These are the some of the most important command you have to do before the CSA interview,

* Grep: global search of regular expression
* Find
* ping: send an echo to o hostname or an IP addess
* traceroute: finds hop to rreach to perticular host
* netcat
* top: The top command allows users to monitor processes and system resource usage on Linux.
* Iptables
* Iostat
* vmstat
* iptable
* crontab

1. Task: Create directory, add 4 files within it, and change the permission where only the owner can read, write and be able to execute it where everyone else can only read it.
2. Mkdir
3. Touch
4. Chmod 700
5. Task: How to find the linux version and kernel release.

Uname -r

1. Task: Display your hostname and IP address

ifconfig

1. Task: Write down command to create the file.

Touch filenanme

Vi filename

1. Task: Create two files and append one file content to another after then rewrite the content of one file to another.
2. Task: Write down the chmod command with details of each value.

Chmod -rwerwerwe filename

1. Task: change the owner's permission of the file and directory.

Chmod 700 directoryname

1. Task: copy one file to another location, copy all the files of the directories to somewhere else, When to use the -i flag with the copy command.

Cp filename directorylocation

Cp\* to another location

1. Task: Create a soft link between the files. What is a soft link?

ln -s filename linkname

1. Task: Display available disk space by filesystem, in human readable form.

Df -h

1. Task: Display the space taken by each file in the folder, human readable form, and also just the summary of the folder in human readable file.

Df -h

1. Task: find the datatype of the file and which type of file it is.

File filename

1. Task: List out all the grep flags and why we are using i, why we use grep.
2. Task: Create a file with the following content,

“Hhncuinisoncnincjmidc

Ncdiucn0ueiancdufnivdu

Jidujdnnuhytoecodmcijv

Shfjrhfksjdkejfh

jijeoiew0”

Now , find the line which starts with the H, find the file which and with the letter “c”, find the line which the third letter is d. Find the line which has 4 u, find the line which has more then 2 j.

1. Task: Why we are using the ‘find' command and what is the difference between grep and find. Also list out all the flags for the find command and their purpose.

Find: for finding a particular folder/file based on name type, size

Grep matches a charcters/regular expression in a particular thing n displays it

1. Task: Find the highest cpu consuming process and stop the process, What is the different type of kill signals you know and their numbers. Difference between the -9 and -15 option.

-9: for signal cannot be trapped

-15 forces kill can be trapped

1. Task: I want to open the file but want to view one page at a time without scrolling it.
2. Task: Create hard link and soft link. Does inode value change during this process. How to check the inode value of the file. Difference between hard link and soft link.
3. +-
4. Task: find a specific file from the system. Also list out important flags.
5. Task: Find out the hidden files in your directories, as well as the inode number of the file.
6. Task: How to rename the directories, What are the differences between the shadow and normal password and their location in our linux system. How to change the password of the username. What if you don't have permission to change the password?
7. Task: Display the running processes, also list the parent process ID along with the user ID of the PID, also display priority and nice value, what is nice value? How can you change the nice value of the process? Also display information of all opened bash shells.
8. Task: Display the path of the current directory?, Remove one of the files and directory.
9. Task:SSH to the remote server., What are the steps required to create the ssh session without typing the remote server password every time.
10. Task: List out all the users available in your system and switch to another user.
11. Task: Display the first 15 lines of the file. Then Display the last 20 lines of the file. What are the options available for both of this command?
12. Task: Download any archive file and extract it and once again archive it with a different name.
13. Task: Compress the file with two different methodology, what the difference, what is compression of the file and how it works. List out the different types of the compression methods. Also try to compress and archive the files at the same time.
14. Task: Download any zip file and unzip that file and zip the same file with a different name and what is zip?
15. Task: What are the commands that can be used to see the running processes and their %CPU and %MEM.
16. Task: List out all the parameter that are you are getting using the #top command.
17. Task: Install package, remove package and upgrade package . Both in Linux and redhat.

Also write down what are the different methods for the package handling.

