**LINUX PROGRAMMING: ASSIGNMENT 2:**

**1. What does the command pwd, whoami, and hostname display?**

Answer:

* Pwd:- It shows full path of the current working directory.
* Whoami:- It tells you which user account is currently active in the terminal session.
* Hostname:-It shows name of the computer system network.

**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.**

Answer:

bash

pwd

cd Desktop/

mkdir project

cd project

touch file.txt

touch file1.txt

touch file2.txt

ls

output

file.txt file1.txt file2.txt

**3. Explain the difference between absolute path and relative path with proper examples.**

Answer:

|  |  |
| --- | --- |
| **Absolute Path** | **Relative Path** |
| * It points to a specific location in the file system, irrespective of the current working directory | * It points to the location of a directory using current directory as a reference |
| * It is also referred to as full path or file path | * It is also referred to as non-absolute path |
| * It refers to the location of a file or directory relative to the root directory in Linux | * It refers to the location of a file or directory relative to the current directory |
| * Absolute URLs are used to link to other websites that are not located on the same domain | * Relative URLs are used to link to other websites that are located on the same domain |
| * Example: If your pictures are in C:\Sample\Pictures and index in C:\Sample\Index, then the absolute path for pictures is C:\Sample\Pictures | * Example: If your pictures are in C:\Sample\Pictures and index in C:\Sample\Index, the relative path is “..\Pictures”. |

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

Answer:

history

output

pwd

cd Desktop/

mkdir project

cd project

touch file.txt

touch file1.txt

touch file2.txt

ls

**5. Compare the working functionality of find and locate command. Which one is faster and why?**

|  |  |
| --- | --- |
| **Locate** | **Find** |
| * Speedy results | * Compare to locate little slow |
| * Data maybe accurate | * Data search results are accurate |
| * It uses mlocate.db database | * Find do not use any database real time scan |
| * Do not support strong filter/search regular expression | * It supports more complex regular expressions |
| * Yum install mlocate | * Yum install findutils |

**6. Which command is used to modify file permissions in Linux? Give an example.**

Answer:

Chmod

Example:- chmod 755 script.sh

**7. A file has permissions -rw -r- -r- -. What does this mean?**

Answer:

It means the file can be readable and writeable by its owner but not others

**8. Explain the difference between chown and chgrp with an example.**

Answer:

|  |  |
| --- | --- |
| **chown** | **chgrp** |
| * Changes the user and/or group ownership of a file or directory. | * Changes the group ownership of a file or directory. |
| * The basic syntax is chown [new\_owner][:new\_group] [file]. | * The basic syntax is chgrp [new\_group] [file]. |
| * Example: To change the owner of example.txt to user alice and the group to staff, you would use:   bash  chown alice:staff example.txt | * Example: To change the group of a file named example.txt to staff, you would use:   bash  chgrp staff example.txt |

**9. A file needs to be accessible by multiple users but only writable by the owner. How will you set permissions?**

Answer:

bash

chmod 644 filename

**10. How do you check the manual page for any Linux commands?**

Answer:

man ls