<u>Lab-3 Assignment – LINUX Commands</u>

\$logname: displayed the currently logged in user's name

output: isha

\$pwd: displayed the present working directory of the user

output: /home/isha/Desktop/lab_3

\$date: current date day and time

output: Sun Sep 2 11:00:57 PDT 2018

\$cal: displayed this month's calendar

output: September 2018 Su Mo Tu We Th Fr Sa

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

\$cal 2020: displayed 2020's calendar

output:

2020

January February March
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 4 1 1 2 3 4 5 6 7

5 6 7 8 9 10 11 2 3 4 5 6 7 8 8 9 10 11 12 13 14

12 13 14 15 16 17 18 9 10 11 12 13 14 15 15 16 17 18 19 20 21

19 20 21 22 23 24 25 16 17 18 19 20 21 22 22 23 24 25 26 27 28

26 27 28 29 30 31 23 24 25 26 27 28 29 29 30 31

April May June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 4 1 2 1 2 3 4 5 6

5 6 7 8 9 10 11 3 4 5 6 7 8 9 7 8 9 10 11 12 13

12 13 14 15 16 17 18 10 11 12 13 14 15 16 14 15 16 17 18 19 20

19 20 21 22 23 24 25 17 18 19 20 21 22 23 21 22 23 24 25 26 27

26 27 28 29 30 24 25 26 27 28 29 30 28 29 30

31

July August September
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
1 2 3 4 1 1 2 3 4 5
5 6 7 8 9 10 11 2 3 4 5 6 7 8 6 7 8 9 10 11 12
12 13 14 15 16 17 18 9 10 11 12 13 14 15 13 14 15 16 17 18 19
19 20 21 22 23 24 25 16 17 18 19 20 21 22 20 21 22 23 24 25 26
26 27 28 29 30 31 23 24 25 26 27 28 29 27 28 29 30
30 31

October November December
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa

1 2 3 1 2 3 4 5 6 7 1 2 3 4 5
4 5 6 7 8 9 10 8 9 10 11 12 13 14 6 7 8 9 10 11 12
11 12 13 14 15 16 17 15 16 17 18 19 20 21 13 14 15 16 17 18 19
18 19 20 21 22 23 24 22 23 24 25 26 27 28 20 21 22 23 24 25 26
25 26 27 28 29 30 31 29 30 27 28 29 30 31

\$cal 04 2020: displayed April's calendar for the year 2020

output: April 2020 Su Mo Tu We Th Fr Sa 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

\$who: displays the information of all users on this system

output: isha :0 2018-09-01 09:30 (:0)

\$whoami: displayed currently logged in user's name like logname

output: isha

\$finger: complete information of all users logged in

output:

Login Name Tty Idle Login Time Office Office Phone isha isha gupta *:0 Sep 1 09:30 (:0)

\$uptime: information about the time duration of server running and number of active users

output: 11:09:29 up 1:58, 1 user, load average: 0.08, 0.13, 0.17

\$which (command name): gives the path of the location of the command

input: which date

output: /bin / date

\$whereis (command name): gives the path of the location of the command and other files related to that command

input: whereis date

output: date: /bin/date /usr/share/man/man1/date.1.gz

\$tty: location of terminal file

output: /dev/pts/0

\$df: information about free space in disk

output:

Filesystem 1K-blocks Used Available Use% Mounted on
udev 1978280 0 1978280 0% /dev
tmpfs 401572 2092 399480 1% /run
/dev/sda1 102685624 8753592 88672872 9% /
tmpfs 2007844 99008 1908836 5% /dev/shm
tmpfs 5120 4 5116 1% /run/lock
tmpfs 2007844 0 2007844 0%/sys/fs/cgroup
/dev/loop0 89088 89088 0 100% /snap/core/4917
/dev/loop3 3840 3840 0 100% /snap/gnome-system-monitor/51
/dev/loop1 2432 2432 0 100% /snap/gnome-calculator/180
/dev/loop2 13312 13312 0 100% /snap/gnome-characters/103
/dev/loop4 144384 144384 0 100% /snap/gnome-3-26-1604/70
/dev/loop5 89088 89088 0 100% /snap/core/5145
/dev/loop6 14848 14848 0 100% /snap/gnome-logs/37
/dev/loop7 35584 35584 0 100% /snap/gtk-common-themes/319
/dev/loop8 3840 3840 0 100% /snap/gnome-system-monitor/54
/dev/loop9 14848 14848 0 100% /snap/gnome-logs/40
/dev/loop10 2432 2432 0 100% /snap/gnome-calculator/199
/dev/loop11 13312 13312 0 100% /snap/gnome-characters/117
tmpfs 401568 16 401552 1% /run/user/121
tmpfs 401568 60 401508 1% /run/user/1000
/dev/loop12 90112 90112 0 100% /snap/core/5328
/dev/loop13 30208 30208 0 100% /snap/sublime-text/29

\$du: some information regarding disk usage

output: 48

\$clear: clears terminal screen

creating files

cat: file creations and editing

\$cat > filename: creates a (txt) file of this name and opens it for writing in it

input: cat >test_cat Hello World!

\$cat < filename: displays content of the filename input

input : cat <test_cat</pre>

output: Hello World!

