

LR(0) Items for LR(1) Parser

Compiler Theory - Programming Project 4 : LR(1) Parser

21400646 Lim Chae Eon

LR(0) Item List (' . ' ← this is a period symbol)

Program*	→	. Program
Program*	→	Program .
Program	→	. <script_start> stmt-sequence <script_end>
Program	→	<script_start> . stmt-sequence <script_end>
Program	→	<script_start> stmt-sequence . <script_end>
Program	→	<script_start> stmt-sequence <script_end> .
stmt-sequence	→	. statement ; stmt-sequence
stmt-sequence	→	statement . ; stmt-sequence
stmt-sequence	→	statement ; . stmt-sequence
stmt-sequence	→	statement ; stmt-sequence .
stmt-sequence	→	. comment nextLine
stmt-sequence	→	comment . nextLine
stmt-sequence	→	comment nextLine .
stmt-sequence	→	.
statement	→	. if-stmt
statement	→	if-stmt .
statement	→	. declaration-stmt
statement	→	declaration-stmt .
statement	→	. loop-stmt
statement	→	loop-stmt .
statement	→	. assign-stmt
statement	→	assign-stmt .
statement	→	. function-stmt
statement	→	function-stmt .
statement	→	. switch-stmt
statement	→	switch-stmt .
statement	→	. increment-stmt

<i>statement</i>	→	<i>increment-stmt</i> .
<i>statement</i>	→	. break
<i>statement</i>	→	break .
<i>simple-stmt</i>	→	. <i>stmt-sequence</i>
<i>simple-stmt</i>	→	<i>stmt-sequence</i> .
<i>simple-stmt</i>	→	. { <i>stmt-sequence</i> }
<i>simple-stmt</i>	→	{ . <i>stmt-sequence</i> }
<i>simple-stmt</i>	→	{ <i>stmt-sequence</i> . }
<i>simple-stmt</i>	→	{ <i>stmt-sequence</i> } .
<i>if-stmt</i>	→	. if (<i>exp</i>) <i>simple-stmt</i>
<i>if-stmt</i>	→	if . (<i>exp</i>) <i>simple-stmt</i>
<i>if-stmt</i>	→	if (. <i>exp</i>) <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i> .) <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i>) . <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i>) <i>simple-stmt</i> .
<i>if-stmt</i>	→	. if (<i>exp</i>) <i>simple-stmt</i> else <i>simple-stmt</i>
<i>if-stmt</i>	→	if . (<i>exp</i>) <i>simple-stmt</i> else <i>simple-stmt</i>
<i>if-stmt</i>	→	if (. <i>exp</i>) <i>simple-stmt</i> else <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i> .) <i>simple-stmt</i> else <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i>) . <i>simple-stmt</i> else <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i>) <i>simple-stmt</i> . else <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i>) <i>simple-stmt</i> else . <i>simple-stmt</i>
<i>if-stmt</i>	→	if (<i>exp</i>) <i>simple-stmt</i> else <i>simple-stmt</i> .
<i>declaration-stmt</i>	→	. var <i>id</i>
<i>declaration-stmt</i>	→	var . <i>id</i>
<i>declaration-stmt</i>	→	var <i>id</i> .
<i>id</i>	→	. <i>assign-stmt</i>
<i>id</i>	→	<i>assign-stmt</i> .

<i>id</i>	→	. id , id
<i>id</i>	→	<i>id</i> . , id
<i>id</i>	→	<i>id</i> , . id
<i>id</i>	→	<i>id</i> , <i>id</i> .
<i>id</i>	→	. IDENTIFIER
<i>id</i>	→	IDENTIFIER .
<i>assign-stmt</i>	→	. IDENTIFIER <i>assign-op</i> <i>exp</i>
<i>assign-stmt</i>	→	IDENTIFIER . <i>assign-op</i> <i>exp</i>
<i>assign-stmt</i>	→	IDENTIFIER <i>assign-op</i> . exp
<i>assign-stmt</i>	→	IDENTIFIER <i>assign-op</i> <i>exp</i> .
<i>assign-op</i>	→	. =
<i>assign-op</i>	→	= .
<i>assign-op</i>	→	. --=
<i>assign-op</i>	→	--= .
<i>assign-op</i>	→	. +=
<i>assign-op</i>	→	+= .
<i>exp</i>	→	. simple-exp <i>logic-op</i> <i>simple-exp</i>
<i>exp</i>	→	<i>simple-exp</i> . logic-op <i>simple-exp</i>
<i>exp</i>	→	<i>simple-exp</i> <i>logic-op</i> . simple-exp
<i>exp</i>	→	<i>simple-exp</i> <i>logic-op</i> <i>simple-exp</i> .
<i>exp</i>	→	. simple-exp
<i>exp</i>	→	<i>simple-exp</i> .
<i>logic-op</i>	→	. <
<i>logic-op</i>	→	< .
<i>logic-op</i>	→	. >
<i>logic-op</i>	→	> .
<i>logic-op</i>	→	. <=
<i>logic-op</i>	→	<= .

