Lecture 5

Lexical Analysis

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January 29, 2025

Takeaways from the last class

- Difference between **lexeme** and **token**

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- **Maximal Munch**

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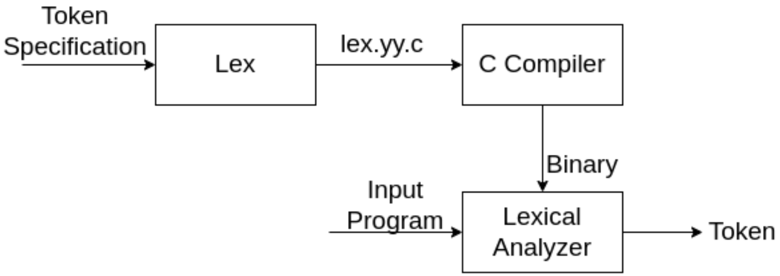

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- Section enclosed in %{%} delimiter lines are copied to the lex.yy.c file.

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  $include < math.h >$
  $int \quad count;$
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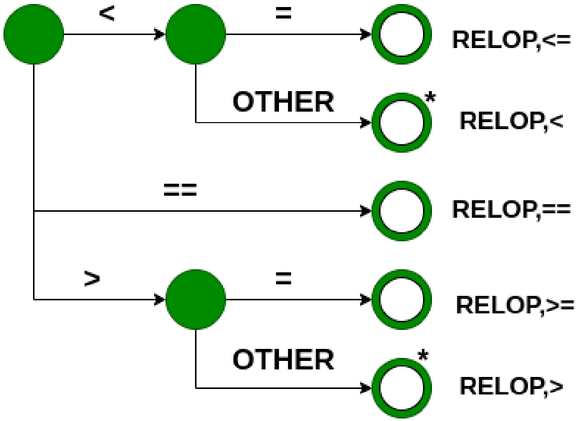
- Lexical definitions consist of **regular definitions, priority rules**, and **maximal munch principle**
- Construct an analyzer that will return $\langle$`token, lexeme`$\rangle$ pairs

Transition Diagram for Relational Operator



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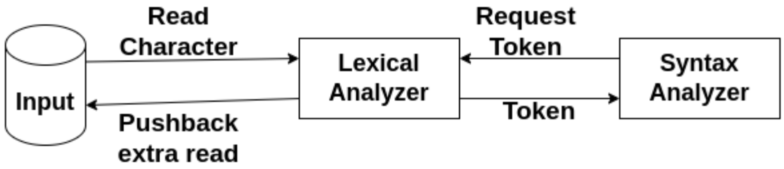
- This can be implemented using **lots of** `switch-cases` in C programming language.

Interface to other passes


Read Character
Request Token
Input
Lexical Analyzer
Syntax Analyzer
Token
Pushback extra read