

Linux Filters, Redirections & Basic Commands

--- Filters in Linux ---

1. `grep` - Searches for a pattern in a file.

Example: `grep "error" logfile.txt`

2. `sort` - Sorts lines in a file.

Example: `sort names.txt`

3. `uniq` - Filters out duplicate lines.

Example: `sort names.txt | uniq`

4. `wc` - Counts lines, words, characters.

Example: `wc -l file.txt`

5. `sed` - Stream editor to find and replace text.

Example: `sed 's/old/new/g' file.txt`

6. `awk` - Pattern scanning and processing.

Example: `awk '{print $1}' file.txt`

7. `head` - Outputs first N lines.

Example: `head -n 5 file.txt`

8. `tail` - Outputs last N lines.

Example: `tail -n 5 file.txt`

--- Redirections in Linux ---

1. `>` : Redirect output to a new file (overwrite).

Example: `echo "Hello" > file.txt`

2. `>>` : Append output to an existing file.

Example: `echo "World" >> file.txt`

3. `<` : Take input from a file.

Example: `wc -l < file.txt`

4. `|` : Pipe output of one command to another.

Example: `cat file.txt | grep "text"`

--- Basic Linux Commands ---

1. `pwd` - Print current directory
2. `ls` - List files
3. `cd` - Change directory
4. `mkdir` - Create directory
5. `rmdir` - Remove directory
6. `touch` - Create file
7. `cp` - Copy file
8. `mv` - Move/Rename file
9. `rm` - Remove file
10. `cat` - View file content
11. `nano` - Simple text editor
12. `vim` - Advanced text editor
13. `chmod` - Change file permissions
14. `chown` - Change file ownership
15. `useradd` - Add new user
16. `passwd` - Set user password
17. `su` - Switch user
18. `sudo` - Execute command as superuser
19. `ps` - View running processes

20. `top` - Real-time system monitor

Use ``man command`` to see detailed help for any command.