir ritty
```

Output:

```
student@S28:~$ mkdir ritty
```

3. ls

The ls command is used to display a list of content of a directory.

Syntax:

```
student@S28:~$ ls
```

Output:

```
student@S28:~$ ls
Desktop  Documents  Downloads  examples.desktop  Music  Pictures  Public  ritty  snap  Templates  Videos
```

- ls –l

Syntax:

```
student@S28:~$ ls -l
```

Output:

```
student@S28:~$ ls -l
total 52
drwxr-xr-x 2 student student 4096 Feb 25 12:55 Desktop
drwxr-xr-x 2 student student 4096 May 30  2018 Documents
drwxr-xr-x 2 student student 4096 May 30  2018 Downloads
-rw-r--r-- 1 student student 8980 May 30  2018 examples.desktop
drwxr-xr-x 2 student student 4096 May 30  2018 Music
drwxr-xr-x 2 student student 4096 May 30  2018 Pictures
drwxr-xr-x 2 student student 4096 May 30  2018 Public
drwxr-xr-x 2 student student 4096 Mar 24 14:29 ritty
drwx------ 3 student student 4096 Feb 25 12:59 snap
drwxr-xr-x 2 student student 4096 May 30  2018 Templates
drwxr-xr-x 2 student student 4096 May 30  2018 Videos
```

- ls –a

Syntax:

```
student@S16:~$ ls -a
```

Output:

```
student@S28:~$ ls -a
.              .bash_logout  .config    Downloads         .ICEauthority  Music              .profile  snap        Videos
..             .bashrc       Desktop    examples.desktop  .local         .oracle_jre_usage  Public    .ssh
.bash_history  .cache        Documents  .gnupg            .mozilla       Pictures           ritty     Templates
```

- ls –r

Syntax:

```
student@S16:~$ ls -r
```

Output:

```
student@S28:~$ ls -r
Videos  Templates  snap  ritty  Public  Pictures  Music  examples.desktop  Downloads  Documents  Desktop
```

- ls –al

Syntax:

```
student@S16:~$ ls -al
```

Output:

```
student@S16:~$ ls -al
total 2400
drwxr-xr-x 55 student student    4096 Mar 24 14:29  .
drwxr-xr-x  6 root    root       4096 Jan 13 14:14  ..
-rw-rw-r--  1 student student     115 Mar  8  2019  12.py
-rw-rw-r--  1 student student     183 Mar  8  2019  15.py
drwxr-xr-x  3 student student    4096 Feb  7  2019  ajce
drwxrwxr-x  2 student student    4096 Jan 17  2020 'Anooja s3'
drwxr-xr-x  2 student student    4096 Mar 28  2019  aravind
drwxr-xr-x  3 student student    4096 Feb  3  2020  ashi
drwxr-xr-x  2 student student    4096 Mar  5  2020  ashishel
-rw-------  1 student student    8762 Dec  6 11:43  .bash_history
-rw-r--r--  1 student student     220 Nov 22  2018  .bash_logout
-rw-r--r--  1 student student    3771 Nov 22  2018  .bashrc
drwx------ 28 student student    4096 Jan  7 12:47  .cache
drwxr-xr-x  2 student student    4096 Feb 13  2019 'CD LAB'
drwx------ 24 student student    4096 Feb 21 09:20  .config
drwxr-xr-x  2 student student    4096 Feb 10  2020  D1
drwxr-xr-x  2 student student    4096 Feb 10  2020  D2
drwxr-xr-x  2 student student    4096 Feb 10  2020  D3
drwxr-xr-x  7 student student    4096 Nov 26 10:06  Desktop
drwxr-xr-x  7 student student    4096 Feb 25 11:27  Documents
drwxr-xr-x  6 student student   12288 Mar  2 14:15  Downloads
drwxr-xr-x  4 student student    4096 Feb 10  2020  E1
```

