

### **Linux 300+ Technical Interview Questions:**

In some questions I am encouraging to search online because it will help you practice for searching more complicated questions in the future  
(Good Luck)

1. When you login you get “\$” prompt, what is the prompt for root?  
**#**
2. Explain the difference between grep and egrep?  
**Search online**
3. What is the port # for DNS, NTP and NFS?  
**53,123 and 111/2049**
4. What is the configuration file name of DNS and where is it located?  
**/etc/named.conf**
5. How many new directories will be created after running the following command  
mkdir {a..c}{1..3}  
**9**
6. Your PC is configured with a DNS server address but not the default gateway. Can the PC access internet?  
**No**
7. What is the difference between IP and Gateway?  
**Search online**
8. Can you assign one static IP to 2 computers, if not then why?  
**No because it will create IP conflict**
9. How to change IP's address to static?  
**ifconfig x.x.x.x**
10. You are trying to ping a server by hostname and you get an error message, “ping: unknown host ...”. What could be the reason and how to solve the problem so you can ping it by hostname?  
**Check for /etc/hosts or DNS to see if it has hostname to IP entry**
11. Explain the difference between relative and absolute path?  
**Absolute path starts from / where relative path is your current directory**
12. List 3 different methods of adding user?  
**Search online**
13. What is the command to change file/directory ownership and group?  
**chown and chgrp**
14. List any 3 type of filesystem?  
**ext4, NTFS and FAT**
15. When you login you get a message on the screen. What is the name of that file and where is it located?  
**/etc/motd**

16. What is /bin directory used for?  
**Search online**
17. What are the different types of DNS Server  
**Master and secondary**
18. How to change a user password?  
**passwd username**
19. What is the version of Redhat Linux you have experience with?  
**7.4**
20. List any 4 linux distributions?  
**Redhat, CentOS, Ubuntu and SUSE**
21. How to logoff from the system?  
**exit**
22. Give any 3 examples of operating systems?  
**Windows, Linux and MAC**
23. How to create a directory?  
**mkdir**
24. Where are the zone files located for DNS service?  
**/var/named/zonefiles**
25. How to check kernel version?  
**uname -a**
26. Which directory has all the configuration files?  
**/etc**
27. How to become root user from a regular user?  
**su -**
28. How many mega bytes in 1 giga bytes?  
**Search online**
29. What is the purpose of having different network ports?  
**So the communication of each application goes through a dedicated port**
30. How to display first column of a file?  
**cat filename | awk '{print \$1}'**
31. What is the name of DNS rpm package?  
**bind**
32. What is the difference between nslookup and dig commands?  
**Search online**
33. How to check your user id and group id?

**id**

34. How to check a file's permission?  
**ls -l**
35. What is the difference between "kill" and "kill -9" command?  
**Search online**
36. What is subnet?  
**Search online**
37. You are troubleshooting an issue with Redhat support and they have asked you to send the contents of /etc directory. How and which method you will use to transfer the contents?  
**tar (compress) the entire /etc directory and ftp**
38. What is root home directory?  
**/root**
39. What is rsyslogd daemon and its purpose?  
**Search online**
40. Your company has terminated a server administrator. What is first thing as an administrator you should do to enhance the security?  
**Change root password**
41. How to check the computer name or host name in Linux?  
**hostname**
42. Which permission allows a user to run an executable with the permissions of the owner of that file?  
**First 3 bits should have x**
43. What is the command to untar a tarred file?  
**untar**
44. What is /proc directory used for?  
**Search online**
45. What is the purpose of nsswitch.conf file  
**It tells the system where to go to resolve hostnames**
46. List 3 basic commands to navigate the filesystem?  
**cd, pwd and ls**
47. Which service/daemon should be running on the server that allows you to connect remotely?  
**sshd**
48. What is the purpose of firewall?  
**Search online**
49. List any 3 IT components?  
**Hardware, OS and Applications**
50. Which directory has all the commands we use, e.g. ls, cd etc.?

