

Assignment 6

NAME- Shreya Rajni

SECTION-3A

ROLL NO.-59

USN- ENG24CY0161

Q1. Which command is used to list the contents of a directory?

Answer:

ls

Lists all files and folders in the current directory.

Example:

ls /home

Q2. Write the command to create a new directory named 123test_dir.

Answer:

mkdir 123test_dir

Creates a folder with the name 123test_dir.

Q3. What is the purpose of the sed command?

Answer:

sed stands for **Stream Editor**, used to **search, find, replace, insert, or delete** text in files.

Example:

sed 's/linux/unix/' file.txt

Replaces the word *linux* with *unix* in each line.

Q4. Which distinct command is used to display one-line descriptions of any commands?

Answer:

whatis command_name

Example:

whatis ls

Displays a short description of the ls command.

Q5. Write the command to create an empty file named notes.txt.

Answer:

touch notes.txt

Creates an empty file or updates timestamp if it already exists.

Q6. Differentiate between grep and awk commands.

Answer:

Feature	grep	awk
Purpose	Search for patterns	Process and analyze text (fields/columns)
Output	Prints matching lines	Can print specific columns or compute
Example	grep "error" log.txt	awk '{print \$1, \$3}' log.txt

Q7. Write the command to give read, write, and execute permission to the owner of a file script.sh.

Answer:

chmod u+rx script.sh

Gives all permissions to the user (owner).

Q8. How is chown different from chgrp? Give one example for each.

Answer:

Command	Function	Example
chown	Changes file owner	sudo chown user file.txt
chgrp	Changes file group	sudo chgrp staff file.txt

Q9. A user cannot execute a file even though it exists. How to troubleshoot using ls -l, chmod, and whoami?

Answer:

1. Check permissions:
 2. `ls -l file.sh`
 3. Check current user:
 4. `whoami`
 5. If execute permission missing, add it:
 6. `chmod +x file.sh`
-

Q10. Command pipeline to find all .log files modified in last 2 days in /var/log, display them and save results to recent_logs.txt.

Answer:

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

Displays the list on screen and saves it in recent_logs.txt.