Day-07

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Creating a directory

In windows we call it as “Folder” coming to Linux we call it as directory.

With “mkdir” we can create a directory.

“mkdir” is stands for make directory.

$ mkdir folder1 # create a directory

$ mkdir folder2 folder3 # Can create multiple directories at a time.

Switching the directory

Switch from one directory to another directory

$ cd folder_name

Note: Explain about how to identify a file or directory.

rm - Remove

Removing the files and directories

rm file or directory (It will ask you permission)

rm -rf -file or directory (Forcefully delete the files without asking)

rmdir empty_directory_name (It will delete the only empty directory)

Copy file to file/directory to directory

In windows it's very easy and straight forward coping the files and directories.

cp stands for copy. cp is a Linux shell command to copy files and directories.

Syntax:

cp Source Destination

$ cp file1 file2

Here copying the file1 to file2

To copy the directories

cp -r dir1 dir2

Move

Move command is used to move the files and directories

It renames a file or folder

syntax:

mv source destination

mv file1 file2 - rename the file

mv dir1 dir2 - Moving the directory1 into directory2

Basic "ls" related commands

1. **Basic Usage**:
    - **ls**: Lists the contents of the current directory.
2. **Listing with Details**:
    - **ls -l or ll**: Lists the contents of the directory in long format, showing file permissions, number of links, owner, group, size, and timestamp.
3. **Including Hidden Files**:

Note: before that explain what is hidden dir/file and Show how to create a hidden file/hidden directory.

- **ls -a**: Lists all files, including hidden files (those starting with a dot).
- **ls -la** or **ls -al**: Lists all files, including hidden files, in long format.

4. **Human-Readable File Sizes**:
    - **ls -lh**: Lists files in long format with human-readable file sizes (e.g., KB, MB).
5. **Sorting by Modification Time**:
    - **ls -lt**: Lists files in long format, sorted by modification time, with the newest files first.

6. **Sorting by File Size**:

   - **ls -lS**: Lists files in long format, sorted by file size, with the largest files first.

7. **Reverse Order**:

   - **ls -r**: Lists files in reverse order.

8. **Recursive Listing**:

   - **ls -R**: Lists directories and their contents recursively.

logname

The **logname** command in Linux is a simple and useful utility to retrieve the login name of the user who initiated the current session.

The **logname** command is useful in scripts or applications where you need to know the original login name of the user who started the session, especially when the current effective user ID may have changed due to the use of **su** or **sudo**.

Whoami

The **whoami** command in Linux is used to display the current effective user ID, which is typically the username of the user currently logged into the system or the user whose identity the current process is running under.

whoami is particularly useful for administrative tasks, scripting, and troubleshooting user permissions.

pwd (print working directory)

It is used to display the full path of the current directory that you are working in.

This command is useful for determining your exact location within the directory structure of the filesystem.

Who -b

The **who -b** command in Linux is a straightforward way to check the last system boot time. This can be particularly useful for system administrators who need to monitor system uptime and diagnose potential issues related to system reboots.

uname

The **uname** command in Linux is used to display system information. This command provides details about the operating system, the kernel version, and other system-specific information.

Example

1. **Display Kernel Name**

```sh
uname -s
```

Output:

```sh
Linux
```

2. **Display All System Information**

```sh
uname -a
```

Output:

```sh
Linux hostname 5.8.0-43-generic #49-Ubuntu SMP Wed Jan 27 22:54:38 UTC 2021 x86_64
```

3. **Display Kernel Release**

```sh
uname -r
```

Output:

```sh
5.8.0-43-generic
```

5. **Display Machine Hardware Name**

```sh
uname -m
```

Output:

```sh
x86_64
```