**/usr/bin or /bin**

51. What is the difference between memory, virtual memory and cache?  
**Search online**
52. Which of the following is correct?  
245. **Hardware → Operating System → Users**  
246. Operating System → Users → Hardware  
247. Database → Hardware → Users
53. Which of the following is a communication command?  
☐ grep  
☐ **mail**  
☐ touch  
☐ cd
54. How to rename a file or directory?  
**mv**
55. How to change a hostname in Linux?  
**Search online**
56. How to check network interfaces in Linux?  
**ifconfig**
57. Why is “tail -f logfilename” command used most often and what does it do?  
**It will output all incoming logs in real time**
58. What type of hardware have you worked on?  
**You should get yourself familiar with Dell, HP and UCS hardware by going online and check the vendor websites**
59. How to sort a file in reverse order?  
**cat filename | sort -r**
60. What is the name of operating system that runs Unix?  
**Solaris, HP-UX etc.**
61. List all byte sizes from smallest to largest?  
**Search online**
62. How to check the total number of partition in Linux?  
**fdisk -l**
63. How to access a linux system from a linux system?  
**ssh**
64. Explain the procedure of bonding 2 NICs or interfaces together?  
**Search online**
65. What is the exact command syntax to list the 5<sup>th</sup> column of a file and cut the first 3 letters?  
**cat filename | awk '{print \$5}' | cut -c1-3**

66. What is /etc/hosts file used for?  
**To resolve hostnames with IP address**
67. List any 3 options of 'df' command and what they are used for?  
**Search online**
68. What is the command to change file/directory permissions?  
**chmod**
69. What is the purpose of pipe (|)?  
**To combine multiple commands**
70. What is /etc directory used for?  
**For configuration files**
71. Which command is used to list files in a directory?  
**ls -l**
72. There is a command which gives you information about other commands, please explain that command and what is it used for?  
**man**
73. How to delete a file and a directory?  
**rm filename and rmdir dirname**
74. What is the difference between "tail" and "tail -10"?  
**None**
75. List 4 commands to display or read a file contents?  
**cat, more, less, vi**
76. Which command is used to read the top 5 lines of a file?  
**head -5 filename**
77. What are the different commands or methods to write to a file?  
**echo > filename and vi filename**
78. What is swap space and how to check swap space?  
**Search online**
79. What is inode and how to find an inode of a file?  
**Search online**
80. Which file to edit for kernel tuning?  
**Search online**
81. What is the latest version of Redhat?  
**Search online**
82. Name the command to find specific word from a file?  
**grep word filename**

83. You have scheduled a job using crontab but it does not run at the time you specified, what could be the reason and how would you troubleshoot?  
**Check your system time**  
**Check your crontab entry**  
**Check /var/log/messages**
84. How to check system hardware information?  
**dmidecode**
85. How to check network interface MAC address?  
**ifconfig**
86. If I don't want others to read my file1, how to do that?  
**Remove r from the last 3 bits of file permission**
87. What is the purpose of "uniq" and "sed" command?  
**Search online**
88. Which command is used to list the contents of a directory in the most recent time and in reverse order, meaning the most updated file should be listed on the bottom?  
**ls -ltr**
89. What is the difference between tar, gzip and gunzip?  
**Search online**
90. What are the different ways to install an OS?  
**DVD, DVD iso and network boot**
91. How to view difference between two files?  
**diff file1 and file2**
92. You noticed that one of the Linux servers has no disk space left, how would you troubleshoot that issue?  
**If running LVM then add more disk and extend LVM**  
**If not running LVM then add more disk, create a new partition and link the new partition to an existing filesystem**
93. How to check Redhat version release?  
**uname -a or /etc/redhat-release**
94. What is the difference between TCP and UDP?  
**Search online**
95. What is a zombie process?  
**Search online**
96. How do you search for a pattern/word in a file and then replace it in an entire file?  
**sed command**
97. Explain the purpose of "touch" command?  
**To create an empty file**
98. If a command hangs, how to stop it and get the prompt back?  
**Ctrl C**

