Linux commands

1. Shell takes the commands and sends to Kernel. Kernel sits between hardward and OS. Depending on the command using, we need to choose the shell.
   Ex: Bash, Fish, Tcsh, Z shell, KornShell

2. / is the root folder
   opt, home, tmp, usr, etc, root, mnt,var are examples of children

3. mkdir dir1 - To create a directory
4. touch f1 - To create a file
5. ls - to list the files and directories
6. date - to show the date of system
7. cal - calendar
8. uptime - How long system is up and running
9. pwd - present working directory
10. whoami - shows the logged in user
11. sudo su - root
12. rm f4.doc - remove file
13. cd - change directory
14. mkdir -p /dir1/dir2/dir3 - if any parent is mising, create them too. This command fails without -p if parent is not existing
15. rmdir /dir1 - remove empty directory
16. rm -r /dir1 - recursive delete, asks permission to delete children
17. rm -r -f /dir1 - delete parent and children with no asking permission
18. touch ../f5 - create f5 in parent directory, .. is go back one level
19. useradd kk - add new user
20. passwd username - to set a password, only super user can create user and passwords.
21. All users avaialble in /etc/passwd. All passwords in /etc/shadow
22. groupadd name - create a group
23. usermod -a -G groupname username - add user to the group. -a is to append to the existing groups otherwise overrides all the existing groups user is part of
24. id ar - shows the list of groups user is part of
25. chgrp groupname filename/dirname - change the groupname on a file. by default username and group name are same. command run by root user
26. read permission - 4, write -2, execute -1
27. chmod 754 filename - 7 is for owner(4+2+1), 5 is for group, 4 is for others. Only owner can run this command
28. usermod -g username - to change the primary group of the user. Any file created by this user is under this group by default
29. umask 222 - to change the default permission for all the files created. it will be 666-222 because linux default for a file is 666, for directory default is 777
30. chown user - change ownership
31. whereis commandname - shows the absolute path of the command script file

32. ps -ef - processes currently in real memory
33. kill process_id - To kill a running process
34. systemctl stop sshd - to stop a service running. Service is a continuous running process
    Ex: ssh - port 22, http - port 80
35. more
36. head -n 99 filename - top 99 lines
37. tail -n 99 filename - bottom 99 lines
38. systemctl start httpd
39. systemctl enable servicename - recommended way to start the service with the server start or reboot
40. chkconfig sshd on - to start the service with the server start or reboot, same as systemctl enable
41. ifconfig
42. hostname -i - get the private ip
43. hostname -f - complete dns name
44. curl ifconfig.me - to get the public ip
45. telnet publicip 80 - to check why my public ip is not accessible
46. netstat -tupln - to see the service listening port number
47. netstat -plant
48. etc/httpd/conf/httpd.conf - you can define the port to run http
49. ps aux - to see the process state
50. curl - if you want to browse something in the terminal
51. All the services and deamons that are manageable by systemctl command are available in /usr/lib/systemd/system
    For Ex: sshd service script is in /usr/lib/systemd/system/sshd.service file
52. top - to see processes running and cpu, memory usage