

Paper Code: BCADSC 3.7

Paper Title: Operating Systems Lab

Teaching Hours: 3 Hrs / Week

Marks: Th-40+IA-10

Credits: 1

Section A:

1. Write a C/Java program that implements a producer-consumer system with two processes.
2. Write a C/Java program to allow cooperating processes to lock a resource for exclusive use, using Semaphores
3. Write a C program to implement SJF CPU scheduling.
4. Write a C program to implement FCFS CPU scheduling.
5. Write a C program to implement Priority based CPU scheduling.
6. Write a C program to implement FIFO page replacement.
7. Write a C program to implement LRU scheduling.
8. Write a C program to implement memory management using paging technique.

Section B :

1. Write a shell script to generate mark-sheet of a student by reading five subject marks, calculate and display total marks, percentage and Class obtained by the student.
2. Write a shell script that displays first n prime numbers as output.
3. Write a shell script to read n numbers as command arguments and sort them in descending order.
4. Write a shell script to read 2 filenames and find which file has more number of words (lines/characters)
5. Find which file is older.
6. Read a directory name and find the number of subdirectories, text files and link files.
7. Write a shell script to display all executable files, directories and zero sized files from current directory.
8. Write a shell script to check entered string is palindrome or not.
9. Write a shell script to perform basic arithmetic operations(use case statement)
10. Write a shell script to determine whether a given file exists or not, file name is supplied as command line argument