**UNIT- II: The Linux File System, File and Directory management**

**Assignment 2.3**

1. List only text files in your current working directory (Assume text files end with extension txt)

ls \*.txt

1. List all subdirectories from your current working directory

ls -d \*/

1. List the files sorted by file size in your current working directory

ls -S # will sort from large to small

1. Display the files in your current working directory with one file name per line.

ls -l

1. List the files in your current working directory based on last modified time

ls -t

1. List all the files in your current working directory where the filename ends with a single digit. (For eg: if the file names are abc1 and abc12 then the output should display abc1 only)

ls \*[0-9] | grep -E "^[^0-9]\*([0-9]{1})$"

1. Display the files in your current working directory in the sorted order of their names (ascending order).

ls -X

1. Write a command to display the hidden files in the current working directory.

(Hint: hidden file names start with the symbol ‘.’)

ls -a

1. Create a file d1 containing the attributes of all files & directories present in the current working directory, arranged in the descending order of their size.

ls -Slr > d1

1. Write a command to set the file permission to read-only for all the files in your cwd.

find . -maxdepth 1 -type f -exec chmod 444 {} \; # will make file readonly for the user, group and everyone else

1. Write a command to set the file permission to write-only for group users for all the files in your cwd.

find . -maxdepth 1 -type f -exec chmod g=w{} \; # will make all the files in the cur dir to write only for the group

1. Mask the file permission bits such that all the future files are created as read-only for  
   other and group users.

umask 022

1. Display the details of the file /etc/passwd such as inode number, block details, and name length.

stat -c "%i %b %n" /etc/passwd

1. Write a command to enable write permission to group users for all the files in the current working directory. To execute this, initially create a few files without write permission to the group user.

# assuming the umask is set to 022 which is read only to the group and others

touch skillissue

touch noPerms

umask 002

touch yayWorks

touch newFileWithNoskillissues

touch newFileWithPerms

1. Set the file permission bits so that all future files are created as
   1. Read-write files

umask 000 # gives read write for newly created files for users,group and others

* 1. For user give all permission and for group and other user read only permission

umask 022