```
File  Edit  View  Search  Terminal  Help
drwxr-xr-x  6 student student   12288 Mar  2 14:15  Downloads
drwxr-xr-x  4 student student    4096 Feb 10  2020  E1
drwxr-xr-x  2 student student    4096 Feb 10  2020  E2
drwxr-xr-x  2 student student    4096 Feb 10  2020  E3
drwxr-xr-x  2 student student    4096 Apr  4  2019  echo
drwxrwxr-x  4 student student    4096 Oct 19  2019  eventcal
-rw-r--r--  1 student student    8980 Nov 22  2018  examples.desktop
drwxr-xr-x  2 student student    4096 Feb 10  2020  F1
-rw-rw-r--  1 student student     129 Mar  1  2019  fact.py
-rwxr--r--  1 student student     113 Sep 30 12:27  file1.txt
-rw-r--r--  1 student student      22 Apr  4  2019  file.txt
-rw-rw-r--  1 student student     162 Mar  8  2019  functio.py
drwxr-xr-x 24 student student    4096 Apr  6  2019  .gimp-2.8
-rw-r--r--  1 student student      26 Apr 30  2019  .gitconfig
drwx------  3 student student    4096 Nov 23  2018  .gnupg
-rw-------  1 student student   33966 Mar 24  2022  .ICEauthority
drwxrwxr-x  2 student student    4096 Feb  1  2019  .idlerc
drwxr-xr-x  2 student student    4096 Apr  4  2019  inmca
drwxr-xr-x  2 student student    4096 Apr  4  2019  inmcas2
-rw-rw-r--  1 student student    1285 Feb 13  2019 '<invalid path>'
-rw-rw-r--  1 student student     360 Feb 13  2019 '<invalid path>.layout'
drwxrwxr-x  4 student student    4096 Feb  1  2019  .java
-rw-r--r--  1 student student 2048582 Apr  4  2019 'java.net.*'
drwx------  5 student student    4096 Dec  6 11:30  .local
drwxr-xr-x  2 student student    4096 Mar 24 14:29  malabika
-rw-rw-r--  1 student student     163 Mar  1  2019  maxi.py
drwx------  5 student student    4096 Nov 23  2018  .mozilla
drwxr-xr-x  2 student student    4096 Nov 22  2018  Music
-rw-------  1 student student   12288 Feb 24  2020  .numeric.sh.swo
-rw-------  1 student student   12288 Feb 24  2020  .numeric.sh.swp
drwxrwxr-x  2 student student    4096 Feb  1  2019  .oracle_jre_usage
-rwxr-xr-x  1 student student     129 Feb 24  2020  pass.sh
drwxr-xr-x  2 student student    4096 Nov 26 12:46  Pictures
drwx------  3 student student    4096 Nov 29 11:22  .pki
-rw-r--r--  1 student student     807 Nov 22  2018  .profile
-rw-rw-r--  1 student student     106 Mar  1  2019  ptrn.py
drwxr-xr-x  2 student student    4096 Nov 22  2018  Public
drwxrwxr-x  3 student student    4096 Dec 17 10:18  .PyCharmCE2018.3
```

