

Code:

Name:

Class:

1. **What is a shell in Linux?**
 - a) A programming language for developing Linux applications.
 - b) A user interface that allows interaction with the operating system.
 - c) A graphical interface for Linux users.
 - d) A specific type of Linux distribution.

2. **What are the two main types of user interfaces in Linux?**
 - a) Windows Interface and Terminal Interface.
 - b) Graphical User Interface (GUI) and Command-Line Interface (CLI).
 - c) File Explorer and Task Manager.
 - d) Control Panel and BIOS.

3. **Why do many Linux users prefer CLI over GUI?**
 - a) CLI is more visually appealing than GUI.
 - b) CLI provides greater control and flexibility.
 - c) GUI does not support Linux applications.
 - d) CLI does not require authentication.

4. **Which of the following best describes Bash in Linux?**
 - a) A type of text editor.
 - b) The default shell used in Linux.
 - c) A version of the Linux kernel.
 - d) A security tool for Linux.

5. **What is the purpose of wildcards in Linux commands?**
 - a) To generate random file names.
 - b) To refer to multiple files using a single pattern.
 - c) To change user permissions.
 - d) To encrypt files before execution.

6. **Which symbol represents the home directory in Linux?**
 - a) #
 - b) /
 - c) ~
 - d) *

7. **What does the command `ls` do in Linux?**
 - a) It lists the files and directories in the current directory.
 - b) It creates a new directory.
 - c) It deletes all files in a directory.

d) It moves files from one directory to another.

8. What is the function of the man command?

- a) It opens the Linux file manager.
- b) It displays manual pages for Linux commands.
- c) It manages installed applications.
- d) It checks system hardware status.

9. Which of the following commands is used to change the current directory?

- a) ls
- b) cd
- c) pwd
- d) mkdir

10. Which command is used to display the current working directory?

- a) cd
- b) ls
- c) pwd
- d) touch

11. What is the purpose of the tilde (~) symbol in a shell prompt?

- a) It indicates the root directory of the system.
- b) It represents the user's home directory.
- c) It denotes a command error.
- d) It is used to append text to files.

12. Which command allows a user to forcefully remove a file in Linux?

- a) rm -r
- b) rm -f
- c) rmdir
- d) del /f

13. What does the -r option in the cp command do?

- a) Recursively copies directories and their contents.
- b) Removes all existing files before copying.
- c) Displays detailed information about the copied files.
- d) Restarts the copy operation in case of an error.

14. Which of the following is NOT a shell in Linux?

- a) Bash
- b) Zsh
- c) PowerShell

d) Tcsh

15. What is the purpose of the `pwd` command in Linux?

- a) It prints the absolute path of the current working directory, helping users navigate the file system.
- b) It changes the working directory to the parent directory.
- c) It creates a new directory in the current location.
- d) It prints a list of all available directories on the system.

16. How does the `mv` command function in Linux?

- a) It renames or moves files and directories within the file system without creating a copy.
- b) It copies files from one directory to another without deleting the original.
- c) It permanently deletes files that are moved to another directory.
- d) It lists all moved files in a separate log file.

17. What happens if you use the `rm` command without any options?

- a) It removes the specified files without asking for confirmation.
- b) It moves files to the trash folder instead of deleting them permanently.
- c) It prompts the user for confirmation before deleting any files.
- d) It archives the files before removing them.

18. What does the `cat` command do when used with a file name?

- a) It displays the contents of the file on the terminal without modifying it.
- b) It renames the file to a system-generated name.
- c) It deletes the file after displaying its contents.
- d) It creates a copy of the file in a backup directory.

19. Which of the following best describes the `touch` command?

- a) It creates a new, empty file or updates the timestamp of an existing file.
- b) It modifies the content of a file without opening it.
- c) It copies a file to a different location with a timestamp.
- d) It permanently locks a file to prevent modifications.

20. What happens if you use `mkdir newdir` in the terminal?

- a) A new directory named "newdir" is created in the current location.
- b) All files inside "newdir" are deleted permanently.
- c) The system prompts for user confirmation before creating the directory.
- d) A temporary directory is created, which is deleted upon system reboot.

21. What is the function of the `rmdir` command in Linux?

- a) It removes an empty directory but does not delete files inside it.

- b) It deletes all files and directories inside a specified directory.
 - c) It renames a directory before deleting it.
 - d) It moves a directory to another location instead of removing it.
22. What is the purpose of the `man` command when used with a Linux command?
- a) It displays the manual page containing details about how the command works and its options.
 - b) It runs a test version of the command before executing it fully.
 - c) It modifies the default behavior of the command.
 - d) It lists all available commands related to a given keyword.
23. Which Linux command is used to display the current system date and time?
- a) `date`
 - b) `time`
 - c) `sysclock`
 - d) `datetime`
24. What happens if you type `echo "Hello World"` in a Linux terminal?
- a) The text "Hello World" is printed on the terminal output.
 - b) A file named "Hello World" is created in the home directory.
 - c) The system runs a hidden script named "Hello World".
 - d) The command generates a syntax error due to missing arguments.
25. How can you create a new empty file in Linux using the command line?
- a) By using the `touch filename` command, which creates an empty file or updates an existing file's timestamp.
 - b) By running `mkdir filename`, which creates a file in the current directory.
 - c) By using `cp /dev/null filename`, which copies an existing file template.
 - d) By typing `newfile filename`, which generates a file with default content.
26. Which command allows you to count the number of lines in a file?
- a) `wc -l filename`
 - b) `count filename`
 - c) `numlines filename`
 - d) `grep -c filename`
27. How can you view the first 10 lines of a file in Linux?
- a) Use the `head filename` command to display the first 10 lines.
 - b) Run `tail filename` to view the first few lines of the file.
 - c) Use `top filename` to see the first section of the file.
 - d) Open the file with `nano` and manually scroll to the top.

