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ENG24CY0112
3C – 18

1. What does the command pwd, whoami, and hostname display? (CO1)
- The pwd command shows the current working directory path.
- The whoami command displays the currently logged-in username.
- The hostname command reveals the system's network name.

2. Write the command to create a directory named "project" inside the /home/student folder and keep three .txt file into it. Give output snapshot.
mkdir -p /home/student/project
touch /home/student/project/file1.txt /home/student/project/file2.txt
/home/student/project/file3.txt

3. Explain the difference between absolute path and relative path with proper examples.
- Absolute path begins from the root (/), such as /home/student/project/file1.txt.
- Relative path is based on the current directory, such as project/file1.txt if working within /home/student.

4. What command will give you the already executed command traces in the terminal. Give output snapshot.
history

5. Compare the working functionality of find and locate command. Which one is faster and why?
- find searches the filesystem in real time, so it's always up-to-date but can be slow.
- locate uses a database, so it's very fast but may not show the latest files until the database updates.
- locate is faster due to prebuilt database lookup, while find gives live results

6. Which command is used to modify file permissions in Linux? Give an example.
chmod
Example: chmod u+rwx file.txt adds read, write, and execute permissions for the file owner.

7. A file has permissions -rw-r--r--. What does this mean?
- Owner: read and write
- Group: read only
- Others: read only
- No one can execute the file; only the owner can modify it.

8. Explain the difference between chown and chgrp with an example.
chown changes the owner of a file.
chgrp changes the group associated with a file.
Example: chown alice file.txt
                        chgrp staff file.txt

9. A file needs to be accessible by multiple users but only writable by the owner. How will you set permissions?
chmod 644 file.txt, which sets the permissions to -rw-r--r--—readable by all, writable only by owner.

10. How do you check the manual page for any Linux commands?
The man command.
Example: man ls
This opens the manual for ls; use arrows to scroll, and q to quit.