1. Task: How can you check the buffer and cache used by kernel. What is the difference between the buffer and cache. [List out the result in mega, kilo and terabytes.]
2. Task: What are the different ways to check the swap memory. Explain swap memory in detail with example.
3. Task: How can you check the kernel IP routing table, How can you check the status of the active socket, How can you check the traffic on each interface.
4. Task: Which command is used to capture the traffic in the linux system, At least write down 7 important flags of that command without --help command.
5. Task: view the content of the file, What are the ways you can create the file and view the content of the file.
6. Task: List out two commands to view the content of the file page by page.
7. Task: How to find the users define quote and check the number of file and disk space used.
8. Task: Which command allows users for automatic rotation,compression, removal and mailing of the logs. How can we achieve all of this task using that command?
9. Task: How can you see how long the system is running and how many users are currently logged in inside our system. What other information can you get using this command?
10. Task: Same task as above but also list how many processes are running by each individual user and what is their TTY and their login time.
11. Task: Show username, date and time and host information.
12. Task: Show currently logged in users.
13. Task: what are the command options do you have to check how many users are currently logged in within our system.
14. Task: how can you list out the files in ascending or descending order.
15. Task: How can you find the file with the given options? What other command can you use to find the file?
16. Task: Create one file and compress it, how can you be able to see the content of the file without uncompressing it.
17. Task: How can you save the created partition without rebooting the system.
18. Task: How can you see the disk partition along with the mount points? Write multiple commands if you know.
19. Task: How can you display the process ID and parent process ID? What are the different methods to display process ID write the command.
20. Task: What are the system monitoring tools available in Linux, At least list out 4.
21. Task: Display information about the network interfaces. How can you find the IP and MAC address of the system and number of input and output packets along with the errors and drops. What are the other values you are able to get from this command that you are using it. List out at least 5 parameters.
22. Task: Display all the methods to print out the routing tables.
23. Task: Display list of all the open files:
24. Task: Can we implement an access control list in our linux system for the file. Which command can we use? When we may implement that command? How can you use it? What is the general syntax of that command?
25. Task: How can you download the content from the internet? When you run this command what will happen at the hardware level or the system level? What is kernel and its importance?
26. Task: Download the content from the internet and save it to the specific file?. How can you run the command in the background ?? How can you download content from multiple URLs using a single command?
27. Task: Can you fill the online form using linux CLI terminal? Which command and how?
28. Task: Which command in linux can be used for the disk manipulation?, What are the operations you can perform with this command related with the partition in the hard disk? Can any user be able to use this command in linux, who has default right to use this command? List out all the flags for this command with examples, how can you save this partition using this command?
29. Task: To format partition which command can you use?
30. Task: What is the logrotate command? Where and how do you configure log rotate operation in the logrotate configuration file? Specify the content of the file and each parameter of the config file?
31. Task: How can you find the specific file in your linux system [list out the flags of that command that you know]? List out the command for the following, find the file in whole drive, find the file in the current directory, find the “shailesh.txt” file, find all the empty files, find all the readable and executable files, find the files with the .mp3 extension.
32. Task: You have an entire folder full of music files in a bunch of different formats. You want to find all the \*.mp3 files from the artist JayZ, but you don’t want any of the remixed tracks. Using a find command with a couple of grep pipes will do the trick: Just write down the single command to satisfy the requirement.
33. Task: How can you check the open ports of the linux system? What are the other operations can you perform with that command? List out all the flags with description and one example.
34. Task: How can you schedule tasks in the linux system? Answer all the commands you know? What are the differences between these two commands?
35. Task: What is crontab and how can you use it? Where is the crontab configuration file located in your system? How can you list the available cron table, How to create the new cron table and how to remove the cron table?
36. Task: how many fields does crontab file have, what will be the line in crontab file which will remove the tmp files from /home/someuser/tmp each day at 6:30 PM.
37. Task: How can you turn on and off the eth1 interface and see the ip address information of that same interface?
38. Task: How can you restart, stop and start the network interface?, Assign a static IP address and default gateway on the fly to the ethernet eth1?
39. Task: Which commands can you use to see the DNS related information? What information can you see using that command and explain it?
40. Task: Which command can you use to configure the speed and duplex of your network interface card (NIC)?
41. Task: What is kernel explain in detail point wise?
42. Task: What is swap memory, and why we are using it in linux?, What is swapiness value and how can you check the current swappiness value or change it?, what is swapiness value range?, Ideally how much swap memory we should assign for our linux system?
