

1. What is Linux?

Linux is an open-source operating system kernel that serves as the foundation for various Linux distributions (distros).

2. What are some popular Linux distributions?

Ubuntu, CentOS, Debian, Fedora, and Red Hat Enterprise Linux (RHEL).

3. How do you access a remote Linux server using SSH?

Use the `ssh` command followed by the username and IP address or hostname of the remote server.

4. What is the root user in Linux?

The root user is the superuser with full administrative privileges on a Linux system.

5. How do you change your user's password in Linux?

Use the `passwd` command followed by your username to change the password.

6. Explain the file permissions in Linux (e.g., "rwxr-xr--").

File permissions consist of three sets: owner, group, and others. "r" is for read, "w" is for write, and "x" is for execute.

7. How do you change file permissions in Linux?

Use the `chmod` command followed by the permission code and the file name.

8. What is the purpose of the "ls" command in Linux?

The `ls` command is used to list files and directories in a directory.

9. How do you navigate between directories in Linux using the command line?

Use the `cd` command followed by the directory name to navigate.

10. What is the "`pwd`" command used for in Linux?

- The `pwd` command prints the current working directory.

11. How do you copy a file in Linux using the command line?

- Use the `cp` command followed by the source file and the destination.

12. What is the purpose of the "`mv`" command in Linux?

- The `mv` command is used to move or rename files and directories.

13. How can you create a new directory in Linux using the command line?

- Use the `mkdir` command followed by the directory name.

14. Explain the role of the "`df`" command in Linux.

- The `df` command is used to display disk space usage on the file system.

15. What is the "`ps`" command used for in Linux?

- The `ps` command displays information about currently running processes.

16. How do you terminate a running process in Linux?

- You can use the `kill` command followed by the process ID (PID).

17. What is the purpose of the "`grep`" command in Linux?

- The `grep` command is used to search for a specific pattern or text in files.

18. How do you view the contents of a file in Linux using the command line?

- Use the cat command followed by the file name.

19. Explain the "pipe" ("|") operator in Linux commands.

- The pipe operator is used to send the output of one command as input to another command.

20. What is the purpose of the "chmod" command in Linux?

- The chmod command is used to change the permissions of files and directories.

21. How can you view the first few lines of a file in Linux using the command line?

- Use the head command followed by the file name.

22. What is the purpose of the "tail" command in Linux?

- The tail command is used to display the last few lines of a file.

23. How can you find and replace text in a file using the command line?

- Use the sed command followed by the pattern to find and the replacement text.

24. Explain the "vi" or "vim" text editor in Linux.

- "vi" and "vim" are popular text editors in Linux. They offer different modes (normal, insert, command) for editing files.

25. How can you install software packages in Linux using the command line?

- Depending on the Linux distribution, you can use package managers like apt, yum, or dnf.

26. What is the "top" command used for in Linux?

- The top command provides real-time information about system resource usage and processes.

27. How do you restart a Linux server using the command line?

- Use the reboot or shutdown command followed by appropriate options.

28. How can you check the IP address of a Linux server using the command line?

- Use the ifconfig or ip addr command to display network interface details.

29. What is the purpose of the "ping" command in Linux?

- The ping command is used to test network connectivity and check if a remote host is reachable.

30. How do you view a list of users on a Linux system using the command line?

- Use the cat /etc/passwd command to display a list of users.