

Operating Systems & Compiler Design Lab

List of Experiments

1. Simulate the following CPU scheduling algorithms:
 - (a) Round Robin (b) SJF
 - (c) FCFS
 - (d) Priority
2. Simulate the following:
 - a) Multiprogramming with a fixed number of tasks (MFT)
 - b) Multiprogramming with a variable number of tasks (MVT)
3. Simulate the following page replacement algorithms:
 - a) FIFO b) LRU
 - c) LFU
4. Write a C program that illustrates two processes communicating using shared memory
5. Write a C program to simulate producer and consumer problem using semaphores
6. Simulate Bankers Algorithm for Dead Lock Avoidance
7. Simulate Bankers Algorithm for Dead Lock Prevention.
8. Write a C program to identify different types of Tokens in a given Program.
9. Write a Lex Program to implement a Lexical Analyzer using Lex tool.
10. Write a C program to Simulate Lexical Analyzer to validating a given input String.
11. Write a C program to implement the Brute force technique of Top down Parsing.
12. Write a C program to implement a Recursive Descent Parser.
13. Write C program to compute the First and Follow Sets for the given Grammar.
14. Write a C program for eliminating the left recursion and left factoring of a given grammar
15. Write a C program to check the validity of input string using Predictive Parser.
16. Write a C program for implementation of LR parsing algorithm to accept a given input string.
17. Write a C program for implementation of a Shift Reduce Parser using Stack Data Structure to accept a given input string of a given grammar

18. Simulate the calculator using LEX and YACC tool.