

List of Assignments (Jan-Apr 2022)

Subject – Operating Systems Lab

Course Code : CSL 403

Class – SE (Computer Engineering)

Sem : IV

1. . Explore the internal commands of linux like

LO1

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|-------------------------------------------------------------------------------------------------------------------|-----------|-----------|
| 1. ls | 2. Mkdir | 3. chdir |
| 4. rmdir | 5. Cat | 6. rm |
| 7. mv | 8. Cp | 9. head |
| 10. tail | 11. Sort | 12. wc |
| 13. chown | 14. Chmod | 15. chgrp |
| 16. umask | 17. Ps | 18. pipe |
| 19. Redirection operators | | |
| 20. Explore commands for following: | | |
| a. Display top 10 processes in descending order, | | |
| b. Display the process with highest memory usage, | | |
| c. Display current user logged in and logname, | | |
| d. Display current shell, home directory, operating system type, current path setting, current working directory, | | |
| e. Display OS version, release number, kernel version. | | |

2. Write Shell Programs to

LO1

1. Add 2 numbers
2. Check if a number entered is even and odd
3. Find sum of n numbers
4. Determine if a person is eligible to vote or not
5. Display all filenames beginning with character 'a' and displays its contents
6. Find Factorial of a number
7. Check validity of a username and password with a function defined in the code

3. Process Scheduling Algorithms **LO2**

WAP to simulate Non Pre-emptive Priority Scheduling Policy

4. Memory Allocation Techniques **LO4**

Write programs to simulate the Bestt Fit Memory Allocation Technique

5. Page Replacement Policies **LO5**

WAP to simulate following LRU Page Replacement techniques

6. Write a program to simulate Paging technique **LO5**

7. Write a program to implement the SSTF Disk Scheduling Policiy **LO6**

8. Write a program to implement the following SCAN Disk Scheduling Policy **LO6**

9. WAP to simulate Bankers Algorithm **LO3**

10. Write program to simulate Linked File Allocation Technique **LO6**

11. Written Assignment 1 **LO6**

Topic : File Management

1. Explain all File Organization techniques with one example for each
2. Explain File Allocation Techniques with one example and advantages and disadvantages of each technique

12. Written Assignment 2 **LO1**

Topic : Mobile OS

Explain the following points

- 1.What is Mobile OS ??
2. Explain features of IOS and Android OS
3. Mention differences and similarities between Android OS and IOS