99. Which command is used to count words or lines?  
**wc**
100. How to check the number of users logged in?  
**who**
101. What is the command to view the calendar of 2011?  
**cal 2011**
102. Which command is used to view disk space?  
**df -h**
103. How to create a new group in Linux?  
**groupadd**
104. What is the command to send a message to everyone who is logged into the system?  
**wall**
105. Which command is used to check total number of disks?  
**fdisk -l**
106. What is an mail server record in DNS?  
**MX**
107. What does the following command line do?  
ps -ef | awk '{print \$1}' | sort | uniq  
**List the first column of all running processes, sort them and remove duplicates**
108. You get a call that when a user goes to www.yourwebsite.com it fails and gets an error, how do you troubleshoot?  
**Check for user internet**  
**Check to see if user computer has DNS for hostname lookup**  
**Check to see if the server is up that is running that website**  
**Check to see if the server's web service is running**  
**Check for DNS availability which is resolving that website**
109. List 4 different directories in /?  
**/etc, /bin, /tmp, /home**
110. What is the output of the following command:  
**It will show the first line from the last 10 lines of a file** **\$tail -10 filename | head -1**
111. What are the different fields in /etc/passwd file?  
**Search online**
112. Which command is used to list the processes?  
**ps -ef**
113. What is the difference between “hostname” and “uname” commands?  
**Hostname will give you system name and uname will give you OS information**
114. How to check system load?

## **top and uptime command**

115. How to schedule jobs?  
**crontab and at**
116. What is the 3rd field when setting up crontab?  
**Day of the month**
117. What is the command to create a new user?  
**useradd**
118. What is the “init #” for system reboot?  
**6**
119. How to restart a service?  
**systemctl restart servicename**
120. How to shutdown a system?  
**shutdown or init 0**
121. What is “ftp” command used for?  
**To transfer files from one computer to another**
122. Explain cron job syntax? First is minute, second is..  
**Min, house, day of the month, month, day of the week and command**
123. How to delete a package in Linux?  
**rpm -e packagename**
124. What is the file name where user password information is saved?  
**/etc/shadow**
125. Which command you would use to find the location of chmod command?  
**which chmod**
126. Which command is used to check if the other computer is online?  
**ping othercomputer**
127. Please explain about LAN, MAN and WAN?  
**Search online**
128. How to list hidden files in a directory?  
**ls -la**
129. What is the difference between telnet and ssh?  
**ssh is secure where telnet is not**
130. How to run a calculator on Linux and exit out of it?  
**bc and quit**
131. List any 4 commands to monitor system?  
**top, df -h, iostat, dmesg**
132. You are notified that your server is down, list the steps you will take to troubleshoot?



**Check the system physically**  
**Login through system console**  
**Ping the system**  
**Reboot or boot if possible**

133. What is difference between static and DHCP IP?  
**Search online**
134. How to write in vi editor mode?  
**i = insert, a = insert in next space, o = insert in new line**
135. What is the difference between “crontab” and “at” jobs?  
**crontab is for repetitive jobs where at is for one time job**
136. What is vCenter server in VMWare?  
**Search online**
137. What is “dmidecode” command used for?  
**To get system information**
138. What is the difference between SAN and NAS?  
**Search online**
139. What is the location of system logs? E.g. messages  
**/var/log directory**
140. How to setup an alias and what is it used for?  
**alias aliasname=”command”**  
**It is used to created short-cuts for long commands**
141. What is the purpose of “netstat” command?  
**Search online**
142. What are terminal control keys, list any 3?  
**Ctrl C, D and Z**
143. Which command(s) you would run if you need to find out how many processes are running on your system?  
**ps -ef | wc -l**
144. What are the different types of shells?  
**sh, bash, ksh, csh etc.**
145. How to delete a line when in vi editor mode?  
**dd**
146. Which is the core of the operating system?  
a) Shell  
**b) Kernel**  
c) Commands  
d) Script
147. Which among the following interacts directly with system hardware?  
a) Shell