<i>logic-op</i>	→	<i>.</i> >=
<i>logic-op</i>	→	>= <i>.</i>
<i>logic-op</i>	→	<i>.</i> ==
<i>logic-op</i>	→	== <i>.</i>
<i>logic-op</i>	→	<i>.</i> !=
<i>logic-op</i>	→	!= <i>.</i>
<i>simple-exp</i>	→	<i>.</i> <i>simple-exp add-op term</i>
<i>simple-exp</i>	→	<i>simple-exp</i> <i>.</i> <i>add-op term</i>
<i>simple-exp</i>	→	<i>simple-exp add-op</i> <i>.</i> <i>term</i>
<i>simple-exp</i>	→	<i>simple-exp add-op term</i> <i>.</i>
<i>simple-exp</i>	→	<i>.</i> <i>term</i>
<i>simple-exp</i>	→	<i>term</i> <i>.</i>
<i>add-op</i>	→	<i>.</i> +
<i>add-op</i>	→	+ <i>.</i>
<i>add-op</i>	→	<i>.</i> -
<i>add-op</i>	→	- <i>.</i>
<i>term</i>	→	<i>.</i> <i>term mul-op factor</i>
<i>term</i>	→	<i>term</i> <i>.</i> <i>mul-op factor</i>
<i>term</i>	→	<i>term mul-op</i> <i>.</i> <i>factor</i>
<i>term</i>	→	<i>term mul-op factor</i> <i>.</i>
<i>term</i>	→	<i>.</i> <i>factor</i>
<i>term</i>	→	<i>factor</i> <i>.</i>
<i>mul-op</i>	→	<i>.</i> *
<i>mul-op</i>	→	* <i>.</i>
<i>mul-op</i>	→	<i>.</i> /
<i>mul-op</i>	→	/ <i>.</i>
<i>factor</i>	→	<i>.</i> (exp)
<i>factor</i>	→	(<i>.</i> <i>exp</i>)

<i>factor</i>	→	(<i>exp</i> .)
<i>factor</i>	→	(<i>exp</i>) .
<i>factor</i>	→	. NUMBER
<i>factor</i>	→	NUMBER .
<i>factor</i>	→	. IDENTIFIER
<i>factor</i>	→	IDENTIFIER .
<i>loop-stmt</i>	→	. for (<i>for-parameter</i>) <i>simple-stmt</i>
<i>loop-stmt</i>	→	for . (<i>for-parameter</i>) <i>simple-stmt</i>
<i>loop-stmt</i>	→	for (. <i>for-parameter</i>) <i>simple-stmt</i>
<i>loop-stmt</i>	→	for (<i>for-parameter</i> .) <i>simple-stmt</i>
<i>loop-stmt</i>	→	for (<i>for-parameter</i>) . <i>simple-stmt</i>
<i>loop-stmt</i>	→	for (<i>for-parameter</i>) <i>simple-stmt</i> .
<i>loop-stmt</i>	→	. while (<i>exp</i>) <i>simple-stmt</i>
<i>loop-stmt</i>	→	while . (<i>exp</i>) <i>simple-stmt</i>
<i>loop-stmt</i>	→	while (. <i>exp</i>) <i>simple-stmt</i>
<i>loop-stmt</i>	→	while (<i>exp</i> .) <i>simple-stmt</i>
<i>loop-stmt</i>	→	while (<i>exp</i>) . <i>simple-stmt</i>
<i>loop-stmt</i>	→	while (<i>exp</i>) <i>simple-stmt</i> .
<i>for-parameter</i>	→	. <i>exp</i> ; <i>exp</i> ; <i>exp</i>
<i>for-parameter</i>	→	<i>exp</i> . ; <i>exp</i> ; <i>exp</i>
<i>for-parameter</i>	→	<i>exp</i> ; . <i>exp</i> ; <i>exp</i>
<i>for-parameter</i>	→	<i>exp</i> ; <i>exp</i> . ; <i>exp</i>
<i>for-parameter</i>	→	<i>exp</i> ; <i>exp</i> ; . <i>exp</i>
<i>for-parameter</i>	→	<i>exp</i> ; <i>exp</i> ; <i>exp</i> .
<i>function-stmt</i>	→	. function-keyword (<i>function-parameter</i>)
<i>function-stmt</i>	→	function-keyword . (<i>function-parameter</i>)
<i>function-stmt</i>	→	function-keyword (. <i>function-parameter</i>)
<i>function-stmt</i>	→	function-keyword (<i>function-parameter</i> .)