43. Task: Which editors are available in the linux system?, which one is your favorite?
44. Task: Explain the Linux boot process in detail as well as in briefly, your answer should be individual? Also list out where the configuration file is located for each step?
45. Task: Explain and linux file system and important of each directory in brief and what they contain? Or define top level linux directories and their purpose.
46. Task: What is run level? What are the different types of run levels along with their name? And where are they located?
47. Task: How to mount a filesystem?, In how many ways can you mount a specific file system and how can you achieve that, write the exact command for that with syntax?
48. Task: You are unable to mount a file system. What might be the reasons?, How can you check the mounted file system?, Where does the information about the mounted file system is stored in which folder?
49. Tsk: Which commands can you use to create the partition?, and after that how can you make the file system from that?
50. Task: What is compression and what is archive?What is the difference between compression and archive? Which commands can you use for compression and archive separately?
51. Task: How can you archive and compress the file at the same time, can you do that for the directory? List out purpose each command used in the command?
52. Task: let’s say there’s a directory at /usr/local/something on the current system and you want to compress it to a file named archive.tar.gz, perform the task?
53. Task: What are the different types of compression methods you know?
54. Task: How can you able to see the hidden directory in linux?, let’s say you want to compress /home/ubuntu, but you don’t want to compress the /home/ubuntu/Downloads and /home/ubuntu/.cache directories.
55. Task: could you archive an entire directory and exclude all .mp4 files.
56. Task: Create the file shailesh.txt and directory shailesh and compress and archive both the file and directory in two different format you know [hint: tar.gz and tar.bz(tr.bz2)] , What is the key difference between the command? Does the size of output files of both the commands are the same?
57. Task: You have the archive file, how can you figure out which command can you use to extract the file?
58. Task: You want to extract the content of the the archive.tar.gz file to the /tmp directory.?
59. Task: What is the proc file system in linux? How can you see the snapshot of the proc files in your PC, what is contained in /proc file system?
60. Task: What is process?, List out different types of processes?, list out all the system calls for the process management and their purpose? What are the different types of process IDs? How can you find out both the types of process ID for the current shell?
61. Task: What is cloudcmd and why are we using it?, How can you start the process in the background using this command? How to list out the background process? How can you convert the background process to the foreground process write the command?
62. Task: What is the difference between the process and state of the process in linux? What are the different state of the process, explain in brief?
63. Task: What are the commands you can use to control the process in Linux? Also list out the supported operation for each command?
64. Task: List out at least 6 signals that can be sent to the process to control it?Which command can you use to see the supported all the signals?
65. Task: open the firefox application and kill that application? You can least out all the possible methods?
66. Task: Suppose you want to kill the process but , using the normal command you could not kill the process why?, How can you kill this kind of process completely?
67. Task: What is a kernel scheduler and what does it do? What parameter is manage the priority of the process in Linux?, Acceptable range for that parameter? Which one has the highest priority and which one has the lowest?
68. Task: start the process “large-job” with the priority of 12, write the command for this task? Suppose any process is already running , how can you change the current priority of the process?
69. Task: changes the nice value of the job with process id 1134 to 17. [key concept to remember for this command]
70. Task: Explain the terms suid, sgid and sticky bit and write the command to set them?
71. Task: What is the init process and what’s the process ID of the init?, Where are the run levels defined?Where does the script for all the run levels are located? What are the two scripts available inside that directory?
72. Task: What is initrd image and what is its function in the linux booting process?
73. Task: what is file descriptor?List the first three file descriptors and what they do?
74. Task: How to check the current partition in the system?How to create a completely new partition in the system step by step? Write each command and their description.
75. Task: Create the file system in LV? , Mounting the logical volume?
76. Task: What is inode in linux?, What are the attributes of each file which are stored in an inode? How can you check the inode number of the /etc/passwd file? Apart from inode value, which command can you use to check all the attributes associated with the file /etc/passwd?
77. Task: What is UID in linux?Who is able to add, delete or modify the user account?
78. Task: What is **/etc/passwd** and **/etc/shadow** file used for in linux?,What is the difference between the **/etc/passwd and /etc/shadow** file?
79. Task: Create a new user with the password, lock the user account try to access it, and unlock the user account and access it, provide response along with the commands.
80. Task: What is a linux group?, What are the types of groups in linux?, where does the group information is stored?
81. Task: Create the group and add the user in the group, what happens if the user already exists in the group?
82. Task: Where does the log files are stored in linux? Also list out at least 5 different types of log files? What are the commands can you use to see the log files?
