

Experiment No.2

Aim: Understanding System Administration: Using root login, Becoming super user, Administrative commands.

Commands:

1. sudo:

```
manish28@ubuntu:~$ sudo passwd root
[sudo] password for manish28:
New password:
Retype new password:
passwd: password updated successfully
manish28@ubuntu:~$
```

2. uptime command:

```
manish28@ubuntu:~$ uptime
 04:18:02 up 13 min,  1 user,  load average: 0.38, 0.22, 0.14
manish28@ubuntu:~$ uptime -s
2023-04-04 04:04:11
manish28@ubuntu:~$ uptime -p
up 13 minutes
manish28@ubuntu:~$ uptime -V
uptime from procs-ng 3.3.16
manish28@ubuntu:~$
```

3. w Command:

```
manish28@ubuntu:~$ w
 04:18:57 up 14 min,  1 user,  load average: 0.72, 0.33, 0.18
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
manish28  :0        :0               04:04    ?xdm?  1:29   0.01s  /usr/li
manish28@ubuntu:~$ w -s
 04:19:00 up 14 min,  1 user,  load average: 0.66, 0.32, 0.18
USER      TTY      FROM            IDLE   WHAT
manish28  :0        :0               ?xdm?  /usr/lib/gdm3/
manish28@ubuntu:~$ w -o
 04:19:04 up 14 min,  1 user,  load average: 0.61, 0.32, 0.18
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
manish28  :0        :0               04:04    ?xdm?  1:29m   /usr/li
manish28@ubuntu:~$ w -i
 04:19:07 up 14 min,  1 user,  load average: 0.61, 0.32, 0.18
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
manish28  :0        :0               04:04    ?xdm?  1:29   0.01s  /usr/li
manish28@ubuntu:~$
```

4. users command:

```
manish28@ubuntu:~$ users
manish28
manish28@ubuntu:~$ users --version
users (GNU coreutils) 8.30
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Joseph Arceneaux and David MacKenzie.
manish28@ubuntu:~$
```

5. who command:

```
manish28@ubuntu:~$ who
manish28 :0          2023-04-04 04:04 (:0)
manish28@ubuntu:~$ who -u
manish28 :0          2023-04-04 04:04 ?          1395 (:0)
manish28@ubuntu:~$ who -r
run-level 5 2023-04-04 04:04
manish28@ubuntu:~$ who -b -H
NAME LINE TIME PID COMMENT
system boot 2023-04-04 04:04
manish28@ubuntu:~$
```

6. whoami command:

```
manish28@ubuntu:~$ whoami
manish28
manish28@ubuntu:~$ whoami --version
whoami (GNU coreutils) 8.30
Copyright (C) 2018 Free Software Foundation, Inc.
License GPLv3+: GNU GPL version 3 or later <https://gnu.org/licenses/gpl.html>.
This is free software: you are free to change and redistribute it.
There is NO WARRANTY, to the extent permitted by law.

Written by Richard Mlynarik.
manish28@ubuntu:~$
```

7. cat command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ cat > mj.txt
Manish Shashikant Jadhav
TYIT
2201933
2030408246006
manish28@ubuntu:~/Desktop$

manish28@ubuntu:~/Desktop$ cat mj.txt
Manish Shashikant Jadhav
TYIT
2201933
2030408246006
manish28@ubuntu:~/Desktop$
```

8. more command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ more -d manish.txt
Manish Jadhav
I am 18 years old.
I am from Dasgaon.

manish28@ubuntu:~/Desktop$ more -f manish.txt
Manish Jadhav
I am 18 years old.
I am from Dasgaon.

manish28@ubuntu:~/Desktop$

manish28@ubuntu:~/Desktop$ more -p manish.txt

Manish Jadhav
I am 18 years old.
I am from Dasgaon.

manish28@ubuntu:~/Desktop$
```

9. less command:

- -i:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ less -i manish.txt

Manish Jadhav
I am 18 years old.
I am from Dasgaon.
manish.txt (END)
```

- -N:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ less -N manish.txt

1 Manish Jadhav
2 I am 18 years old.
3 I am from Dasgaon.
4
manish.txt (END)
```

