LINUX PROGRAMMING ASSIGNMENT - 05

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ROLL NO: 40
SECTION:B

1. **What is a shell in Linux OS? How many categories of shell is currently exists in Linux? Why bash shell is very popular in Linux distribution?(CO2)**
   Answer - A shell is a command-line interface that allows users to
   interact with the Linux system.
   There are mainly two types of shells:-
    - command-line shell
    - graphical shell
     - the bash shell is most popular because it is user-friendly, fast and
      supports scripting.

2. **What does ls-z command display?(CO1)**
   Answer - ls-z shows the SELinux security context of files and directories, like their labels and permissions.

3. **Write a command to list all hidden files in the current directory.(CO1)**
   Answer -
   ls -a

4. **Explain the difference between hard links and soft links in Linux.**
   (CO1)
   Answer -

Hard link - points directly to the files data on disk. Even if the original
  file is deleted, the data remains.
Soft link - points to the file name, not data. If the original file is
  deleted, the link breaks.

5. A file has permissions -rwxr-x-x. Explain who can read, write and
execute it. (CO1)
  Answer -
Owner - read, write, execute.
Group - read and execute.
Others - execute only.

6. Write the command to change the group ownership of a
file data.txt
  to group staff. (CO1)
  Answer -
  chgrp staff data.txt

7. Why is it dangerous to give 777 permissions to a file?
Explain with
  an example. (CO1)
  Answer -
  777 means everyone can read, write and execute the file.
  Its risky because any user can modify or delete it.
  Example -
      Chmod 777 important.txt

8. What is the difference between apropos and whatis?
(CO1)
  Answer -
  apropos - searches manual pages for a keyword.
  whatis - shows a short description of a specific command.

9. Write a command to redirect the error output of a
command to a file
  named error.log. (CO1)
  Answer -
  command 2> error.log

10. How can you use the tee command to append output to
a file
  instead of overwriting it? (CO4)
  Answer -

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command  |  tee  -a file.txt
(-a means append)
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