Sample question for Practice (ST-1)

Que: What is the primary **function of the Linux kernel**?

User interface Device drivers management

File system navigation System administration

Que: Which component of Linux is responsible **for managing processes and system resources**?

Shell Kernel Libraries File system

Que: The **shell in Linux is responsible** for:

Managing hardware resources Providing a command-line interface

Controlling the graphical user interface Handling file system operations

Que: Who is the **original creator** of the Linux kernel?

Richard Stallman Linus Torvalds Eric S. Raymond Andrew Tanenbaum

Que: When was the first version of the Linux kernel released?

1985 **1991** 1995 2000

Que: The GNU General Public License (GPL), under which Linux is distributed, is an example of:

Proprietary software license **Open-source license**

Freeware license Commercial license

Que: Which Linux distribution is known for its **focus on simplicity and ease of use**?

Fedora Arch Linux Ubuntu CentOS

Que: What is the package management system used by Debian-based Linux distributions?

RPM Pacman apt YUM

Que: Which of the following Linux distributions is **designed for penetration testing and ethical hacking**?

# Kali Linux Red Hat Enterprise Linux Gentoo openSUSE

Que: The Linux distribution commonly used for **servers and enterprise environments** is:

Ubuntu Server CentOS Debian Fedora Server

Que: What is the primary **responsibility of the kernel** in an operating system?

Managing user applications Providing a graphical user interface

# Handling system resources and core functionalities

Que: In a microkernel architecture, which of the following **components typically runs in user space rather than kernel space**?

Device drivers Process scheduler File system Memory management

Que: Which of the following **file systems is commonly used by Linux, while not natively supported by Windows**?

NTFS FAT32 ext4 exFAT

Que: What is a **major distinction** between Windows and Linux in terms of licensing?

# Linux is always open source, while Windows requires a paid license.

Windows is always open source, while Linux requires a paid license.

Both Windows and Linux are always open source.

Both Windows and Linux require a paid license.

Que: Which of the following is a **characteristic feature of Linux**, distinguishing it from Windows?

Linux uses a graphical user interface by default.

Linux is primarily designed for gaming.

# Linux follows a monolithic kernel architecture.

Linux supports only a limited number of programming languages.

Que: During the Linux installation process, which component **allows users to select specific software packages to install**?

BIOS settings Bootloader configuration

# Package manager Kernel customization

Que: In the Linux structure, what does the **/bin directory contain**?

Boot files Binary executable files Backup files Device files

Que: What is the primary **function of the Linux kernel**?

Manage peripheral devices Run applications

# Act as an intermediary between software and hardware Manage network connections

Que: Which command is used **to change the current directory** in Linux?

mv cd ls pwd

Que: In Linux, what command is used **to change the current working directory**?

move cd change switch

Que: The command **ls -l** is used to:

List all files including hidden files List files in a long format with detailed information

List only directories List files sorted by modification time

Que: What does a **forward slash (/) represent** in a Linux file path?

# Root directory Home directory Current directory Parent directory

Que: The path **../documents/file.txt** represents a:

Absolute path Relative path Home path Root path

Que: To **create an empty text file named** "example.txt," the command would be:

# touch example.txt create example.txt newfile example.txt edit example.txt

Que: What command is used **to create a new directory** in Linux?

# mkdir newdir createdir makedir

Que: The command **df -h** is used to:

# Display disk free space in human-readable format Delete files

Display disk file information Check disk fragmentation

Que: The command **du -sh /directory** is used to:

# Display disk usage of the specified directory Delete files in the specified directory

Display detailed information about the directory Check for disk errors in the directory

Que: Which command can be used **to find out the sizes of individual files** in a directory?

size ls -l du -a filesize

Que: In the output of the df command, the "Used" column represents:

Total disk space Free disk space Used disk space Available disk space

Que: If you want to navigate to the "user2/documents" directory from the current location, which command should be used?

# cd /home/user2/documents cd /documents

change /user2/documents dir /user2/documents

Que: What does the command **ls /home/user1/document**s do in Linux?

Moves files to the "documents" directory

# Lists the contents of the "documents" directory in "/home/user1"

Removes the "documents" directory

Creates a new directory named "documents"

Que: In Linux, what does the command **ls -l** do?

# Lists files in the long format Lists only the directories in a location

Lists files without showing their permissions Displays hidden files

Que: What is the purpose of the **find command with the -exec option** in Linux?

Display file permissions Execute a command on each found file

Find hidden files only Search for files based on content

Que: Which option in the find command is used to **search for files modified within the last 24 hours**?

-mtime +1 -mtime 0 **-mtime -1** -mtime 1

Que: What is the purpose of a **Linux symbolic link** (symlink)?

Duplicate a file Create a shortcut to a file or directory

Encrypt a file Compress a file

Que: The **file /dev/null** in Linux is used for:

Temporary storage Device communication Log file storage Network communi

Que: In the less command, how can **you search for a specific text string within a file**?

# /search find search grep search search /

Que: The **tail command with the -f option** is commonly used for:

Displaying the first lines of a file Following the growth of a log file in real-time

Truncating a file Rearranging lines in a file

Que: The **chmod** command is used to:

Change the modification time of a file Change file ownership

# Change file permissions Change the file type

Que: The **chown** command is used to:

# Change file ownership Change file permissions

Change the file type Change the modification time of a file

Que: What is the purpose of the **umask** command in Linux?

# Set default permissions for new files Change the ownership of a file

Display file permissions Remove file permissions