OPERATING SYSTEMS LAB

Course Code: CSE 424

Credit Unit: 01
Total Hours: 20

Course Objectives:
- To introduce Basic Unix general purpose Commands.
- To learn vi editor.
- To learn shell script.
- To learn file management and permission commands.

Software Required: UNIX SCO

Course Contents :

Lab Experiments are based on the course Operating Systems (CSE 404)

Following experiments should be performed in lab:

1. Write a shell Script to assign a file permission to the given file using Symbolic Mode/Absolute Mode: **(1 Hour)**
2. To compresses a file using gzip and pack commands.: **(1 Hour)**
3. To find a given pattern in a list of files of current directory using grep and fgrep commands.: **(1 Hour)**
4. Write a shell script to create two directories and store five files in one directory using the related commands and to transfer all the files to another directory.: **(1 Hour)**
5. write a shell script to accept a file name as input and display whether it exits or not. If it exists, then give the details of its attributes like access permission, its size etc.: **(1 Hour)**
6. Shell Script to find out the sum of the given numbers using command line argument.: **(1 Hour)**
7. Write a shell script to find the largest among the 3 given numbers also write a shell script to find the smallest.: **(1 Hour)**
8. Write a shell script to find sum of digits of a number.: **(1 Hour)**
9. Write a shell scripts which works similar to the Unix commands Head Tail.: **(1 Hour)**
10. Write a shell script to find the sum, the average and the product of the four integers entered.: **(1 Hour)**
11. Write a shell script to find how many terminals has this user logged in.: **(1 Hour)**
12. Write a shell script to reverse a number supplied by a user.: **(1 Hour)**
13. Write a script to find the value of one number raised to the power of another.: **(1 Hour)**
14. Write a shell script, which will receive any number of filenames as arguments. The shell script should check whether such files already exist.: **(1 Hour)**
15. Write a shell script, which will receive any number of filenames as arguments. The shell script should check whether such files already exist.: **(1 Hour)**
16. Write a shell script to reverse the contents of a file: **(1 Hour)**
17. Write a script to count and report the number of entries in each subdirectory mentioned in the path, which is supplied as a command-line argument.: **(1 Hour)**
18. Write a shell program to add, subtract and multiply the 2 given numbers passed as command line arguments**: (1 Hour)**
19. Write a menu driven shell script for Copy a file, remove a file, Move a file.: **(1 Hour)**
20. Write a shell program to add, subtract and multiply the 2 given numbers passed as command line arguments.: **(1 Hour)**

Course Outcomes:

- Identify the basic Unix general purpose commands.

- Apply and change the ownership and file permissions using advance Unix commands.

- Use the awk, grep, perl scripts.

- Implement shell scripts and sed.

- Apply basic of administrative task.

Examination Scheme:

IA			EE			
A	**PR**	**Practical Based Test**	**Major Experiment**	**Minor Experiment**	**LR**	**Viva**
5	10	15	35	15	10	10

Note: IA –Internal Assessment, EE- External Exam, A- Attendance, PR- Performance, LR – Lab Record, V – Viva.

Text & References:

- "Unix Programming Environment" The Kernighan and Pike Prentice – Hall of India
- "Unix –Shell Programming" Kochar
- "Unix Concepts and application" Das Sumitabha Tata Mcgraw Hill