UNIX Assignments: Day 1

Concept: Basic commands in UNIX, Filters, Pipes

Objective: At the end of the assignment, participants will be able to:

- Execute Basic Unix commands
- Implement the concepts of Pipes and Filters
- Work with vi editor

Problems:

Section 1:

1. List all the files and sub directories of the directory /bin.
2. List all the files including hidden files in your current directory.
3. List all the files starting with letter 'r' in your current directory.
4. List all the files having three characters in their names, from your current directory.
5. List all the files with extension .doc in your current directory.
6. List all the files having the first letter of their name within the range 'l' to's', from your current directory.
7. Create a file text1 and read its input from keyboard.
8. Copy the contents of file text1 to another file text2.
9. Append the contents of file text2 to file text1.
10. Count the number of files in the current directory.
11. Display the output of command ls –l to a file and on the output screen.
12. From file text1 print all lines starting from 10th line.
13. Find the number of users currently logged on to the system.
14. Delete all the files with their names starting with "tmp".

Section 2:

1. Count the total number of words in file text1.
2. List the contents of ls command page wise.
3. Create a file FILE2 with some text in it. Increase the no. of hard links to the file FILE2 to 3 and check the inode number and link count for those names.
4. Using one single command, display the output of "who" and "pwd" commands.
5. Display the system date in following format:

   Today is Friday, 17 May 96
6. Display the following text message on the monitor screen.

   Deposited $100 to you account
7. Display the following message on the monitor.

   The long listing of my home dir …… is ……

   (Hint: Use ls – l and pwd commands)
8. Use **find** command to locate the following within your home directory tree:
   a) Files with extension .c or .pl
   b) Directories having permission 755
   c) Files having permission 655
   d) Files having inode number 12122
   e) Files which have not been accessed for more than a year and save the list in Old_File
   f) Files whose size is greater than 1024 bytes

Section 3 :

1. Using vi editor:
   a) Create a file "Data1.txt
   b) Save the file and exit from the vi editor.
   c) Open the vi editor without specifying a file name
   d) Write some text and and save it to a file "MyData2.txt"
   e) Repeat point (c) but after writing some text don't save and just exit "vi"
2. Create a file using vi editor and enter the following text in it:

   Unix Unix Unix Unix Unix

   Unix is multi user operating system, Unix is multi tasking o\perating system

   Everything on Unix is a file.

   Unix File structure is hierarchical like an upside down tree.

   Regular files cannot contain another file, or directory

   Directory File Contains directory(s) and/or file(s) within it

Device files are used to represent physical devices.

Symbolic link is an indirect pointer to a file

a) Save the file without exiting vi.

b) Display the line number from within vi

c) Move first three lines of the file to the end of the file.

d) Copy 5th line and paste above the first line.

e) Search the word ***Unix*** in forward direction

f) Search the word ***Unix*** in backward direction

g) Replace all the occurrences of the word ***Unix*** with ***UnixOS***