Part 2

Mastering Linux's Advanced Shell Scripting Commands

Unlocking the Next Level of Shell Scripting Mastery

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1. xargs

Description: Constructs and executes command lines from standard input.

Use Case:
Useful for handling output from one command as input to another.

Example:
`find . -name "*.txt" | xargs rm` deletes all .txt files in the current directory.

2. tee

Description: Reads from standard input and writes to both standard output and a file.

Use Case:
Useful for logging and debugging scripts.

Example:
`ls | tee output.txt` saves the list of files to output.txt while displaying it.

3. alias

Description: Creates shortcuts for long or frequently used commands.

Use Case:
Saves time by simplifying repetitive commands.

Example:
`alias ll='ls -la'` creates a shortcut for ls -la

4. cut

Description: Extracts specific columns or fields from text.

Use Case:
Ideal for extracting structured data from logs or outputs.

Example:
echo "user:password" | cut -d ':' -f 1
extracts user.

5. uniq

Description: Filters out duplicate lines from sorted text.

Use Case:
Useful for cleaning up duplicate data in logs or files.

Example:
sort file.txt | uniq removes duplicate lines from file.txt

6. head

Description: Displays the first few lines of a file.

Use Case:
Quickly preview large files without opening them.

Example:
`head -n 5 file.txt` shows the first 5 lines of file.txt.

7. tail

Description: Displays the last few lines of a file.

Use Case:
Commonly used for monitoring log files in real time.

Example:
`tail -f /var/log/syslog` continuously shows new log entries.

8. basename

Description: Strips the directory and file extension from a file path.

Use Case:
Helpful in scripts for working with file names.

Example:
basename /home/user/file.txt outputs file.txt.

9. export

Description: Sets environment variables for the current shell session.

Use Case:
Required for passing variables to child processes.

Example:
`export PATH=$PATH:/new/path` adds `/new/path` to the PATH.

10. read

Description: Accepts user input from the command line.

Use Case:
Useful for interactive scripts.

Example:

```
read -p "Enter your name: " name
echo "Hello, $name!"
```

11. printf

Description: Formats and prints text, similar to echo but more customizable.

Use Case:
Ideal for creating well-formatted outputs in scripts.

Example:
printf "Name: %s\nAge: %d\n" "Alice" 25.

12. sed

Description: A stream editor for performing basic text transformations.

Use Case:
Used for replacing, deleting, or inserting text in files.

Example:
`sed 's/old/new/g' file.txt` replaces all occurrences of old with new.

Found Useful?

Thank you so much for reading! I really appreciate that you took your precious time to read this!

If you found this post useful, please consider sharing it to help this contribution reach needy ones!

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