**USP LAB**

**WEEK 3**

**Agenda: User Management and File Permissions**

1. Check which group or groups you belong to.
2. Create a user named **user1** with /home/user1 as home directory, user1 as groupname
3. Create another user named **user2** with /home/user2 as home directory and groupname be student.
4. Set password for user1,user2
5. Add supplementary group sudo to user1 and user2 from user student
6. Test your new user1,user2 for working
7. Move to their home directories. Check for the username.
8. Check the umask setting in each user.
9. Create file **exercise3** in your user2 account
10. Find the permissions of file **exercise3**
11. Can you able to access the file exercise3 in the user1 and student according to the permissions you have for group and others. Write your observation. Why or why not?
12. Change the ownership of the file to user1. Now observe the difference.
13. Create a file **exercise3a** in user2
14. Change the umask setting to 0011 for user2.
15. Create file **exercise3b** in user2
16. Find out the difference
17. Change group of file exercise3a from to another group user1. Is it working?
18. Use the umask command to set the default permissions to be 700 for directories. What is the default permission for files after this command?
19. Create a directory named **ex3** under your home directory.
20. Check the default permission of this directory. Is it 700?
21. Create a directory under ex3 directory without moving from your home directory and name it session1.
22. Check the default permission of this directory. Is it 700?
23. Move to session1 directory.
24. Create a file named hw3 under this directory and write five lines about unix. Save this file.
25. Check the permission of this file. Is it 700 or 600? Why? Explain the difference between the permissions for files and directories.
26. Do users in your group have any access to this file? Do other users have any access to this file?
27. Change the permissions to allow users in your group only to copy this file to their own directories. Is there a need to change the permission of any directories? If yes, make the necessary changes.
28. Let the other user in the group copy the file to her home directory. Was the copy successful? If not, find the reason and take the appropriate actions to correct it.
29. Create a greet.c file which has a welcome message. Compile the c program and have the output file as greet. Find the permissions of the file greet.c and greet.
30. Remove the execute permission from the user from greet. Try executing the greet file. You should have a problem. Do you know why the problem is? Fix the problem.
31. **Try playing with different files in different directories in different user.**

**Answers**

1. groups
2. sudo groupadd user1 ; sudo useradd -d /home/user1 -m -g user1 user1
3. sudo useradd -d /home/user2 -m -g student user2
4. sudo passwd user1, sudo passwd user2
5. sudo usermod -a -G sudo user1, sudo usermod -a -G sudo user2
6. su user1 , su user2
7. cd ~ ; whoami [in both the terminals]
8. umask
9. cat > exercise3
10. ls –l exercise3
11. cat /home/user2/exercise3
12. chown user1 /home/user2/exercise3
13. touch exercise3a
14. umask 0011
15. cat > exercise3b
16. change in default file permissions can be observed
17. sudo chgrp /home/user2/exercise3b
18. umask 0077 rwx------
19. mkdir ex3
20. yes. drwx------
21. mkdir ./ex3/session1
22. ls -ld ./ex3/session1. Yes it is 700
23. cd /ex3/session1
24. cat>hw3
25. ls -l hw3. The file permission is 600.
26. cat /home/user1/ex3/hw3 in different user terminals
27. chmod g+w /home/user1/ex3/hw3
28. copy not successful as not write permission in other user. Assign permission to the directory and use it.
29. gedit greet.c; gcc greet.c –o greet; ls –l greet.c greet
30. chmod u-x greet; ./greet