83. Task: Which service in the linux is responsible for creating the log files? And where does the config file for that service is located?
84. Task: List out at least 5 commands that you can use to check the resource utilization in Linux? Also list out what kind of information you can get with each command?
85. Task: What information can you see using the vmstat?, copy past your output from the linux system and explain each parameter in detain? What is the difference between the buffer, cache and swap memory?
86. Task: What information can you see from the top command?, paste the output from your linux system? Explain each and every parameter in brief and what they indicate?
87. Task: What is the usage of the uptime command? What information can you get using this command?
88. Task: Suppose your linux system is running slow?, How can you troubleshoot this?
89. Task: You are trying to create the file but the file is still not created. What might be the reason for that?
90. Task: Suppose you are opening an application but its take too much time to just open, but afterward its working completely fine, what might be the reason for that?
91. Task: There is a lot of RAM available but your CPU usage is still very high?, List out the possible problems.
92. Task: What is iptable in linux?, what are three types of in built chains in iptable? List out all the flags for the iptable command.
93. Task: How can you check the iptable rule in chain?
94. Task: Allow HTTP traffic for Apache web server over port 80 so it may service web request?, write the command along with the description?
95. Task: Allow FTP traffic for VSFTPD over port 21 to service FTP request, write the command and description?
96. Task: Once we go through all the rules and then we can at last use this command to block all the other types of traffic, which command exactly you can use for that?
97. Task: What is a soft link and hard link? How can you create a soft link and hard link?What are the three differences between the soft kink and hard link?
98. Task: What is daemon?, List out some of the demons that are launched why system V init script, which runs automatically when the system is boot up? Also give some description.
99. Task: What is the zombie process?, How can you check how many zombie processes are running and which zombie process are running? Find at least three commands. Also define the way to kill the zombie process permanently? Which specific kill signal can you use to kill the zombie process?
100. Task: How to check services in linux? Start, stop and restart the httpd service?
101. Task: What is RAID?, How can we manage RAID level?, What are the different RAID levels and give some brief information about each.
102. Task: What is fstab?, Where does the fstab config file located and what information does it contain?Write the exact syntax along with the description of each field.
103. Task: What are the file system types in Linux?, Give brief information about each.
104. Task: What is journaling? How many types of journaling available in linux?, Describe each of them.
105. Task: What do you think how secure is linux?, Explain in detail.
106. Task: What are the different types of Linux flavour you worked with?, and Which one is your best and why?
107. Task: What is demand paging? When a process tries to access a page, what steps are followed?
108. Task: What is an OOM killer and how can we configure it?
109. Task: What is quota? How to control the limit of memory blocks and file to users or group? How can you add the quota?, Suppose you are unable to add the quota?, What steps missing?, How to create the new quotas file in the root directory?, Explain the flags individually. What is grace period in linux?
110. Task: Linux system is slow?, How to troubleshoot the issue? List all the factors you are considering as well as Describe and discuss each in detail along with the screenshot?
111. Task: Customers can’t ssh into their machine or remote machine. What troubleshooting steps will you take? Discuss in detail.
112. Task: Suppose you have plenty of space in your memory, but still cannot write on the drive, what could be the issue?
113. Task: You have to restrict IP such a way that restricted IP cannot use the ftp server?
114. Task: How can you block IP addresses in linux?
115. Task: You need to search for the string “Amazon” in all the “.txt” files in the current directory. How will you do it?
116. Task: You want to send a message to all connected users as “Server is going down for maintenance”, what will you do?
117. Task: As the disk space utilization was so high in the server, the Administrator has removed a few files from the server but still the disk utilization is showing as high. What would be the reason? df shows the disk is full but du shows it still has memory, explain.
118. Task: How can you find unlinked but held open files in linux? Add the screenshot for the result of command over here?
119. Task: Server failed with the hosting service?, What might be the cause for that, troubleshoot the issue?, explain your logic.
120. Task: What is NFS in linux?, List out the important packages and files (their location) for the NFS configuration?
121. Task: Just list out the high level steps to setup and configure NFS mounts on linux server. Give a very brief description for each.
122. Task: List out the important command and their purpose for NFS.
123. Task: What is network bonding?, and What are the types of network bonding? Where are the bond file located in your linux system?
124. Task: What is SELinux?What are the three modes of SELinux?What are the two levels of SELinux?, What are the two ways to check whether SELinux is enabled in your system or not?What is the difference between both of these commands? Attach SS of your result? One of the commands has -b flag why we are using it?
125. Task: How can you enable and disable SELinux?, in both permanent and temporary ways?
126. Task: What is automount?, which command we are using for that?, What is the difference between that command and /etc/fstab?