**Tribhuvan University**

**Institute of Science and Technology**

**Amrit Science Campus, Lainchaur**



**Submitted By**

**Name: …………………………………...**

**Roll No.: .……………………………….**

**Submitted To**

**Navaraj Negi**

**Department of Computer Science and Information Technology**

**Operating Systems Lab Report**

|  |  |  |  |
| --- | --- | --- | --- |
| Lab No. | Name of Experiment | Date of Submission | Signature |
| 1. | Study of basic Commands in Linux Operating System. |  |  |
| 2 | Write a program for implementation of Thread and Process. |  |  |
| 3 | Write a C program to implement a producer-consumer problem using Semaphores. |  |  |
| 4 | Write a C program to Simulate the concept of Dining-philosophers problem. |  |  |
| 5 | Write a C program to simulate the following non-preemptive CPU scheduling algorithms to find turnaround time and waiting time. a) FCFS b) SJF c) Priority |  |  |
| 6 | Write a C program to simulate the following preemptive CPU scheduling algorithms to find turnaround time and waiting time.  a) Round Robin b) Priority |  |  |
| 7 | Write a C program to Simulate Bankers Algorithm for Deadlock Avoidance. |  |  |
| 8 | Write a C program to Simulate the MVT and MFT memory management techniques. |  |  |
| 9 | Simulate paging technique of memory management. |  |  |
| 10 | Write a C program to simulate the FIRST-FIT contiguous memory allocation technique. |  |  |
| 11 | Write a C program to simulate the BEST FIT contiguous memory allocation technique. |  |  |
| 12 | Write a C program to simulate the WORST-FIT contiguous memory allocation technique. |  |  |
| 13 | Write a C program to simulate FIFO page replacement algorithm. |  |  |
| 14 | Write a C program to simulate LRU page replacement algorithm. |  |  |
| 15 | Write a C program to simulate LFU page replacement algorithm. |  |  |
| 16 | Write a C program to simulate Optimal page replacement algorithm. |  |  |
| 17 | Write a C program to simulate the following file organization techniques:  a) Single level directory  b) Two level directory  c) Hierarchical |  |  |
| 18 | 18. Write a program to Simulate all file allocation strategies  a) Sequential b) Indexed c) Linked |  |  |
| 19 | 19. Write a C program to simulate disk scheduling algorithms.  a) FCFS b) SCAN c) LOOK |  |  |