Ex No: 1
Date: 23.01.2025

BASIC LINUX COMMANDS

Basic Linux commands and output

1. $ date

    Thu Jan 30   13:45:03 IST 2025

2. date +/. M

    01

3. date +/. h

    Jan

4. date +/. d

    30

5. date +/. y

    28

6. date +/. H

    13

7. date +/. M

    47

8. date +/. S

    53

9. echo "Hello!"

    Hello!

10. cal

    January 2025
    Su Mo To 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 31

11. bc

    2 * 5

    10

12. who

    root   tty2   2025-02-01 13:35 (tty2)
    cse161 pts/1   2025-02-01 13:39 (172.16.52.161)
    cse192 pts/2   2025-02-01 13:39 (172.16.52.178)

13. who am i

    cse179 pts/5   2025-02-01 13:53 (172.16.52.169)

14. id

    uid = 1132 (cse179) gid = 1132 (cse179) groups = 1132 (cse179)
    context = unconfined - U : unconfined - r : unconfined - T : s0-s0 : c0.c1023

15. tty

    /dev/pts/5

16. ps

    PID   TTY   TIME CMD
    5237 pts/5   00:00:00 bash
    5993 pts/5   00:00:00 ps

17. uname - n

    fedora

18. pwd

    /home/cse179

19. mkdir rec :

    [cse179 @ fedora ~ rec] $

20. cd rec

    [cse179 @ fedora rec] $

21. ls
        rec

22. cat > rec1

    " Welcome To RPC "
      Hello Manu

23. Copy command

    cp rec1 rec 2

24. Remove file

    rm rec 2

25. move file

    mv rec1 rec 2

26. file rec1

    rec1 : ASCII Text

27. wc cs165

    1 11   65   cs165

28. ls > cs165

    display files of cs165

29. who | wc -l

    27

30. who | tee cs165 | wc -l

    27

31. ls c**

    cs165

32. ls ?5*

    cs165

33. ls n** :- newfile .Txt

34. ls ?s* :- newfile .Txt

35. ls [a-o]* :- newfile .Txt

36. ls [!a-o]* :- ls : cannot access '[!a-o]*':

37. head filter :-

    head newfile .Txt
    o/p :- newfile .Txt

38. Tail filter :-

    tail newfile .Txt
    o/p :- newfile .Txt

39. more filter :-

    ls-l | more
    o/p :- total 6
    - rw-r-r--

40. grep command :-

    grep file newfile .Txt
    o/p :- newfile .Txt

41. sort command :-

    sort newfile .Txt
    o/p :- newfile .Txt

42. i)   chmod - wx newfile .Txt
    ii) chmod + rwx newfile .Txt
    iii) chmod = wx newfile .Txt

43 Semi-colon command

ls ; date

o/p :→ newfile.Text

Saturday 01 February 2025 02:43:39 PM

44 "&&" operation

ls && date

o/p :→ newfile.Text

Saturday 01 February 2025 02:43:15 PM IST

45. "||" operation

ls || date

o/p :→ newfile.Text

Other essential commands

1. free

	Total	used	free	shared	buff/cache	available
Mem :	4062320	422416	2996456	61336	643448	3406332
Swap :	3424252	0	3424252			

2. top

top - 14:45:10 up 48 min, 3 users, load average : 0.06, 0.02, 0.00
Tasks : 153 total, 2 running, 153 sleeping, 0 stopped, 0 zombie

3. vmstat

procs ---- memory ---- swap ---- io ---- system --- cpu ---
r b swpd free buff cache si so bi bo in cs us sy id

4. df

filesystem	1K-blocks	used	available	use%	mounted on
devtmpfs	2020172	0	2020172	0%	/dev
tmpfs	2031160	0	2031160	0%	/dev/shm

5. ping

ping [-aAbBdDfhLn OqrRUvV46+] [-c count] [-i interval] [-I interval]
[-m mark] [-M pmtudisc_option] [-l preload] [-p pattern] [-s size]

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6. ifconfig

flags = 4163 <UP, broadcast, running, multicast > mtu 1500
inet 172.16.9.29 netmask 255.255.252.0 broadcast 172.16.11.255

7. Traceroute

Traceroute to www.rajalakshmi.org (220.227.30.51), 30 hops max
60 byte packets 1 gateway (172.16.41) 0.299 ms 0.327 ms

Result:

The Unix/Linux commands successfully displayed system information, managed files, and performed navigation tasks, confirming the proper setup and functionality of the environment.