

1 Context-free grammar for CUTE Lang

This chapter explains what context-free grammar is used in CUTE Lang. To explain efficiently, grammar is explained by syntax diagram.

1.1 Syntax diagram representation rules

Representation rules of syntax diagram are on Table 1.

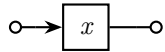
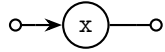
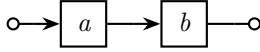
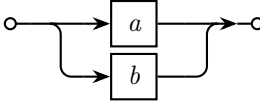
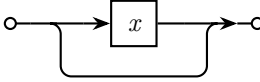
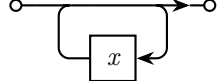
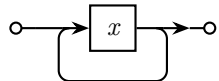
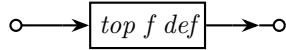
Representation	EBNF Equivalent	Meaning
	x	Nonterminal
	" x "	Terminal
	a, b	Sequence
	$a \mid b$	Selections
	$[x]$	Optional
	$\{ x \}$	Zero or more repeat
	$x, \{ x \}$	One or more repeat

Table 1: Representation rules of syntax diagram

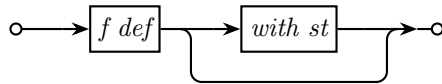
1.2 Syntax diagram for context-free grammar

Context-free grammar expressed by syntax diagram is the following.

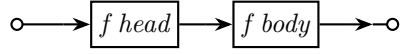
top def



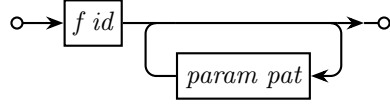
top f def



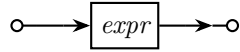
f def



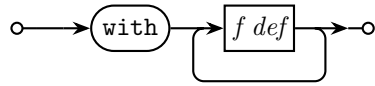
f head



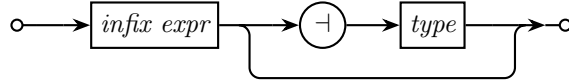
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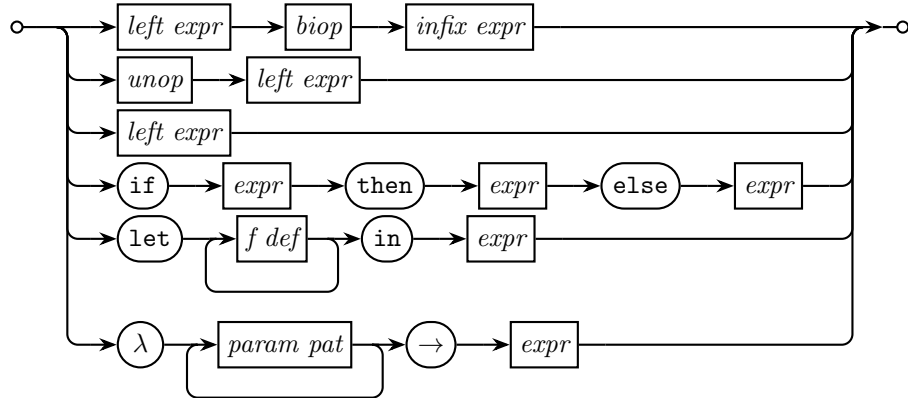
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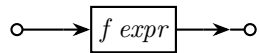
expr



infix expr



left expr



f expr