- b) Commands
- c) Kernel**
- d) Applications

148. How to save and quit from vi editor?  
**Shift ZZ or :wq!**
149. What is the difference between a process and daemon?  
**Search online**
150. What is the process or daemon name for NTP?  
**ntpd**
151. What are a few commands you would run if your system is running slow?  
**top, iostat, df -h, netstat etc.**
152. How to install a package in Redhat Linux?  
**yum install packagename**
153. What is the difference between “ifconfig” and “ipconfig” commands?  
**ifconfig for Linux and ipconfig for Windows**
154. What is the first line written in a shell script?  
**Define shell**  
**e.g. #!/bin/bash**
155. Where is the network (Ethernet) file located, please provide exact directory location and file name?  
**/etc/sysconfig/network-scripts/ifcfg-nic**
156. Why do we use “last” command?  
**To see who has logged in the system whether active or logged off**
157. What is RHEL Linux stands for?  
**Search online**
158. To view your command history, which command is used and how to run a specific command?  
**history and history #**
159. What is NTP and briefly explain how does it work and where is the config files and related commands of NTP?  
**Search online**
160. How to disable firewall in Linux?  
**Search online**
161. How to configure mail server relay for sendmail service?  
**Edit /etc/mail/sendmail.mc file and add SMART\_HOST entry**
162. Where is samba log file located?  
**/var/log/samba**
163. What is mkfs command used for?  
**To create a new filesystem**

164. If you create a new group, which file does it get created in?  
**/etc/group**
165. Which file has DNS server information (e.g. DNS resolution)?  
**/etc/resolv.conf**
166. What are the commands you would run if you need to find out the version and build date of a package (e.g. http)?  
**rpm -qi http**
167. On the file permissions? What are the first 3 bits for and who is it for?  
**Read, write and execute. They are used for the owner of the file**
168. How to create a soft link?  
**ln -s**
169. How to write a script to delete messages in a log file older than 30 days automatically?  
**Search online**
170. How to quit out of “man” command?  
**q**
171. Which command is used to partition disk in Linux?  
**fdisk**
172. What is the difference between “shutdown” and “halt” command?  
**Search online**
173. What is the exact syntax of mounting NFS share on a client and also how to un-mount?  
**Search online**
174. What experience do you have with scripting, explain?  
**if-the, do-while, case, for loop scripts**
175. How to get information on all the packages installed on the system?  
**rpm -qa**
176. Explain VMWare?  
**Search online**
177. You are tasked to examine a log file in order to find out why a particular application keep crashing. Log file is very lengthy, which command can you use to simplify the log search using a search string?  
**grep for error, warning, failure etc. in /var/log/messages file**
178. What is /etc/fstab file and explain each column of this file?  
**Search online**
179. What the latest version of Windows server?  
**Search online**
180. What is the exact command to list only the first 2 lines of history output?  
**history | head -2**

181. How to upgrade Linux from 7.3 to 7.4?  
**yum install update**
182. How to tell which shell you are in or running?  
**\$0**
183. You have tried to “cd” into a directory but you have been denied. You are not the owner of that directory, what permissions do you need and where?  
**- - - - - r - x**
184. What is CNAME record in DNS?  
**Entry for hostname to hostname**
185. What is the name of VMWare operating system?  
**ESXi**
186. What is the client name used to connect to ESXi or vCenter server?  
**vSphere client**
187. You get a call from a user saying that I cannot write to a file because it says, permission denied. The file is owned by that user, how do you troubleshoot?  
**Give write permission on the first 3 bits**
188. What is the latest version of VMWare?  
**Search online**
189. What is the name of firewall daemon in Linux?  
**firewalld**
190. Which command syntax you can use to list only the 20<sup>th</sup> line of a file?  
**Search online**
191. What is the difference between run level 3 and 5?  
**3 = Boot system with networking, 5 = boot system with networking and GUI**
192. List a few commands that are used in troubleshooting network related issue?  
**netstat, tcpdump etc.**
193. What is the difference between domain and nameserver?  
**Search online**
194. You open up a file and it has 3000 lines and it scrolled up really fast, which command you will use to view it one page at a time?  
**more or less**
195. How to start a new shell. E.g. start a new ksh shell?  
**Simply type ksh, or bash**
196. How to kill a process?  
**kill processID**
197. How to check scheduled jobs?  
**crontab -l**