28. What is the key difference between the `head` and `tail` commands in Linux?
- a) `head` displays the first few lines of a file, while `tail` shows the last few lines.
 - b) `tail` is used for sorting data, while `head` is used for deleting files.
 - c) `head` permanently modifies the first 10 lines of a file, while `tail` replaces the last 10 lines.
 - d) `tail` moves a file to a new directory, while `head` creates a backup.
29. What is the function of the `grep` command in Linux?
- a) It searches for a specific pattern in a file and prints matching lines.
 - b) It renames files that contain a given string.
 - c) It removes duplicate lines from a file.
 - d) It creates an index of words found in a file.
30. What happens when you use the `clear` command in the Linux terminal?
- a) The screen is cleared, removing previous output but keeping the session active.
 - b) All files in the current directory are deleted permanently.
 - c) The system logs out the current user.
 - d) The current session is reset, closing all running programs.
31. What is the primary function of environment variables in Linux?
- a) To control system boot options.
 - b) To store configuration settings that affect the behavior of processes.
 - c) To determine the file system structure.
 - d) To encrypt sensitive data in a Linux system.
- 32. Which of the following correctly describes the pipe (|) operator in Linux?**
- a) It is used to redirect output from one command to another command.
 - b) It creates a new shell process.
 - c) It combines two commands into a single executable file.
 - d) It modifies user permissions for a file.
- 33. What does the `kill` command do in Linux?**
- a) Deletes files permanently.
 - b) Terminates a running process.
 - c) Uninstalls software packages.
 - d) Shuts down the Linux system.
- 34. Which of the following options correctly describes the `grep` command in Linux?**
- a) It searches for specific text patterns in a file.
 - b) It moves files from one directory to another.
 - c) It generates a list of currently running processes.

d) It renames files based on user input.

35. Which of the following commands is used to switch to the root user?

- a) sudo su
- b) switch root
- c) sudo login
- d) su root

36. What is the difference between > and >> when redirecting output in Linux?

- a) The > operator overwrites the existing file with new output, while >> appends the output to the existing file.
- b) The > operator saves output in memory, while >> writes output to a log file.
- c) The >> operator creates a new file every time it is used, while > modifies the system log.
- d) Both > and >> perform the same function, with no difference in their behavior.

37. What happens when you run `chmod 755 myfile` in Linux?

- a) The owner gets full permissions, while the group and others get read and execute permissions.
- b) The file is deleted from the system.
- c) The file is encrypted and requires a password to access.
- d) The command has no effect unless executed by the root user.

38. What is the function of the `ps` command in Linux?

- a) It displays information about currently running processes, including process IDs.
- b) It prints system logs to the terminal.
- c) It shuts down unresponsive processes.
- d) It permanently removes background processes.

39. Which command is used to monitor real-time system resource usage in Linux?

- a) top
- b) monitor
- c) syswatch
- d) logs

40. What is the primary purpose of the `sed` command in Linux?

- a) It searches, finds, and replaces text within a file without opening it.
- b) It sorts a file's content alphabetically.
- c) It encrypts a file and restricts access to it.
- d) It moves a file to another directory while keeping its timestamp.

41. Which of the following describes the purpose of the `awk` command in Linux?

- a) It is used for pattern scanning and processing text data in a structured format.
- b) It moves files from one directory to another.
- c) It changes the ownership of a file.
- d) It compresses files to reduce their size.

42. What happens if you execute `kill -9 PID` on a process?

- a) It forcefully terminates the specified process without allowing cleanup operations.
- b) It restarts the process instead of terminating it.
- c) It sends a request to terminate the process, but the process can refuse.
- d) It moves the process to the background but does not stop it.

43. Which command is used to schedule a job for execution at a later time in Linux?

- a) `at`
- b) `now`
- c) `startjob`
- d) `cron`

44. What does the `df` command do when executed in Linux?

- a) It displays available disk space for file systems mounted on the system.
- b) It formats a hard disk and removes all data.
- c) It defragments the file system to improve performance.
- d) It lists all connected USB devices.

45. What is the purpose of the `du` command in Linux?

- a) It reports the disk usage of files and directories in a specified path.
- b) It deletes unnecessary files to free up disk space.
- c) It backs up files from one partition to another.
- d) It unmounts a drive and prepares it for removal.

46. What does the command `tar -czvf backup.tar.gz /home/user` do?

- a) It compresses and archives the `/home/user` directory into a `backup.tar.gz` file.
- b) It extracts the contents of an existing `backup.tar.gz` archive into `/home/user`.
- c) It permanently deletes the `/home/user` directory.
- d) It moves all files from `/home/user` to a backup partition.

47. Which command is used to extract files from a `.tar.gz` archive?

- a) `tar -xzvf archive.tar.gz`
- b) `extract archive.tar.gz`
- c) `untar archive.tar.gz`

d) `unpack archive.tar.gz`

48. Which command is used to create a symbolic link in Linux?

- a) `ln -s target_link link_name`
- b) `symlink target_link link_name`
- c) `link -symbolic target_link link_name`
- d) `mklink target_link link_name`

49. What is the main function of the `iptables` command in Linux?

- a) It configures the firewall to allow or block network traffic.
- b) It creates and manages user permissions for system files.
- c) It sets up an automated backup system.
- d) It configures system-wide keyboard settings.