

# Programming Language Paradigms Lecture

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September 13, 2021

## 1 Chapter 4

### Lexical Analysis

- called lexer
- pattern matching
- find lexeme's and tokens
- includes skipping whitespace and comments
- methods of specifying lexers
  - Formal description using regex (or similar language)
    - \* lexer for floats may be  $[0-9]^+backslash.[0-9]^+$
  - Design state transition diagram. Use the design to write a program
    - \* similar to an automaton
    - \* uses a state diagram to parse each character
  - Design state transition diagram, but turn it into a table and write a table-driven program

### Syntax Analysis

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