

Linux & DevOps Interview Quick Answers (42 Questions)

1. Tell me about yourself

MCA graduate with hands-on in AWS, Linux, Git, Docker & Jenkins. Built CI/CD pipelines, automated deployments and optimized cloud infrastructure; passionate about DevOps automation.

2. Which OS do you use daily and why?

Ubuntu Linux—lightweight, secure, open-source, and industry standard for DevOps.

3. Interesting features of Linux

Open-source, strong CLI, robust permissions, package managers, scripting, stability.

4. How does Linux maintain security?

File permissions, SELinux/AppArmor, user groups, sudo, regular patches, SSH keys.

5. Linux file system structure

Hierarchical: / (root) → /home, /etc, /bin, /var, /tmp, etc.

6. Where are system-related files kept?

/etc, /bin, /sbin, /lib, /usr

7. Where to find binary files?

/bin, /usr/bin, /sbin, /usr/sbin

8. Can you edit system files without root access?

No—requires sudo/root permissions.

9. Why is Linux secure?

Least-privilege model, audited code, rapid updates, strong permission system.

10. Which command used for modification?

Editors like vi, nano, or stream editor sed.

11. Difference between chmod and chown

chmod changes permissions; chown changes owner/group.

12. What does /etc/passwd do?

Stores user account information (username, UID, GID, shell).

13. How to view running processes?

ps, ps aux, top, or htop.

14. What is ps aux?

Lists all running processes with detailed columns (user, PID, CPU, MEM).

15. Difference between top and htop

top: basic CLI monitor. htop: interactive, color UI, easy kill/sort.

16. Last 10 lines of a log file

tail -n 10

17. What is a symbolic link?

Alias (shortcut) pointing to another file path; also called soft link.

18. What is a soft link?

Same as symbolic link—references pathname, can cross filesystems.

19. Command to create soft link

ln -s source target

20. Difference between soft link vs hard link

Soft: points to pathname, breaks if target removed, can cross FS. Hard: points to inode, survives rename/delete, must be on same FS.

21. When did you use them?

Used soft links to share config files across multiple release folders.

22. What are signals in Linux?

Software interrupts sent to processes (e.g., SIGTERM, SIGKILL).

23. What is a daemon?

Background service such as sshd, crond, httpd that runs continuously.

24. Is daemon only used in Docker?

No—daemons are a general UNIX concept, not limited to Docker.

25. Which daemon do we use for EC2 SSH?

sshd (SSH daemon).

26. What is symmetric key?

Same secret key used for both encryption and decryption.

27. Public/private key: symmetric or asymmetric?

Asymmetric: public key encrypts, private key decrypts.

28. Tool to check file usage?

du -sh or ncdu for interactive view.

29. Does awk need comma-separated data?

No; default field separator is whitespace but can be set via -F.

30. Command to check if service is running?

systemctl status servicename or ps aux | grep servicename.

31. Cron job vs crontab

crontab is the table/editor; cron job is each scheduled command line.

32. How to store script on GitHub with code checks?

Push to GitHub; run shellcheck/linters via GitHub Actions before merge.

33. Difference between hooks and webhooks

Hooks are local Git event scripts; webhooks are HTTP callbacks to external systems (e.g., CI).

34. AI for reviewing PRs?

GitHub Copilot, ReviewGPT, Codeium etc. can suggest improvements.

35. Remove sensitive line from Git history?

git filter-branch --force or BFG Repo-Cleaner.

36. Git reset vs revert

reset rewrites history and moves HEAD; revert adds a new commit that reverses changes.

37. When did you use reset/revert?

reset to undo local WIP; revert to roll back faulty commit on shared branch.

38. How do conflicts happen & how to solve?

When two commits modify same line; resolve manually, add, commit, then push.

39. How to get all branches from GitHub?

git fetch --all; git branch -a to list.

40. How to hide token when using git remote -v?

Use credential helpers or config, avoid embedding token in remote URL.

41. What is an environment variable in Linux?

Key-value pair exported to the shell process (e.g., PATH).

42. Was there a time you questioned your path?

Initially unsure; real-world DevOps projects affirmed my passion for automation and cloud engineering.