CS 142 Final Exam Review

Winter 2016
Topics Covered

• Scanner
  – NFA/DFA
• Parsing
  – Ambiguity
  – LL parsers and LR parsers
  – Conflicts in an LR parser
• Semantic analysis
  – Symbol table and scoping
  – Type system and type inference
• Optimization
  – How to generate three address code
  – Dataflow optimizations, e.g., how each optimization transforms the program
• Understand what tasks belong what compiler phase