Lab Nine

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November 2019

Goal

Manipulating grammars.

Examples from the Readings

1 Crafting a Compiler

Below are the examples listed on the requirements document for the lab from the *Crafting a Compiler* textbook.

1.1 Problem 5.5

Transform the following grammar into LL(1) form using the techniques presented in Section 5.5:

DeclList	–>	DeclList ; Decl
	|	Decl
Decl	–>	IdList ; Type
IdList	–>	IdList , id
	|	id
Type	–>	ScalarType
	|	array (ScalarTypeList) of Type
ScalarType	–>	id
	|	Bound .. Bound
Bound	–>	Sign intconstand
	|	id
Sign	–>	+
	|	–
	|	λ
ScalarTypeList	–>	ScalarTypeList , ScalarType
	|	ScalarType

Removing Left Recursion:

DeclList	–>	Decl ; DeclList
	|	Decl
Decl	–>	IdList ; Type
IdList	–>	id , IdList
	|	id
Type	–>	ScalarType
	|	array (ScalarTypeList) of Type
ScalarType	–>	id
	|	Bound .. Bound
Bound	–>	Sign intconstand
	|	id
Sign	–>	+
	|	–
	|	λ
ScalarTypeList	–>	ScalarType , ScalarTypeList
	|	ScalarType