198. How to check system memory and CPU usage?  
**free and top**
199. Which utility could you use to repair the corrupted file system?  
**fsck**
200. What is the command to make a service start at boot?  
**systemctl enable servicename**
201. How to combine 2 files into 1? E.g. you 3 lines in file "A" and 5 lines in file "B", which command syntax to use that will combine into one file of 3+5 = 8 lines  
**cat fileA >> fileB**
202. What is echo command used for?  
**To output to a screen**
203. What does the following command do?  
echo This year the summer will be great > file1  
**It will create a new file "file1" with the content as "This year the summer will be great"**
204. Which file to modify to allow users to run root commands  
**/etc/sudoers**
205. Your system crashed and being restarted, but a message appears, indicating that the operating system cannot be found. What is the most likely cause of the problem?  
**The /boot file is most likely corrupted**
206. How would you troubleshoot a problem if the server goes down with no network in the middle of the night? This is situational question so what is the best approach and what steps I would take to troubleshoot  
**First the server is physically accessible then I will go to the server and connect using a keyboard/mouse and a monitor and try to login through console. If the server is not accessible then I will try to reach the server through iDRAC if Dell or iLO if HP server. These console access allow you to access the server even the OS is down. Also if the server is in a remote location then most likely there are datacenter technicians who have access to the server and I will ask them to connect to the server using keyboard/mouse and monitor and walk me through exactly what they see on the screen.**
207. How did you handle a difficult situation when you couldn't figure out what to do to fix a problem and user is angry?  
**There might be situations when you have people breathing over your neck and get angry if they server is down. The first thing I would do is not to panic and stay calm. Then I will ask the user to please give me sometime so I can look into the issue and provide status update in an hour or so. I will tell the user/customer that you are in good hands I will do everything to bring the system back online asap. Then I will start troubleshooting the issue and if needed I will setup a conference call with my team members to see if they can find something too. I will also reach out to for the vendor support e.g. Redhat and ask them to open up a case and look into the issue asap. I will make sure I provide continuous status every hour to my users and customers. Once the issue is resolved then I would let the user know that I will definitely dig deep into the issue and find out what caused the issue and most likely will provide root cause analysis for it.**

208. What are the tools you've used to find the root cause of the problem and troubleshoot like say if this was due to hardware failure, configuration of network gone wrong or compatibility issues? Where do you start to find out what went wrong with server down?  
**top, /var/log/messages, free, dmesg, iostat, ifconfig, tcpdump, netstat**
209. You need to modify httpd.conf file but you cannot find it, Which commandline tool you can use to find file?  
**find / -name "httpd.conf"**
210. What is an OS and what are its functions? List few OSs on the commercial market.  
**Operating System is a software that manages the computer hardware and runs the programs i.e. Window, Mac, Linux, Android**
211. What is Linux?  
**Linux is a Unix-like, open source and community-developed operating system (OS) for computers, servers, mainframes, mobile devices, and embedded devices.**
212. Why is Linux Operating system getting so popular?  
**Is open-source and supported on almost every major computer platform, including x86, ARM and SPARC, making it one of the most widely supported operating systems**
213. Why Linux is your favorite OS?  
**Require less resources to run than other competitive OS**  
**Free and Open-source**  
**Multi-task, multi-user Multi processor**
214. What is the main difference between Linux and Windows?  
**Linux is open-source and window is commercial, file system in linux is xfx while in window is ntfs. Linux is more secure and no dependable of antivirus like in windows, there is always a password administrator in linux, and window does not required.**
215. What are the different flavors or distributions of Linux?  
**Ubuntu, Debian, kali, mint, oracle, fedora, redhat, centos and many more**
216. Why would you choose LINUX OS for your server to run apps?  
**More secure, and use less resources, free-open source and hardware support**
217. What is Open-source Software? Give a few examples of open-source software which are industry standards  
**Free and available for anyone to to any changes, take it apart and put it together**  
**Git-hub , Apache HTML, WordPress, Nagios, python, Kubernetes, dockers**
218. What is closed source Software? Give examples of closed-source software Pay to use programs or software, no available for modification  
**Windows os, mac os, adobe suite, Microsoft suite 365, final cut, autoCAD**
219. What is the structure of Linux? Or What are the core parts of the Linux OS?  
**Hardware (hdd, ram, motherboard, cpu) – kernel (OS) – shell (interpreter) – application (terminal, browser, zoom, virtual box)**
220. What is the difference between shell and Kernel?

