100 Day Cyber Security Challenge

Day 1

Linux Basic Commands

➢ What is Linux?

Just like Windows, iOS, and Mac OS, Linux is an operating system. In fact, one of the most popular platforms on the planet, Android, is powered by the Linux operating system. An operating system is software that manages all the hardware resources associated with your desktop or laptop. To put it simply, the operating system manages the communication between your software and your hardware. Without the operating system (OS), the software wouldn't function.

➢ Common Linux Commands

S.No.	Command	Function
1.	ls	Displays information about files in the current directory.
2.	**pwd**	Shows the current working directory's path
3.	**cd**	Changes the working directory
4.	**mkdir**	Creates a new directory
5.	**rm**	Deletes a file
6.	**cp**	Copies files and directories, including their content

7.	**mv**	Moves or renames files and directories
8.	**touch**	Creates a new empty file
9.	**file**	Checks a file's type
10.	**zip and unzip**	Creates and extracts a ZIP archive
11.	**tar**	Archives files without compression in a TAR format
12.	**nano, vi, and jed**	Edits a file with a text editor
13.	**cat**	Lists, combines, and writes a file's content as a standard output
14.	**grep**	Searches a string within a file
15.	**sed**	Finds, replaces, or deletes patterns in a file
16.	**head**	Displays a file's first ten lines
17.	**tail**	Prints a file's last ten lines
18.	**awk**	Finds and manipulates patterns in a file
19.	**sort**	Reorders a file's content
20.	**cut**	Sections and prints lines from a file
21.	**diff**	Compares two files' content and their differences
22.	**tee**	Prints command outputs in Terminal and a file
23.	**locate**	Finds files in a system's database
24.	**find**	Outputs a file or folder's location
25.	**sudo**	Runs a command as a superuser

26.	**su**	Runs programs in the current shell as another user
27.	**chmod**	Modifies a file's read, write, and execute permissions
28.	**chown**	Changes a file, directory, or symbolic link's ownership
29.	**useradd and userdel**	Creates and removes a user account
30.	**df**	Displays the system's overall disk space usage
31.	**du**	Checks a file or directory's storage consumption
32.	**top**	Displays running processes and the system's resource usage
33.	**htop**	Works like **top** but with an interactive user interface
34.	**ps**	Creates a snapshot of all running processes
35.	**uname**	Prints information about your machine's kernel, name, and hardware
36.	**hostname**	Shows your system's hostname
37.	**time**	Calculates commands' execution time
38.	**systemctl**	Manages system services
39.	**watch**	Runs another command continuously
40.	**jobs**	Displays a shell's running processes with their statuses
41.	**kill**	Terminates a running process
42.	**shutdown**	Turns off or restarts the system
43.	**ping**	Checks the system's network connectivity
44.	**wget**	Downloads files from a URL

45.	**curl**	Transmits data between servers using URLs
46.	**scp**	Securely copies files or directories to another system
47.	**rsync**	Synchronizes content between directories or machines
48.	**lfconfig**	Displays the system's network interfaces and their configurations
49.	**netstat**	Shows the system's network information, like routing and sockets
50.	**traceroute**	Tracks a packet's hops to its destination
51.	**nslookup**	Queries a domain's IP address and vice versa
52.	**dig**	Displays DNS information, including record types
53.	**history**	Lists previously run commands
54.	**man**	Shows a command's manual
55.	**echo**	Prints a message as a standard output
56.	**ln**	Links files or directories
57.	**alias and unalias**	Sets and removes an alias for a file or command
58.	**cal**	Displays a calendar in Terminal
59.	**apt-get**	Manages Debian-based distros package libraries