

# 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+rwx 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.