LINUX COMMANDS PAROGRAMS

Expt. 2 Linux Commands

1. Command to display the following message as such (Use ” and Newline).
   "God! Bless us..
   We are starting Shell Scripting"
2. Get the manual page of ’ls’ command. Search for the word ”alphabetic”. Find the next occurrence and then find the previous occurrence.
3. Read your name from the keyboard and display it.
4. Create the directory structure dir1/dir4 and dir1/dir2/dir3 with a single command and then change directory to dir3
5. Create some files using **Vim**
6. Display the current directory
7. Listing Files and folders
   a. List the contents of dir1 (Qn. 4) and all its descendants
   b. List the contents of dir3 (Qn. 4) in
      i. Alphabetical Order
      ii. Sorted on Time of modification, newest first
      iii. Sorted on Size
      iv. Reverse of all above
      v. Long listing of files Sorted on Size with smallest first and size
      vi. displayed in human readable form
8. Execute **ls** and store the output to a file lsoutput
9. Display the file
   a. starting with the first 10 lines and
   b. starting with the 10th line with provision for
      i. Scrolling Up
      ii. Scrolling Up and Down
10. Execute **ls -l** and add the output to lsoutput, at the end.
11. Execute **ls -l** and feed the result to less command, to scroll through the directory listing.

12. Copy the file file1 to newfile.
    a. If newfile already exists, it should be replaced.
    b. If newfile already exists, it should not be replaced.
    c. If newfile already exists, it should be replaced, but only with the consent of the user.
    d. If newfile already exists, it should be replaced only if its contents is older than that of file1.
    e. Even if newfile is read only.
    f. Create a link instead of copying.
    g. Copy the entire directory tree from dir1 of Qn.4 to a new directory dir5
13. Create a new directory, dir6 inside dir1
    a. Move all files in dir5 into it.

b. Delete all files where the name starts with a vowel character, upper or lower case.
c. Delete all files where the name is at least 3 characters long.
d. Delete all hidden folders, and files.

14. Create a file testfile1 using **Vim**
    a. Set line number
    b. Type your name and address with district and pincode
    c. Copy paste the contents 10 times
    d. Replace all occurrence of your district with a neighbouring district
15. Create 2 files testfile2 and testfile3 using **Vim**.
    a. Modify the permissions of testfile2 using symbolic mode.
        i. Add read permission to others
        ii. revoke write from owner
        iii. set only execute to Group.
        iv. add write to owner, revoke read from others and set read only to group.
        v. set read and write to all
    b. Modify the permissions of testfile3 using numeric mode
        i. Set read and write to all
        ii. set read,write and execute to owner, read and execute to group and read only to others
    c. Set the permissions of testfile2 the same as that of testfile3

16. Use **head** and **tail** piped with cat /etc/passwd to display the details of
    a. The first 12 users in the system.
    b. The last 7 users in the system.
    c. All but the first 3.
    d. All but the last 5.
    e. Only the 9 th.
17. Use **grep** to
    a. Display all lines in a file that contains the string “abc”
    b. Display all lines in a file that *does not* contain the string “abc”
18. Using **expr**
    a. Read two integers X and Y. Display the sum, difference, product, quotient and remainder of these variables.
    b. Read a string, S, a position, p and a length l. Display the substring of length l starting at position p from the string S
19.
    a. Add a normal user, user1. Create (if it does not exist) the folder /user1 and set /user1 as the home directory of user1. Also set /bin/bash as the login shell *(Use a single command)*.
    b. Modify the user account of user1, to expire it after a specific date.
    c. Change the owner and group of the directory tree from dir2 and all its contents to user1

d. Delete the user account user1
    i. By retaining the home folder
    ii. By deleting the home folder

20. Miscellaneous
    a. Using **tar** create a tar.gz file of the folder dir1 of Qn.4 with the name *mydir.tar.gz*
    b. Extract the contents of *mydir.tar.gz* to dir6 of Qn.14
    c. Use **top** to display processes sorted on
        i. ProcessId
        ii. CPU%
    d. Use **ps** to display
        i. Processes associated with the current terminal
        ii. All processes in the system
    e. Use **df** to display the storage available in each partition in human readable form.

https://www.w3resource.com/linux-system-administration/working-with-files.php