**Shell is how the user communicate to the hardware or computer (interaction between user and computer) the kernel is the core of the OS**

- 221. What are the critical components of the Server?  
**CPU, RAM, STORAGE HDD SSD M.2, PSU power supply unit, motherboard, and cooling system (heatsink and fans)**
- 222. What is the difference between ILO and IDRAC?  
**ilo: Integrated Lights-Out is hp and idrac: Integrated Dell Remote Access Controller is dell**
- 223. What's the command to check the user's default shell?  
**echo \$SHELL**
- 224. How can you find out the kernel version of Linux system?  
**uname -r**
- 225. How can we check the release version of Linux OS?  
**cat /etc/redhat-release**
- 226. What is the difference between su & su -?  
**su: switch user but use the current user environment, su -: switch user and environment**
- 227. What command do we use to get the commands you executed recently?  
**History, you can also press arrow up in the keyboard**
- 228. What are binaries and where are they stored?  
**Binaries files that contain source code Commands /bin for users, /sbin for root**
- 229. What is the purpose of /boot & /etc directory?  
**/boot – GRUB or bootloader, boot files - contains everything required for the boot process  
/etc - contains all system related configuration files**
- 230. What does /proc file system contain?  
**virtual filesystem**
- 231. What is the difference between /bin and /sbin directories?  
**/bin user binaries, /sbin system binaries**
- 232. Which file system contains systems configuration files?  
**/etc**
- 233. What is path to the directory that contains environmental files?  
**/etc/skel**
- 234. What command we use to find system variables?  
**env**
- 235. Do you know how can we execute multiple commands on a terminal?  
**Use semi-colon**
- 236. Where are the system binaries kept?  
**/sbin**

237. Where can users save temporary files?  
**/tmp**
238. /opt directory or file system contains what?  
**Add-on or software packages**
239. What is the command to check your username and ID of the user account?  
**id**
240. What information we can extract from uptime command?  
**Date time, how long has the system being up, how many users are connected, load average. (cpu utilization between last minutes, 5 minutes and 15 minutes)**
241. What is the command to list all logged-in users and how long server has been up?  
**w**
242. What is ping command and how it works?  
**Ping is to send a signal to another server host and the server host respond back**
243. How can we limit packets in ping command in Linux?  
**Use a -c then a number (c for count)**
244. How can we get the ip address of local server and remote server?  
**nslookup**
245. What does pwd do?  
**Current working directory**
246. How to check what shell you are working on?  
**echo \$SHELL**
247. What is the path of the root's home directory?  
**/root**
248. What is the basic difference between / and /root?  
**Root directory for the entire system and /root home root directory**
249. How can we create a directory? How to create a directory structure?  
**mkdir, mkdir -p**
250. What does -p flag mean in mkdir?  
**parent**
251. How can you go back one directory?  
**cd ..**
252. How can you go back two directories?  
**cd ../..**
253. How can you go back to last working directory?  
**cd -**
254. How to check current directory you are in?



**pwd**

255. How can we delete a directory? “delete”

**rm -d or rmdir – for empty directories , rm -rf for non-empty directories**

256. How to create an empty (zero byte) file?

**touch**

257. How to list files and directories in each directory including hidden files?

**ls -la**

258. How we can long list files and sort by time stamp?

**ls -lt | sort**

259. How can we recursively show the contents of directory and subdirectory in the form of long list?

**ls -lR**

260. How can we remove everything under directory?

**# rm -rf dirname/\***

261. Difference between echo > and echo >> ?

**# echo > will create new file , or will overwrite if the file already exist**

**# echo >> will append to the last line of the file**

262. For a given directory structure /tmp/Users/data you are required to delete the user's directory and everything underneath it (recursively without getting prompted).

