Linux interview questions for Fresher

1–20 (Basic Questions):
1. What is Linux?
2. What are the key features of Linux?
3. What is the Linux Kernel?
4. Explain the basic directory structure in Linux.
5. How do you check the current directory in Linux?
6. What is the command to list files in a directory?
7. How do you create and remove directories in Linux?
8. What is the command to delete a file in Linux?
9. How do you view the contents of a file in Linux?
10. How do you create a new user in Linux?
11. What is the command to check running processes in Linux?
12. What is the purpose of the `grep` command?
13. What is the command to display the IP address of the system?
14. What is the `hostnamectl` command used for?
15. How do you compress files in Linux?
16. What is the difference between `su` and `sudo`?
17. How do you check the disk usage in Linux?
18. What does `chmod 755 filename` mean?
19. How do you check the Linux system uptime?
20. How do you set file ownership in Linux?

21–40 (Intermediate Questions):
21. How do you change file permissions in Linux?
22. What is a symbolic link in Linux?
23. How do you check for open ports in Linux?
24. What are inodes in Linux?
25. What is swap space?
26. How do you partition a disk in Linux?
27. What is the significance of the `/etc/passwd` file?
28. Explain the use of firewalls in Linux.
29. What is the `fstab` file in Linux?
30. What is the purpose of the `/etc/hosts` file?
31. How do you troubleshoot network issues in Linux?
32. What is a network interface in Linux, and how do you list them?
33. Explain how DNS works in Linux.
34. How do you set environment variables in Linux?
35. How do you update the package repository in Linux?
36. What is the purpose of the `umask` command?

37. What is the purpose of the `ping` command?
38. How do you monitor disk I/O performance in Linux?
39. Explain how to schedule a job using `cron`.
40. What is the `tail` command?

41–60 (Advanced Questions):
41. What is the difference between hard and soft links?
42. What is SELinux?
43. Explain how process management works in Linux.
44. What is the `kill` command used for?
45. What are runlevels in Linux?
46. What is the difference between IPv4 and IPv6?
47. Explain how the `ps` command works.
48. What is the GRUB bootloader?
49. How do you configure a firewall using `iptables` or `firewalld`?
50. Explain how to secure a Linux server.
51. What is LVM in Linux?
52. How do you check memory usage in Linux?
53. Explain the difference between RPM and APT.
54. How do you set up a static IP address in Linux?
55. What is the significance of the `/var/log` directory?
56. How do you troubleshoot a network connectivity issue in Linux?
57. How do you configure networking on a Linux system?
58. Explain how the `cat` command works.
59. How do you restart a network service in Linux?
60. How do you schedule a one-time task using the `at` command?

61–80 (More Advanced and Troubleshooting Questions):
61. How do you create and extract a `.tar.gz` archive?
62. What is the difference between `systemd` and `init`?
63. How do you redirect the output of a command to a file?
64. How do you force kill a process in Linux?
65. What is the `nohup` command used for in Linux?
66. How do you check system logs in Linux?
67. What is a Kernel panic?
68. How do you install a `.deb` package in Linux?
69. What is the purpose of the `df` command?
70. Explain the usage of the `top` command.
71. What is the difference between `rm` and `rmdir`?
72. How do you install a `.rpm` package in Linux?
73. How do you mount a file system in Linux?
74. How do you display and configure network interfaces with `ifconfig`?
75. What is a daemon in Linux?
76. How do you start, stop, and restart services using `systemctl`?
77. What is the `ss` command, and how is it different from `netstat`?
78. How do you check CPU usage in Linux?
79. How do you compress files in Linux?
80. How do you change the default shell for a user?

81–100 (Expert-Level and Advanced Topics):
81. What is the difference between Linux and Unix?
82. What are the types of shells in Linux?
83. What is the `rsync` command and how do you use it?
84. How do you monitor network activity in Linux?
85. What is the purpose of `netstat` in Linux?
86. How do you troubleshoot high memory usage in Linux?
87. How do you configure SSH key-based authentication in Linux?
88. What is the process of kernel compilation in Linux?
89. What is the use of the `systemctl` command?
90. What is the difference between hard and soft limits in `ulimit`?
91. How do you manage file permissions for a group of users in Linux?
92. What are environment variables in Linux, and how do you set them?
93. What are Linux permissions and how do they work?
94. How do you check the memory usage of a specific process in Linux?
95. How do you update the Linux Kernel?
96. What is a Linux distribution, and give examples of popular distributions?
97. How do you troubleshoot file system corruption in Linux?
98. How do you monitor real-time system performance in Linux?
99. How do you compile a custom kernel in Linux?
100. How do you perform automated backups in Linux?

All The Best for Interview