1. Input a regular expression. Then convert it to NFA.
2. Input a regular expression. Then convert it to DFA.
3. Input an NFA. Then convert it to DFA.
4. Implement simulating NFA algorithm.
5. Implement simulating DFA algorithm.
6. Implement transition diagram mechanism for recognizing tokens.
7. Implement NFA and DFA mechanism for recognizing tokens.
8. Input a CFG. Then analyze it.
9. Input a CFG. Perform elimination left recursion operations.
10. Input a CFG. Perform left factoring operations.
11. Input a CFG. Find FIRST and FOLLOW sets.
12. Input a CFG. Find FIRST and FOLLOW sets and construct the parsing table.
13. Input a CFG. Find FIRST and FOLLOW sets and construct the parsing table. Also show sample derivation of a sentence.
14. Input a CFG. Find FIRST and FOLLOW sets and construct the parsing table for panic mode recovery strategy. Also show sample derivation of a sentence.
15. Perform semantic analysis.
16. Implement a simple code generator for a given block of three address code.