Learning basic Unix commands is essential for navigating and manipulating files and directories within Unix-like operating systems. Below is a comprehensive list of basic Unix commands along with their common usage:

**File and Directory Operations**

1. **ls**: List files and directories
   * ls – List files in the current directory
   * ls -l – List files in long format (detailed view)
   * ls -a – List all files, including hidden files
2. **cd**: Change directory
   * cd dirname – Change to the specified directory
   * cd .. – Move to the parent directory
   * cd ~ or just cd – Change to the home directory
3. **pwd**: Print working directory
   * pwd – Display the full path of the current directory
4. **mkdir**: Make directory
   * mkdir dirname – Create a new directory
5. **rmdir**: Remove directory (empty)
   * rmdir dirname – Remove an empty directory
6. **cp**: Copy files or directories
   * cp source destination – Copy file from source to destination
   * cp -r sourcedir destdir – Copy directories recursively
7. **mv**: Move or rename files or directories
   * mv oldname newname – Rename a file or directory
   * mv file path – Move file to a different directory
8. **rm**: Remove files or directories
   * rm filename – Remove a file
   * rm -r dirname – Remove a directory and its contents recursively
9. **touch**: Create an empty file or update the timestamp of an existing file
   * touch filename – Create a new, empty file or update the timestamp of an existing file
10. **cat**: Concatenate and display file content
    * cat filename – Display the content of a file
11. **more**/**less**: View file content page by page
    * more filename – View file content with pagination
    * less filename – View file content with pagination (allows backward navigation)
12. **head**/**tail**: Display the beginning or end of files
    * head filename – Display the first 10 lines of a file
    * tail filename – Display the last 10 lines of a file
    * head -n 20 filename – Display the first 20 lines of a file
    * tail -n 20 filename – Display the last 20 lines of a file

**File and Text Processing**

1. **grep**: Search for patterns in files
   * grep 'pattern' filename – Search for a pattern in a file
   * grep -r 'pattern' dirname – Search recursively in a directory
2. **find**: Search for files and directories
   * find /path -name filename – Find files or directories with a specific name
   * find /path -type d -name "pattern" – Find directories matching a pattern
3. **sort**: Sort lines of text files
   * sort filename – Sort the lines in a file
4. **uniq**: Report or omit repeated lines
   * uniq filename – Remove duplicate lines in a file
5. **wc**: Word, line, and byte count
   * wc filename – Display the number of lines, words, and bytes in a file
   * wc -l filename – Display the number of lines
   * wc -w filename – Display the number of words
6. **diff**: Compare files line by line
   * diff file1 file2 – Show differences between two files

**Permissions and Ownership**

1. **chmod**: Change file permissions
   * chmod 644 filename – Change file permissions to rw-r--r--
   * chmod +x filename – Make a file executable
2. **chown**: Change file owner and group
   * chown user:group filename – Change owner and group of a file

**System Information**

1. **df**: Report filesystem disk space usage
   * df – Display disk space usage
   * df -h – Display disk space usage in human-readable format
2. **du**: Estimate file space usage
   * du – Summarize disk usage of each file and directory
   * du -sh – Display total disk usage in human-readable format
3. **top**: Display tasks and system status
   * top – Display ongoing processes and system resource usage
4. **ps**: Report process status
   * ps – List current user's processes
   * ps aux – List all processes with detailed information
5. **kill**: Terminate processes
   * kill pid – Kill a process by its Process ID (PID)
   * kill -9 pid – Forcefully kill a process
6. **free**: Display memory usage
   * free – Display the amount of free and used memory
   * free -h – Display memory usage in human-readable format

**Networking**

1. **ping**: Check network connectivity
   * ping hostname – Send ICMP ECHO\_REQUEST packets to a network host
2. **wget**: Retrieve files from the web
   * wget url – Download files from a URL
3. **curl**: Transfer data from or to a server
   * curl url – Transfer data from or to a URL

**Archiving and Compression**

1. **tar**: Archive files
   * tar -cvf archive.tar dirname – Create an archive
   * tar -xvf archive.tar – Extract an archive
2. **gzip**/**gunzip**: Compress/Decompress files
   * gzip filename – Compress a file
   * gunzip filename.gz – Decompress a file
3. **zip**/**unzip**: Create/Extract zip files
   * zip archive.zip file1 file2 – Create a zip archive
   * unzip archive.zip – Extract a zip archive

**Basic Shell Utilities**

1. **echo**: Display a line of text
   * echo "Hello, World!" – Print text to the terminal
2. **date**: Display or set the system date and time
   * date – Display the current date and time
3. **man**: Display manual pages
   * man command – Display the manual for a command
4. **alias**: Create command shortcuts
   * alias ll='ls -l' – Create an alias ll for ls -l
5. **history**: Display or manipulate the command history
   * history – Show command history
6. **clear**: Clear the terminal screen
   * clear – Clear the terminal display
7. **exit**: Exit the shell
   * exit – Close the terminal session

**Redirection and Pipelines**

1. **Redirection**: Redirect output/input
   * command > file – Redirect standard output to a file
   * command < file – Redirect standard input from a file
   * command >> file – Append standard output to a file
2. **Pipelines**: Chain commands
   * command1 | command2 – Pipe the output of command1 into command2

**Examples of Combined Commands**

* **View a file with pagination**: cat file.txt | less
* **Count the number of lines in a file**: wc -l file.txt
* **Search for a pattern in a file and view results page by page**: grep 'pattern' file.txt | less

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