(A30517) OPERATING SYSTEMS LAB

B. Tech (CSE-AIML) IV Semester	L	T	P	C
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List of Experiments

Week 1: Simulate the following CPU Scheduling Algorithms
a). FCFS b). SJF c). Priority d). Round Robin
Week 2: Simulate Banker's Algorithm for Deadlock Avoidance.
Week 3: Simulate Memory Management Technique.
a) Paging b) Segmentation
Week 4: Simulate the following Page Replacement Algorithms
a). FIFO b). LRU c). OPTIMAL
Week 5: Simulate the following File Allocation Strategies
a). Sequential b). Indexed c. Linked
Week 6: Simulate the following disk scheduling algorithms
a). SCAN b). CSCAN c). SSTF
Week 7: Write a C program to simulate the following contiguous memory allocation techniques
a). First-fit b) Best-fit c) Worst-fit
Week 8: Write programs using the I/O system calls of UNIX/LINUX operating system (open, read, write, close, fcntl, seek, stat, opendir, readdir)
Week 9:
a) Write a C program to simulate producer-consumer problem using semaphores.
b) Write a C program to simulate the concept of Dining-Philosophers problem
Week 10: Write C programs to illustrate the following IPC mechanisms
a) Pipes b) FIFOs c) Message Queues d) SharedMemory

Course outcomes
Students shall be able to
1.Implement CPU Scheduling Algorithms
2. Demonstrate Inter-process communication
3. Demonstrate Page Replacement Algorithms