

# Assignment-6

- Q: Which command is used to list the contents of a directory? Justify with proper example.

A: Command: ls. Example: ls /home lists files in /home directory.

- Q: Write the command to create a new directory named 123test\_dir.

A: Command: mkdir 123test\_dir

- Q: What is the purpose of the sed command? Justify with proper example.

A: sed is a stream editor for text manipulation. Example: sed 's/apple/orange/g' file.txt replaces 'apple' with 'orange' in file.txt.

- Q: Which distinct command is used to display one-line descriptions of any commands?

A: Command: whatis

- Q: Write the command to create an empty file named “notes.txt”.

A: Command: touch notes.txt

- Q: Differentiate between grep and awk commands with an example.

A: grep is for pattern matching. awk is for field-based text processing. Example: grep 'error' log.txt finds lines with 'error'. awk '{print \$1}' log.txt prints first column.

- Q: Write the command to give read, write, and execute permission to the owner of a file script.sh.

A: Command: chmod u+rx script.sh

- Q: How is chown different from chgrp? Give one example for each.

A: chown changes file owner. Example: sudo chown user file.txt. chgrp changes group ownership. Example: sudo chgrp staff file.txt.

- Q: A user complains that they cannot execute a file even though it exists in their directory. How would you troubleshoot this using `ls -l`, `chmod`, and `whoami`?

A: Steps: 1) Use `ls -l` to check file permissions. 2) Use `whoami` to confirm user identity. 3) If missing execute permission, run `chmod +x filename` to allow execution.

- Q: Design a command pipeline to: find all `.log` files modified in the last 2 days in `/var/log`, display them on screen, and save the results into a file `recent_logs.txt` using `tee` command.

A: Command: `find /var/log -name "*.log" -mtime -2 | tee recent_logs.txt`

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