

Unix Interview Questions and Answers (1–50)

1. What is Unix?

Answer: Unix is a multiuser, multitasking operating system designed for flexibility and security.

2. What is the difference between Unix and Linux?

Answer: Unix is proprietary and older; Linux is open-source and Unix-like.

3. What are some Unix flavors?

Answer: AIX, HP-UX, Solaris, BSD.

4. What is a shell in Unix?

Answer: A command-line interpreter like Bash, C Shell, or Korn Shell.

5. What is the default shell in most Unix systems?

Answer: Bash (Bourne Again Shell).

6. How do you list files in a directory?

Answer: `ls`

7. How do you display hidden files?

Answer: `ls -a`

8. How to display current working directory?

Answer: `pwd`

9. How to change directories in Unix?

Answer: `cd /path/to/directory`

10. How do you create a new file?

Answer: `touch filename` or `echo > filename`

11. How do you delete a file?

Answer: `rm filename`

12. How do you delete a directory?

Answer: `rm -r directoryname`

13. How do you copy files?

Answer: `cp source destination`

14. How do you move/rename files?

Answer: `mv oldname newname`

15. How do you search for a file?

Answer: `find / -name filename`

16. What is the use of `grep` command?

Answer: Searches for patterns in files: `grep "text" filename`

17. How to find a running process?

Answer: `ps -ef` or `top`

18. How do you kill a process?

Answer: `kill PID` or `kill -9 PID`

19. How to change file permissions?

Answer: `chmod 755 filename`

20. What do 755 permissions mean?

Answer: Owner: read/write/execute; Group/Others: read/execute

21. How to check file permissions?

Answer: `ls -l`

22. How to create a directory?

Answer: `mkdir dirname`

23. How to view the contents of a file?

Answer: `cat filename`, `less filename`, or `more filename`

24. How to edit a file in Unix?

Answer: Use `vi`, `nano`, or `vim`

25. How to append content to a file?

Answer: `echo "text" >> filename`

26. How to count lines, words, and characters in a file?

Answer: `wc filename`

27. What is a symbolic link?

Answer: A shortcut to another file: `ln -s target linkname`

28. What is a hard link?

Answer: A direct reference to file inode; remains after original file deletion.

29. What is a pipe (|) in Unix?

Answer: Sends output of one command as input to another.

30. What is redirection?

Answer: Redirects input/output using `<`, `>`, or `>>`.

31. What is cron in Unix?

Answer: A daemon to schedule tasks automatically.

32. How do you list all cron jobs?

Answer: `crontab -l`

33. How do you edit cron jobs?

Answer: `crontab -e`

34. What does `chmod 777` mean?

Answer: Full permissions to everyone (not recommended).

35. How to compress files in Unix?

Answer: Use `gzip`, `zip`, or `tar`.

36. How to extract a `.tar.gz` file?

Answer: `tar -xvzf filename.tar.gz`

37. What is `df` command?

Answer: Shows disk usage.

38. What is `du` command?

Answer: Shows space used by files/directories.

39. What is `awk` in Unix?

Answer: A programming language for pattern scanning and processing.

40. What is `sed` in Unix?

Answer: A stream editor for modifying files automatically.

41. How do you switch users?

Answer: `su username` OR `sudo -i`

42. What is the root user?

Answer: Superuser with full administrative privileges.

43. How do you check the current user?

Answer: `whoami`

44. How do you check system uptime?

Answer: `uptime`

45. How to display system hostname?

Answer: `hostname`

46. What is environmental variable?

Answer: Dynamic values like `PATH`, `HOME` that affect processes.

47. How to set an environment variable?

Answer: `export VAR=value`

48. How to list environment variables?

Answer: `printenv` or `env`

49. How to log out of a Unix session?

Answer: `exit` or `logout`

50. How to check Unix version?

Answer: `uname -a`