```
File  Edit  View  Search  Terminal  Help
drwxr-xr-x  2 student student    4096 Nov 22  2018  Public
drwxrwxr-x  3 student student    4096 Dec 17 10:18  .PyCharmCE2018.3
drwxrwxr-x  3 student student    4096 Dec 17 10:18  .PyCharmCE2019.2
drwxrwxr-x 11 student student    4096 Nov 19 08:57  PycharmProjects
drwxr-xr-x  4 student student    4096 Apr 30  2019  rin-gitrepos
drwxr-xr-x  2 student student    4096 Apr  4  2019  s2
drwxr-xr-x  2 student student    4096 Apr  4  2019  s2inmca
-rw-r--r--  1 student student    1305 Apr  4  2019  S.class
-rw-r--r--  1 student student    1310 Apr  4  2019  S.java
drwx------  4 student student    4096 Aug 27  2019  snap
drwxr-xr-x  4 student student    4096 Dec 10 11:19  ss
drwx------  2 student student    4096 Nov 23  2018  .ssh
drwxr-xr-x  2 student student    4096 Nov 22  2018  Templates
drwx------  3 student student    4096 Apr  5  2019  .thumbnails
drwx------  4 student student    4096 Nov 23  2018  .thunderbird
drwxr-xr-x  2 student student    4096 Apr  4  2019  twoway
drwxr-xr-x  2 student student    4096 Apr  4  2019  twoway.java
drwxr-xr-x  2 student student    4096 Apr  4  2019  udp
drwxr-xr-x  2 student student    4096 Apr  4  2019  udp1
-rw-r--r--  1 student student    1034 Apr  4  2019  udpBaseClient_2.class
-rw-r--r--  1 student student    1019 Apr  4  2019  udpBaseClient_2.java
drwxrwxr-x  5 student student    4096 Feb 24  2020  untitled1
drwxr-xr-x  2 student student    4096 Nov 22  2018  Videos
drwxr-xr-x  5 student student    4096 Mar 13  2019  wordpress
-rw-rw-r--  1 student student     131 Jan 14 11:40  .xinputrc
student@S16:~$ ls -t
malabika       'Anooja s3'                 aravind
Downloads       eventcal                   wordpress
Documents       snap                       15.py
ss              rin-gitrepos               12.py
Pictures        s2inmca                    functio.py
Desktop         inmca                      maxi.py
PycharmProjects s2                         ptrn.py
file1.txt       inmcas2                    fact.py
ashishel        file.txt                  '<invalid path>'
pass.sh         udpBaseClient_2.class     '<invalid path>.layout'
untitled1       udpBaseClient_2.java      'CD LAB'
```

- ls –t

Syntax:

```
student@S16:~$ ls -t
```

Output:

```
student@S28:~$ ls -t
ritty  snap  Desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos  examples.desktop
```

4. cd

The cd command is used to change the current directory.

Syntax:

```
student@S28:~$ cd ritty
```

```
student@S28:~$ cd -
/home/student/ritty
```

```
student@S28:~/ritty$ cd ..
student@S28:~/ritty$ cat > a.txt
network and system administration lab
```

Output:

```
student@S28:~$ cd ritty
```

```
student@S28:~$ cd -
/home/student/ritty
```

```
student@S28:~/ritty$ cd ..
student@S28:~/ritty$ cat > a.txt
network and system administration lab
```

5. cat

The cat command is a multi-purpose utility in the Linux system. It can be used to create a file, display content of the file, copy the content of one file to another file, and more.

Syntax:

```
student@S28:~/ritty$ cat >> a.txt
Rittxcgfbhjh
student@S28:~/ritty$ cat a.txt
network and system administration lab
```

```
student@S28:~/ritty$ cat a.txt . b.txt
network and system administration lab
Rittxcgfbhjh
cat: .: Is a directory
student@S28:~/ritty$ cat a.txt > b.txt
student@S28:~/ritty$ cat a.txt
network and system administration lab
Rittxcgfbhjh
student@S28:~/ritty$ cat a > b.txt
cat: a: No such file or directory
student@S28:~/ritty$ cat b.txt
network and system administration lab
Rittxcgfbhjh
```

Output:

```
student@S28:~/ritty$ cat >> a.txt
Rittxcgfbhjh
student@S28:~/ritty$ cat a.txt
network and system administration lab
student@S28:~/ritty$ cat a.txt . b.txt
network and system administration lab
Rittxcgfbhjh
cat: .: Is a directory
student@S28:~/ritty$ cat a.txt > b.txt
student@S28:~/ritty$ cat a.txt
network and system administration lab
Rittxcgfbhjh
student@S28:~/ritty$ cat a > b.txt
cat: a: No such file or directory
student@S28:~/ritty$ cat b.txt
network and system administration lab
Rittxcgfbhjh
```