**# rm -rf /tmp/User 1> /dev/null**

263. How do you know the status of last command?

**# echo \$?**

264. What is metadata?

**Data about data – information about ownership, permission., links, size, modified date and absolute path**

265. Where is metadata of a file or directory stored?

**In the inode of the partition**

266. How to list the metadata of a file or directory.

**# stat filename, ll or ls -l**

267. What's not included in the metadata?

**The actual content of the file**

268. How can I know that a file is a file or directory?

**Using ls -l filename , will display the metadata and the first letter or symbol can indicate d for directory or – for file**

269. How can we copy a file and directory while preserving the time stamp?

**# cp -p**

270. You got a file named /etc/hosts which was last modified about a week ago, your manager asks you to update the time stamp on that file to the current. What command will accomplish this task?

**# touch /etc/hosts**

271. How to read 4 different files and redirect the output into one larger file?  
**# cat file1 file2 file3 file4 >> fileall**
272. What is the difference between appending to a file VS overriding a file, and how to accomplish them?  
**>> for appending and > for overwrite, one > replaces the content while two >> appending will just at the content under the last line of the file content**
273. Say you ran a command, and it produced some “Permissions denied” error. You want to save the error ONLY to a file called errors.txt. How would you accomplish this?  
**2> error.txt**
274. Name three commands you use to read a file?  
**head, cat, more**
275. What is the cat command?  
**Display the whole content of the file as output**
276. What is the difference between more and less command?  
**Display the content forward while less display backward and forward (back and forth)**
277. What is head command and by default how many lines it show you?  
**Display the content of the file by the first 10 line (default)**
278. What is tail command?  
**output the last 10 lines of the file content**
279. How many lines tail command show by default?  
**10**
280. What are logs?  
**Contain information about all kernel and system program activities messages are usually stored**
281. What is Path to system error logs?  
**/var/log/messages**
282. Difference between /var/log/secure and /var/log/messages  
**Secure is system logs information (Contains information related to authentication and authorization privileges. For example, sshd logs all the messages here, including unsuccessful login), system activities (the global system messages)**
283. What is the main log directory?  
**/var/log**
284. What information /var/log/dmesg contains?  
**Contains kernel ring buffer information. When the system boots up, it prints number of messages on the screen that displays information about the hardware devices that the kernel detects during boot process**
285. Where can we find kernel buffer messages?  
**/var/log/dmesg**

286. Where are security and hardware logs found?  
**/var/log/secure and /var/log/dmesg**
287. Where can you find login-related logs?  
**/var/log/secure**
288. Which files holds hardware-related logs?  
**/var/log/dmesg**
289. What is Umask?  
**sets the value of the system's file**
290. What is the default umask value for a root user and a regular user?  
**0002**
291. What are the different types of permissions in Linux?  
**Read write execute**
292. What is the numeric values that the system assigns to read, write and execute?  
**Read 4 write 2 execute 1**
293. Can you tell me the command used for changing permissions of a file or directory?  
**chmod**
294. What are different ways to change the permissions of a file or directory?  
**Numeric and symbolic**
294. What does chown -R do?  
**Change permission recursive, change the permission of the entire content of the directory**
295. What is meant by chmod 777?  
**User, group and others have read write and execute permissions**
296. How can you change file/directory ownership?  
**chown**
297. What command we use to change the group of a file?  
**chgrp**
298. What are the different modes of vi/ vim editor?  
**Escape insert and command**
299. How to quit vim without saving any change?  
**Press shift + ; then type q!**
300. How can you quit vim with saving the changes you made?  
**Press shift + ; then type wq!**
301. Why we use “!” in addition to “:w” or “:wq” to quit?  
**To force run the command**
302. What are the different modes on Vim that you are familiar with? Name any five modes.  
**Command mode, visual mode, escape mode, insert mode, replace mode**

