

100 Essential Linux Interview Questions

This document contains 100 essential Linux interview questions categorized into different topics. These questions will help you prepare for interviews, covering topics from basic commands to advanced system administration.

Basic Linux Commands

1. What is the Linux command to list files in a directory?
2. How do you display the contents of a file in Linux?
3. What is the command to copy files in Linux?
4. How do you rename a file in Linux?
5. How can you check disk usage in Linux?
6. How do you check the memory usage in Linux?
7. How do you change file permissions in Linux?
8. What command do you use to move files in Linux?
9. What is the difference between 'rm' and 'rmdir' in Linux?
10. How do you create an empty file in Linux?

File System Management

11. What is the purpose of the 'chmod' command in Linux?
12. How can you mount and unmount a file system in Linux?
13. What is the 'find' command used for in Linux?
14. How do you check the disk space in Linux?
15. How do you create and remove directories in Linux?
16. What is the command to display disk partition information in Linux?
17. How do you check the file permissions and ownership in Linux?

18. How do you change the owner of a file in Linux?
19. What is the 'df' command used for in Linux?
20. How can you view the contents of a compressed file in Linux?

Networking

21. How do you check the IP address of your system in Linux?
22. What is the 'ping' command used for in Linux?
23. How do you configure a static IP address in Linux?
24. How do you check active network connections in Linux?
25. What is the 'netstat' command used for in Linux?
26. How do you check the routing table in Linux?
27. How can you test the connectivity to a specific host in Linux?
28. How do you check DNS resolution in Linux?
29. What command do you use to display the network interface configuration in Linux?
30. How do you restart the networking service in Linux?

Process Management

31. How do you list all running processes in Linux?
32. What is the 'kill' command used for in Linux?
33. How do you run a process in the background in Linux?
34. How do you bring a background process to the foreground in Linux?
35. What is the 'ps' command used for in Linux?
36. How can you check the status of a service in Linux?
37. What is the 'top' command used for in Linux?
38. How do you stop a process in Linux?

39. How do you start a process in Linux?

40. What is the difference between 'kill' and 'killall' in Linux?

Security

41. What is SELinux in Linux?

42. How do you create a new user in Linux?

43. What is the 'passwd' command used for in Linux?

44. How do you change the password of a user in Linux?

45. How do you lock a user account in Linux?

46. What is the 'sudo' command used for in Linux?

47. How do you secure SSH in Linux?

48. How do you check login attempts in Linux?

49. How do you manage firewall settings in Linux?

50. What is the 'ufw' command in Linux?

System Administration

51. How do you view system logs in Linux?

52. How do you update the Linux system?

53. What is the purpose of the 'cron' job in Linux?

54. How do you schedule a cron job in Linux?

55. What is the 'systemctl' command used for in Linux?

56. How do you reboot a Linux system?

57. How do you shut down a Linux system safely?

58. How do you add a user to a specific group in Linux?

59. What is the 'whoami' command used for in Linux?

60. How do you display the current system date and time in Linux?

Advanced Linux Topics

61. What is a kernel module in Linux?

62. How do you load a kernel module in Linux?

63. How do you compile a kernel in Linux?

64. What is the difference between a process and a thread in Linux?

65. How do you monitor system performance in Linux?

66. What are the steps to configure a RAID array in Linux?

67. What is the purpose of 'iptables' in Linux?

68. How do you configure NFS in Linux?

69. What is the 'lsof' command used for in Linux?

70. How do you debug kernel panics in Linux?

Package Management

71. What is the package manager used in Debian-based Linux systems?

72. How do you install a package in Linux using 'apt-get'?

73. What is the 'yum' command used for in Linux?

74. How do you remove a package in Linux using 'yum'?

75. What is the 'dpkg' command used for in Linux?

76. How do you upgrade all packages on a Linux system?

77. How do you check installed packages in Linux?

78. How do you search for a package in Linux?

79. How do you install software from source in Linux?

80. How do you update the Linux kernel?

Troubleshooting and Maintenance

81. How do you fix a system that is not booting in Linux?
82. How do you recover a deleted file in Linux?
83. How do you troubleshoot network connectivity issues in Linux?
84. How do you repair a corrupted file system in Linux?
85. How do you manage system services in Linux?
86. What is the 'dmesg' command used for in Linux?
87. How do you check system resource utilization in Linux?
88. How do you check CPU and memory usage in Linux?
89. How do you check for bad sectors on a disk in Linux?
90. What is the 'strace' command in Linux?

Backup and Recovery

91. How do you back up a file in Linux?
92. How do you back up an entire directory in Linux?
93. What is the 'rsync' command used for in Linux?
94. How do you restore a file from a backup in Linux?
95. How do you create an incremental backup in Linux?
96. What is the 'tar' command used for in Linux?
97. How do you automate backups in Linux?
98. How do you check backup logs in Linux?
99. What is the purpose of the 'dd' command in Linux?
100. How do you configure remote backups in Linux?