- -V:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ less -V manish.txt
less 551 (GNU regular expressions)
Copyright (C) 1984-2019 Mark Nudelman

less comes with NO WARRANTY, to the extent permitted by law.
For information about the terms of redistribution,
see the file named README in the less distribution.
Home page: http://www.greenwoodsoftware.com/less
manish28@ubuntu:~/Desktop$
```

10. cp command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~$ cd Desktop
manish28@ubuntu:~/Desktop$ cp manish.txt jadhav.txt
manish28@ubuntu:~/Desktop$ cp -r manish.txt jadhav2.txt
manish28@ubuntu:~/Desktop$ cp -i jadhav2.txt manish2.txt
manish28@ubuntu:~/Desktop$ cp -l manish2.txt jadhav3.txt
manish28@ubuntu:~/Desktop$
```

11.mv command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ mv -i jadhav.txt manish.txt
manish28@ubuntu:~/Desktop$ mv -u manish.txt jadhav2.txt
manish28@ubuntu:~/Desktop$ mv -v jadhav2.txt manish.txt
renamed 'jadhav2.txt' -> 'manish.txt'
manish28@ubuntu:~/Desktop$
```

12. cd command:

```
manish28@ubuntu: ~
manish28@ubuntu:~$

manish28@ubuntu: ~/Desktop
manish28@ubuntu:~$ cd Desktop
manish28@ubuntu:~/Desktop$
```

13. pwd command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ pwd -L manish.txt
/home/manish28/Desktop
manish28@ubuntu:~/Desktop$ pwd -P manish.txt
/home/manish28/Desktop
manish28@ubuntu:~/Desktop$
```

14. sort command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ sort -r manish.txt
I am from Dasgaon.
I am 18 years old.
manish28@ubuntu:~/Desktop$ sort -n num.txt
9
28
40
50
80
100
manish28@ubuntu:~/Desktop$ sort -m manish.txt jadhav.txt
I am 18 years old.
I am from Dasgaon.
Manish Jadhav
manish28@ubuntu:~/Desktop$
```

15.vi command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ vi manish.txt

I am 18 years old.
I am from Dasgaon.
~
~
~
```

- insert mode (i):

```
manish28@ubuntu: ~/Desktop
I am 18 years old boy`.
I am from Dasgaon.
~
~
```

- undo (u):

```
manish28@ubuntu: ~/Desktop
I am 18 years old boy`.
I am from Dasgaon.
~
~
~
```

16.ssh command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ ssh -V
OpenSSH_8.2p1 Ubuntu-4ubuntu0.4, OpenSSL 1.1.1f 31 Mar 2020
manish28@ubuntu:~/Desktop$
```

17. ftp or sftp command:

```
manish28@ubuntu: ~/Desktop
manish28@ubuntu:~/Desktop$ ftp
ftp> ipv4
Chosen addressing: IPv4.
ftp> ipv6
Chosen addressing: IPv6.
ftp> !
manish28@ubuntu:~/Desktop$
```

18. free command:

```
manish28@ubuntu:~/Desktop$ free -k
              total        used        free      shared  buff/cache   available
Mem:           4273536    1027972    2562156         4128        683408        3012496
Swap:          945416           0         945416

manish28@ubuntu:~/Desktop$ free -m
              total        used        free      shared  buff/cache   available
Mem:           4173         1003         2502           4           667           2941
Swap:           923           0           923

manish28@ubuntu:~/Desktop$ free -g
              total        used        free      shared  buff/cache   available
Mem:             4           0           2           0           0           2
Swap:            0           0           0

manish28@ubuntu:~/Desktop$ free -t
              total        used        free      shared  buff/cache   available
Mem:           4273536    1027980    2562148         4128        683408        3012496
Swap:          945416           0         945416
Total:        5218952    1027980    3507564
manish28@ubuntu:~/Desktop$
```

19. top command:

```
manish28@ubuntu:~/Desktop$ top -h
procps-ng 3.3.16
Usage:
  top -hv | -bEHiOss1 -d secs -n max -u|U user -p pid(s) -o field -w [cols]
manish28@ubuntu:~/Desktop$ top -d seconds.tenths
top: bad delay interval 'seconds.tenths'
manish28@ubuntu:~/Desktop$ top -u manish28

top - 03:34:16 up 1:44, 1 user, load average: 0.21, 0.12, 0.09
Tasks: 285 total, 2 running, 283 sleeping, 0 stopped, 0 zombie
%Cpu(s): 8.7 us, 4.8 sy, 0.0 ni, 85.9 id, 0.0 wa, 0.0 hi, 0.7 si, 0.0 st
MiB Mem : 4173.4 total, 2342.9 free, 1006.9 used, 823.6 buff/cache
MiB Swap: 923.3 total, 923.3 free, 0.0 used, 2937.7 avail Mem

  PID USER      PR  NI   VIRT   RES   SHR S  %CPU  %MEM    TIME+  COMMAND
 1444 manish28   20   0 334216 90428 42212 S   7.9   2.1   2:24.61 Xorg
 3758 manish28   20   0 20624 3784 3068 S   1.0   0.1   0:03.29 top
 4087 manish28   20   0 20648 3896 3060 R   0.3   0.1   0:00.06 top
 1348 manish28   20   0 19068 10156 7872 S   0.0   0.2   0:02.23 systemd
 1349 manish28   20   0 168820 3432 12 S   0.0   0.1   0:00.00 (sd-pam)
 1354 manish28   9  -11 2016084 20944 15916 S   0.0   0.5   0:18.23 pulseaudio
 1357 manish28   39  19 593624 24240 16280 S   0.0   0.6   0:01.53 tracker-miner-f
 1360 manish28   20   0 248824 7380 6448 S   0.0   0.2   0:00.40 gnome-keyring-d
 1362 manish28   20   0 11488 8692 3916 S   0.0   0.2   0:03.80 dbus-daemon
 1366 manish28   20   0 248428 7768 6720 S   0.0   0.2   0:00.44 gvfsd
 1372 manish28   20   0 382064 8408 7532 S   0.0   0.2   0:00.06 gvfsd-fuse
 1390 manish28   20   0 399852 12000 9940 S   0.0   0.3   0:00.80 gvfs-udisks2-vo
 1401 manish28   20   0 246732 6648 5872 S   0.0   0.2   0:00.15 gvfs-gphoto2-vo
 1407 manish28   20   0 244332 6044 5456 S   0.0   0.1   0:00.17 gvfs-mtp-volume
 1411 manish28   20   0 325356 8708 7680 S   0.0   0.2   0:00.77 gvfs-afc-volume
 1416 manish28   20   0 244508 6080 5556 S   0.0   0.1   0:00.17 gvfs-goa-volume
 1420 manish28   20   0 555936 36436 30400 S   0.0   0.9   0:00.32 goa-daemon
 1426 manish28   20   0 327240 11472 10124 S   0.0   0.3   0:00.10 goa-identity-se
 1442 manish28   20   0 172652 6364 5724 S   0.0   0.1   0:00.07 gdm-x-session
```

20. tar command:

```
manish28@ubuntu:~/Desktop$ tar cvf file.tar *.txt
jadhav.txt
manish.txt
num.txt
manish28@ubuntu:~/Desktop$ tar xvf file.tar
jadhav.txt
manish.txt
num.txt
manish28@ubuntu:~/Desktop$ tar cvfw file.tar *.txt
add 'jadhav.txt'?
add 'manish.txt'?
add 'num.txt'?
manish28@ubuntu:~/Desktop$
```

21.grep command:

```
manish28@ubuntu:~/Desktop$ grep -c "Manish Jadhav" manish.txt
1
manish28@ubuntu:~/Desktop$ grep -l "Manish Jadhav" *
jadhav.txt
manish.txt
manish28@ubuntu:~/Desktop$ grep -o "Manish" num.txt
Manish
Manish
Manish
Manish
Manish
Manish
Manish
manish28@ubuntu:~/Desktop$ grep -n "Manish" manish.txt jadhav.txt num.txt
manish.txt:1:Manish Jadhav
jadhav.txt:1:Manish Jadhav
num.txt:7:Manish
num.txt:9:Manish
num.txt:10:Manish
num.txt:11:Manish Manish Manish
num.txt:12:Manish
manish28@ubuntu:~/Desktop$
```

Practical Performance (4)	Writeup & Oral (4)	Attendance (2)	Total (10)