

16 Apr 2025 - Compilers - Week 03

→ Suggestion: don't pack too many regexes into one.

floating:

$$\underbrace{(D^* \cdot D^+ \mid D^+ \cdot D^*)}_{\text{lexeme}} (e \mid E \ D^+)?$$

Python, essential reference

2 ways

└→ lex .l
└→ transition diagram

write regex, output DFA, regex, easy
but a lot of code.

performance issues

may not fit into
L1 cache

↓ } → if you are writing in a C program

*
→ retraction state
→ see slides

Mini-assignment → study gcc, clang, which ones
use lex

lex.yy.c → table
→ δ