

Exam # 1 Topics

1. DFA, NFA, Regular Expressions
 - (a) Converting Regular Expressions to NFA
 - (b) Converting NFA to DFA
 - (c) Minimizing the number of states in a DFA
2. Lexical Analyzers
 - (a) Lexemes that may be prefixes of other lexemes, recognizing the longest lexeme
 - (b) General method for constructing lexical analyzers
3. Grammars
 - (a) Context free grammars
 - i. definitions
 - ii. writing grammars
 - iii. ambiguity
 - (b) Derivations, parse trees
 - (c) Left factoring a grammar
 - (d) Eliminating left recursion from a grammar
4. LL(1) Predictive Parsing
 - (a) FIRST and FOLLOW sets
 - (b) Constructing a predictive parsing table
 - (c) Iterative table-based parsing
 - (d) Recursive descent parsing