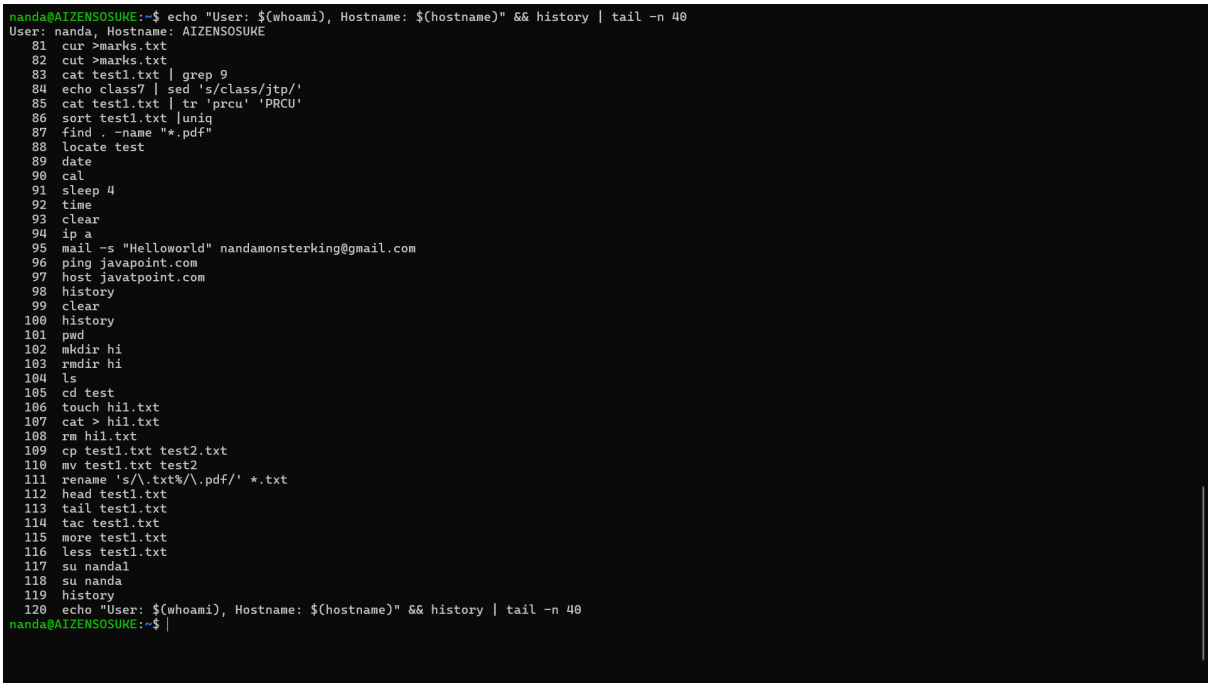
ASSIGNMENT 1: LINUX COMMANDS



Screenshot of executed LINUX commands

Linux commands and their use case:

System Information & Monitoring

1. `whoami` – Displays the current username.
2. `hostname` – Shows the system's hostname.
3. `echo "User: $(whoami), Hostname: $(hostname)"` – Prints username and hostname.
4. `date` – Displays the current date and time.
5. `cal` – Shows the current month's calendar.
6. `time` – Measures execution time of a command.
7. `df -h` – Shows disk space usage in a human-readable format.
8. `top` – Displays real-time system resource usage.

File & Directory Operations

9. `pwd` – Prints the current working directory.
10. `ls` – Lists files and directories.
11. `mkdir hi` – Creates a directory named "hi".
12. `rmdir hi` – Removes the "hi" directory.
13. `touch hi1.txt` – Creates an empty file named "hi1.txt".

14. `rm hi1.txt` – Deletes the file `hi1.txt`.
15. `cp test1.txt test2.txt` – Copies `test1.txt` to `test2.txt`.
16. `mv test1.txt test2` – Moves `test1.txt` to `test2`.
17. `rename 's/\.txt%/\.pdf/' *.txt` – (Incorrect syntax, but intent is renaming `.txt` files to `.pdf`).

File Viewing & Manipulation

18. `cat test1.txt` – Displays the content of `test1.txt`.
19. `cat test1.txt | grep 9` – Searches for the number "9" in `test1.txt`.
20. `echo class7 | sed 's/class/jtp/'` – Replaces "class" with "jtp" in the text "class7".
21. `cat test1.txt | tr 'pcu' 'PRCU'` – Transforms occurrences of 'p', 'c', 'u' into 'P', 'R', 'C', 'U'.
22. `sort test1.txt | uniq` – Sorts and removes duplicate lines from `test1.txt`.
23. `head test1.txt` – Displays the first 10 lines of `test1.txt`.
24. `tail test1.txt` – Displays the last 10 lines of `test1.txt`.
25. `tac test1.txt` – Displays `test1.txt` content in reverse order.
26. `more test1.txt` – Views `test1.txt` one page at a time.
27. `less test1.txt` – Similar to `more`, but allows backward navigation.

Search & Locate

28. `find . -name "*.pdf"` – Finds all PDF files in the current directory and subdirectories.
29. `locate test` – Searches for files and directories containing "test".

Networking Commands

30. `ip a` – Displays IP address and network information.
31. `ping javapoint.com` – Checks network connectivity to `javapoint.com`.
32. `host javapoint.com` – Retrieves DNS information for `javapoint.com`.
33. `mail -s "Helloworld" nandamonsterking@gmail.com` – Sends an email with "Helloworld" as the subject.

User & Session Management

34. `su nanda1` – Switches user to "nanda1".
35. `su nanda` – Switches user to "nanda".

Command History & Execution

36. `history` – Displays the command history.
37. `history | tail -n 40` – Shows the last 40 executed commands.

38. `clear` – Clears the terminal screen.
39. `sleep 4` – Pauses execution for 4 seconds.