Parsing Lab – Parser Generators

Lab 1: LL(k) Grammars

Task

Build parser for "calculator"

- Input is arithmetic expression
- Output should be value of the expression
- Error handling is not required, but appreciated
- Minimal set of expressions: Terms over $\mathbb{N}$ with $+$ and $\cdot$ and parentheses $(,)$

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Document your development

- Identify subset of expressions (CFG or textual description)
- Document choice of lexer generator, parser generator, ideally how to compile/run
- Identify form of final CFG (e.g., LL(1), LL(2), etc.)
- Identify k of actual LL(k) parser built if possible

Submission

- Submit source and (short) documentation in Moodle
- Submission will only be graded "pass" or "fail"
  (parser works as advertised, documentation legible)

Deadline: Sunday, May 12, AoE