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 IPs 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 deamon 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?
       o grep
       o **mail**
       o touch
       o 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 5th 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 and 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: $tail -10 filename | head -1
       It will show the first line from the last 10 lines of a file

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?
     Crtl 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 20th 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 (interpretor) – 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 delate 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, you 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.