<i>function-stmt</i>	→	<i>function-keyword</i> (<i>function-parameter</i>) .
<i>function-keyword</i>	→	. window.prompt
<i>function-keyword</i>	→	window.prompt .
<i>function-keyword</i>	→	. window
<i>function-keyword</i>	→	window .
<i>function-keyword</i>	→	. parseFloat
<i>function-keyword</i>	→	parseFloat .
<i>function-keyword</i>	→	. document.writeln
<i>function-keyword</i>	→	document.writeln .
<i>function-keyword</i>	→	. document.write
<i>function-keyword</i>	→	document.write .
<i>function-keyword</i>	→	. document
<i>function-keyword</i>	→	document .
<i>function-parameter</i>	→	. IDENTIFIER
<i>function-parameter</i>	→	IDENTIFIER .
<i>function-parameter</i>	→	. LITERAL
<i>function-parameter</i>	→	LITERAL .
<i>function-parameter</i>	→	. NUMBER
<i>function-parameter</i>	→	NUMBER .
<i>increment-stmt</i>	→	. <i>increment-op</i> IDENTIFIER
<i>increment-stmt</i>	→	<i>increment-op</i> . IDENTIFIER
<i>increment-stmt</i>	→	<i>increment-op</i> IDENTIFIER .
<i>increment-stmt</i>	→	. IDENTIFIER <i>increment-op</i>
<i>increment-stmt</i>	→	IDENTIFIER . <i>increment-op</i>
<i>increment-stmt</i>	→	IDENTIFIER <i>increment-op</i> .
<i>increment-op</i>	→	. ++
<i>increment-op</i>	→	++ .
<i>increment-op</i>	→	. —

<i>increment-op</i>	→	— .
<i>switch-stmt</i>	→	. switch (IDENTIFIER) { case-part default-block }
<i>switch-stmt</i>	→	switch . (IDENTIFIER) { case-part default-block }
<i>switch-stmt</i>	→	switch (. IDENTIFIER) { case-part default-block }
<i>switch-stmt</i>	→	switch (IDENTIFIER .) { case-part default-block }
<i>switch-stmt</i>	→	switch (IDENTIFIER) . { case-part default-block }
<i>switch-stmt</i>	→	switch (IDENTIFIER) { . case-part default-block }
<i>switch-stmt</i>	→	switch (IDENTIFIER) { case-part . default-block }
<i>switch-stmt</i>	→	switch (IDENTIFIER) { case-part default-block . }
<i>switch-stmt</i>	→	switch (IDENTIFIER) { case-part default-block } .
<i>case-part</i>	→	. case-block case-part
<i>case-part</i>	→	case-block . case-part
<i>case-part</i>	→	case-block case-part .
<i>case-part</i>	→	.
<i>case-block</i>	→	. case-condition : stmt-sequence
<i>case-block</i>	→	case-condition . : stmt-sequence
<i>case-block</i>	→	case-condition : . stmt-sequence
<i>case-block</i>	→	case-condition : stmt-sequence .
<i>case-condition</i>	→	. case case-parameter
<i>case-condition</i>	→	case . case-parameter
<i>case-condition</i>	→	case case-parameter .
<i>case-parameter</i>	→	. NUMBER
<i>case-parameter</i>	→	NUMBER .
<i>case-parameter</i>	→	. LITERAL
<i>case-parameter</i>	→	LITERAL .
<i>default-block</i>	→	. default : stmt-sequence
<i>default-block</i>	→	default . : stmt-sequence
<i>default-block</i>	→	default : . stmt-sequence

default-block → **default :** *stmt-sequence* **.**

default-block → **.**

comment → **.** **//** **anything**

comment → **//** **.** **anything**

comment → **//** **anything** **.**