

## Assignment 1 - Operating System- CBCS 21 (Lab)

### Implement the following in C/C++/Java

Demonstration/Submission Date: 13-03-2019

1. FCFS Scheduling.
2. Shortest-job-first/SJN Scheduling.
3. Priority Scheduling.
4. Round-Robin Scheduling.
5. Multilevel queue Scheduling.
6. Multilevel Feedback Queue Scheduling.
7. Linux Scheduling.

## Assignment 2 - Operating System- CBCS 21 (Lab)

Demonstration/Submission Date: 27 -03 -2019

### SHELL PROGRAMMING:

1. Write a shell script that accepts a file name, starting and ending line numbers as arguments and displays all the lines between the given line numbers.
2. Write a shell script that deletes all lines containing a specified word in one or more files supplied as arguments to it.
3. Write a shell script that displays a list of all the files in the current directory to which the user has read, write and execute permissions.
4. Write a shell script that receives any number of file names as arguments checks if every argument supplied is a file or a directory and reports accordingly. Whenever the argument is a file, the number of lines on it is also reported.
5. Write a shell script that accepts a list of file names as its arguments, counts and reports the occurrence of each word that is present in the first argument file on other argument files.
6. Write a shell script to list all of the directory files in a directory.
8. Write a shell script to find factorial of a given integer.
8. Write an awk script to count the number of lines in a file that do not contain vowels.
9. Write an awk script to find the number of characters, words and lines in a file.
10. Develop an interactive grep script that asks for a word and a file name and then tells how many lines contain that word.
11. Write a sed command that swaps the first and second words in each line in a file.
12. Write a shell script that accepts one or more file name as arguments and converts all of them to uppercase, provided they exist in the current directory.
13. Write a shell script that determines the period for which a specified user is working on the system.
14. Write a shell script that deletes all lines containing a specified word in one or more files supplied as arguments to it.
15. Write a shell script that computes the gross salary of an employee according to the following rules:  
i) If basic salary is < 1500 then HRA =10% of the basic and DA =90% of the basic.  
ii) If basic salary is >=1500 then HRA =Rs500 and DA=98% of the basic  
The basic salary is entered interactively through the key board.
16. Write a shell script that accepts two integers as its arguments and computes the value of first number raised to the power of the second number.
17. Write an interactive file-handling shell program. Let it offer the user the choice of copying, removing, renaming, or linking files. Once the user has made a choice, have the program ask the user for the necessary information, such as the file name, new name and so on.
18. Write a shell script which receives two file names as arguments. It should check whether the two file contents are same or not. If they are same then second file should be deleted.