Due Date: July 26, 2023

BCA 4th semester Operating system Lab Work

1. Write a program to create process by implementing fork (), wait (), and exit () system call.
2. Write a "program to create multi-threaded process."
3. Write C programs to simulate solutions to Classical Process Synchronization Problems: Producer-Consumer Problem.
4. Write C programs to simulate CPU scheduling algorithms: FCFS, SJF, and Robin. Also find the average turn around time and waiting time for each of the algorithm. (Quantum time (in ms): 5)
5. Write a program to simulate the following contiguous memory allocation technique. a) Worst-fit b) Best-fit c) First- fit
6. Write a program to simulate Page replacement Algorithm: FIFO, LRU & optimal
7. Write a program to simulate Disk Scheduling Algorithms: FCFS, SCAN, SSTF.

Instructions:

a) Program must be in Hand written format after successful execution.
b) Attach snapshot of the output at the end of each program (you must be print name and roll number at output section for each of program)
c) Appropriate margin must be taken in each hand written page.
d) Apply appropriate format while creating lab report which is already practice.
e) Cover page for your lab report same as in other subject lab report.
f) Table of content and internal structure of lab report as given below.
g) You can choose your language as you comfort.

LIST OF EXPERIMENTS

S.No.	Name of the Experiment	Date of Experiment	Date of Submission	Page No	Faculty Signature
1	Write a program to create process by implementing fork (), wait (), and exit () system call.	2023-07-06	2023-7-15	1	

Lab No 1. / Experiment 1

AIM: To write the program to implement fork () system call.

DESCRIPTION:

Used to create new processes. The new process consists of a copy of the address space of the original process. The value of process id for the child process is zero, whereas the value of process id for the parent is an integer value greater than zero.

PROGRAM:

// write program here……...

OUTPUT:

// Attach snapshot of the program output here…...

RESULT: Thus, the program was executed and verified successfully.

Good Luck Happy Learning!!!