303. Let's say the word "NYC" appears in a file a hundred times and you want to replace it with "NJ" at every place. What command with you use while you are inside a Vim editor?  
**Enter command mode ( shift+; ) and type %s/NYC/NJ/g and press enter this will replace anything that has NYC will be replace with NJ**
304. What are files that get changed on adding a user?  
**etc/passwd group and shadow**
305. Name the fields of /etc/passwd file.  
**User password userid groupid comment home's user directory shell**
306. What command do you use to know how many user accounts exist on the system?  
**cat /etc/passwd**
307. How do you list the block devices?  
**lsblk**
308. What are the slowest and fastest components of the system?  
**Ram the faster, hdd the slowest**
309. Why do we need RAM if we have the hard disk for storage?  
**Ram helps for start processes faster that will be launch inside the storage drive**
310. When RAM gets full where does data go?  
**Swap space**
311. What is paging out?  
**When the swap data is move in back into the physical ram**
312. What is paging in?  
**When the server has no enough RAM and the process is sent to the swap space**
313. Is paging out is bad thing?  
**Yes and no, no since it helps the server to start process that requires more memory than the server currently has, and yes since it is created on a physical storage drive it will read and drive even if the process is idle**
314. Where swap space is mounted?  
**Device partition**
315. What does df command do?  
**Show available free space on mounted partition**
316. How would you make df command human readable?  
**Using the -h gllag**
317. What does du command do?  
**Disk utilization, estimated file space use**
318. How can we get the disk utilization of a /tmp directory?  
**du /tmp**

319. What is inode number? how can we get the inode number of a file/ directory?  
**Contain the metadata of the file or directory, ls -l or stat**
320. How can we get the inode numbers system wide?  
**df -ih**
321. Name any three filesystems that you are familiar with.  
**Ext4 ext3 xfs ntfs FAT32, exFAT**
322. What is grep command?  
**It is used to search text and strings in a given file. In other words, grep command searches the given file for lines containing a match to the given strings or words**
323. How can I find a string “root” from /etc/passwd file?  
**grep root /etc/passwd**
324. How can you find the pattern “root | failed “ in the /var/log/secure file?  
**grep -E 'root|failed' /var/log/secure**
325. How can we extract all the lines that contain the word “error|ERROR” in /var/log/messages  
**grep -i error /var/log/secure**
326. How can we obtain logs that pertain to sshd from Security log file/login logs.  
**grep sshd /var/log/secure**
327. Tell me the process of NIC bonding
328. Walk me through the process of Linux boot process
329. If you lost root password, how do you recover it
330. What if you run out of physical RAM
331. Any bash shell scripts you have written. Give a few examples
332. Giving file permissions to only ONE user
333. How can you change logging level for /var/log/messages
334. Explain the troubleshooting process of disk space full (/ = 100%)
335. Walk me through the entire process of setting up NFS server
336. Process it taking 100% CPU, how to troubleshoot?
337. What is the latest book you read on law and order?
338. How do you stay up-to-date with healthcare advancements?
339. What do you believe to be some of the most pressing health issues today?
340. If you could design your dream job, what would it look like?
341. Tell me about your process of starting a new project, how do you go about doing it successfully?
341. Tell me how the Internet works?
342. What is the application version you are running in your environment
343. Why are you leaving your job
344. What would you do if a customer said XYZ?
345. How would you market our ABC product?
346. Tell me about a time you had to make a quick decision.
347. Tell me about a difficult experience you had in a clinic or internship and how you overcame it
348. Tell me about a time when you had to act in a leadership capacity
349. Describe a situation where your efforts had a direct impact on the outcome
350. What are your weakness
351. Where do you see yourself in 5 years
352. Describe a time you were unable to complete your work on time and how you handled it?

- 353. Describe a time you disagreed with a supervisor on an important issue?
- 354. Describe a time you had to work with others
- 355. How do you handle difficult situation
- 356. What is your biggest achievement at this point in your life
- 357. How did you handle a difficult situation.