

Lexical Analysis Programming Languages

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Automatic Generation of Lexical Analysis

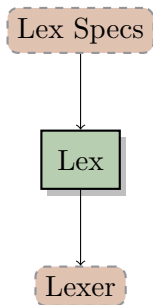
Introduction

- 1 Belongs to the Lex family of tools
- 2 First created in AT&T Bell Labs in 1975
- 3 Several implementations

Programming Language	Implementation
C	Lex
C++	flex
Java	JLex
OCaml	Ocamllex
...	...

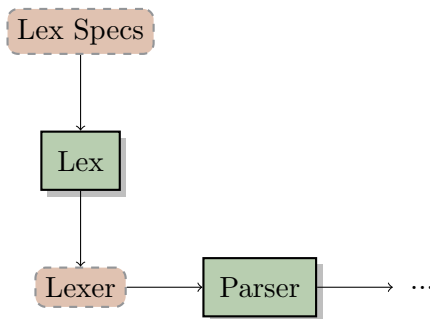
Automatic Generation of Lexical Analysis

Schematic



Automatic Generation of Lexical Analysis

Schematic



Automatic Generation of Lexical Analysis Specification File

```
(* PART ONE *)  
OCaml code to be pasted verbatim.  
  
(* PART TWO *)  
Lexical Specification  
  
(* PART THREE *)  
Additional OCaml code.
```

Automatic Generation of Lexical Analysis

Demo

- 1 Example
- 2 MLL file structure
- 3 Last token recognised
- 4 String literal