\$cat >> filename: appends (write after the last position of cursor) in the filename given

input: cat >>test_cat

appending more text

cat test_cat output: Hello World!

appending more text

\$touch file1 file2 ... filen: creates n empty blank files at the same time

input: touch touch1 touch2 touch3

\$1s: displays the files (not all) in the present directory

output:

1st_file 3rd_file 5th_file test cat touch2 2nd_file 4th_file Lab3-Assignment.odt touch1 touch3

variations in ls command:

\$ls-r: displays files in the reverse order in which they were created

output:

touch3 touch1 Lab3-Assignment.odt 4th_file 2nd_file touch2 test_cat 5th_file 3rd_file 1st_file

\$1s -i: displays files with some id

output:

4197060 1st_file 4195711 4th_file 4194857 test_cat 4194859 touch3 4196080 2nd_file 4195712 5th_file 4194856 touch1

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4197277 3rd_file 4197445 Lab3-Assignment.odt 4194858 touch2
      $1s -a: displays hidden files as well (in the pwd)
      output:
             2nd file 5th file
                                          test cat touch3
             3rd file Lab3-Assignment.odt
                                                 touch1
      1st file 4th file .~lock.Lab3-Assignment.odt# touch2
      $1s -1: long list of files with more information about them in the pwd
      output:
      total 44
      -rw-r--r-- 1 isha isha 457 Sep 2 10:49 1st_file
      -rw-r--r-- 1 isha isha 420 Sep 2 10:49 2nd_file
      -rw-r--r-- 1 isha isha 493 Sep 2 10:50 3rd_file
      -rw-r--r-- 1 isha isha 630 Sep 2 10:53 4th_file
      -rw-r--r-- 1 isha isha 593 Sep 2 10:54 5th_file
      -rw-rw-r-- 1 isha isha 18871 Sep 2 11:26 Lab3-Assignment.odt
      -rw-r--r-- 1 isha isha 33 Sep 2 11:25 test_cat
      -rw-r--r-- 1 isha isha 0 Sep 2 11:27 touch1
      -rw-r--r-- 1 isha isha 0 Sep 2 11:27 touch2
      -rw-r--r-- 1 isha isha 0 Sep 2 11:27 touch3
$mkdir: creates a new directory in the pwd
input: mkdir Linux
$mkdir dir1 dir2... dirn: will create n directories (of the input names) in the pwd
input: mkdir dir1 dir2 dir3
$mkdir -p a/b/c..: used to create nested directories with 'a' being the parent
input: mkdir -p world/asia/india/delhi
      1s -R
output:
./world:
./world/asia:
```

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./world/asia/india:

asia

india

delhi

./world/asia/india/delhi:

navigating commands:

\$cd: change directory

\$cd .. : goes back to the directory just above the pwd

input: cd ..

\$cd ../..: moves two directories above the pwd

input: cd ../..

\$cp: copies file(s) from one location to another

2nd_file: Raindrops the size of bullets thundered on the castle windows for days on end; the lake rose, the flower beds turned into muddy streams, and Hagrid's pumpkins swelled to the size of garden sheds. Oliver Wood's enthusiasm for regular training sessions, however, was not dampened, which was why Harry was to be found, late one stormy Saturday afternoon a few days before Halloween, returning to Gryffindor Tower, drenched to the skin and splattered with mud.

3rd_file: I trust that you also noticed that Tom riddle was already highly self-sufficient, secretive and, apparently, friendless? He did not want help on companionship on his trip to diagon Alley. He preferred to operate alone. The adult Voldemort is the same. You will hear many of his Death Eaters claiming that they are in in his confidence, that they alone are close to him, even understand him. They are deluded. Lord Voldemort has never had a friend, nor do I believe that he has ever wanted one.

Input: cp 2nd_file 3rd_file cat 3rd file

output: Raindrops the size of bullets thundered on the castle windows for days on end; the lake rose, the flower beds turned into muddy streams, and Hagrid's pumpkins swelled to the size of garden sheds. Oliver Wood's enthusiasm for regular training sessions, however, was not dampened, which was why Harry was to be found, late one stormy Saturday afternoon a few days before Halloween, returning to Gryffindor Tower, drenched to the skin and splattered with mud.

\$cp file1 file2 directory: copies multiple files to the directory (give path if not in pwd)

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input: cp 1st_file 2nd_file ../docs cd .. cd docs ls
```

output: 1st_file 2nd_file

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$cp -R dir1 dir2: copies dir1 to dir2 (both in pwd, otherwise give path)
input: cp -R docs unix
      cd unix
      1s
output: docs
$mv: move or rename directories/files
$mv file1 file1 newname: rename the file to the new name
input: mv 1st_file 1st_file_renamed
output:
1st_file_renamed 3rd_file 5th_file
                                         Linux touch1 touch3
             4th_file Lab3-Assignment.odt test_cat touch2 world
2nd file
$mv file dir: move file from pwd to dir (give correct path according to pwd)
input: mv 2nd_file safe/ (safe is inside pwd)
       cd safe
       1s
output: 2nd_file
$rm: removes file or directories
$rm -i filename: removes the file from the pwd
input: rm -i 3rd_file
      1s
output:
                                 Linux test cat touch2 world
1st file renamed 5th file
             Lab3-Assignment.odt safe touch1 touch3
4th file
$rm -rf dir: removes the directory
input: rm -rf safe (in pwd which is lab_3)
      1s
output:
1st_file_renamed 5th_file
                                 Linux touch1 touch3
             Lab3-Assignment.odt test cat touch2 world
4th file
$file filename: displays the type of file filename
```

input: file 5th_file

output: 5th_file: UTF-8 Unicode text, with very long lines

Wild Card Characters

*: matches with any number of characters in the filename

ls t*: displays all files whose names begin with t

output: test_cat touch1 touch2 touch3

ls t*t: displays all files whose name start and end with t

output: test_cat

rm t*: removes all files whose name starts with t

output: 1st_file_renamed 4th_file 5th_file Lab3-Assignment.odt Linux world (after ls)

rm *e: removes all files whose names end with e

output: 1st_file_renamed Lab3-Assignment.odt Linux world

cp -r L* world: copies all files whose names start with L to world directory

input: cp -r L* world