

LR(0) Parser Analysis Result

Is LR(0)? **NO X**

Number of States: 19

Number of Conflicts: 2

Conflicts Details:

State	Symbol	Conflict Type	Action 1	Action 2
3 ID		shift-reduce	r8	s1
3 "for"		shift-reduce	r8	s7

Production #	Non-Terminal	Production
0	programBar	$\text{programBar} \rightarrow \text{program}$
1	arg	$\text{arg} \rightarrow \text{NUMBER}$
2	arg	$\text{arg} \rightarrow \text{STRING}$
3	args	$\text{args} \rightarrow \text{arg} (" , " \text{arg})^*$
4	call_stmt	$\text{call_stmt} \rightarrow \text{ID} (" \text{args? } ") " ; "$
5	for_stmt	$\text{for_stmt} \rightarrow \text{"for" ID} "=" \text{NUMBER} \text{ "to" NUMBER} " ; "$
6	program	$\text{program} \rightarrow \text{stmt_list}$
7	stmt	$\text{stmt} \rightarrow \text{for_stmt}$
8	stmt	$\text{stmt} \rightarrow \text{call_stmt}$
9	stmt_list	$\text{stmt_list} \rightarrow \text{stmt}$
10	stmt_list	$\text{stmt_list} \rightarrow \text{stmt stmt_list}$

State	LR(0) Items
	[call_stmt → · ID "(" args? ")" ";"] [for_stmt → · "for" ID "=" NUMBER "to" NUMBER ";"] [program → · stmt_list] [programBar → · program] [stmt → · call_stmt] [stmt → · for_stmt] [stmt_list → · stmt stmt_list] [stmt_list → · stmt]
State 0	
State 1	[call_stmt → ID · "(" args? ")" ";"]
State 2	[program → stmt_list ·] [call_stmt → · ID "(" args? ")" ";"] [for_stmt → · "for" ID "=" NUMBER "to" NUMBER ";"] [stmt → · call_stmt] [stmt → · for_stmt] [stmt_list → stmt · stmt_list] [stmt_list → stmt ·] [stmt_list → · stmt stmt_list] [stmt_list → · stmt]
State 3	
State 4	[stmt → call_stmt ·]
State 5	[programBar → program ·]
State 6	[stmt → for_stmt ·]
State 7	[for_stmt → "for" · ID "=" NUMBER "to" NUMBER ";"]
State 8	[call_stmt → ID "(" · args? ")" ";"]
State 9	[stmt_list → stmt stmt_list ·]
State 10	[for_stmt → "for" ID · "=" NUMBER "to" NUMBER ";"]
State 11	[call_stmt → ID "(" args? · ")" ";"]
State 12	[for_stmt → "for" ID "=" · NUMBER "to" NUMBER ";"]
State 13	[call_stmt → ID "(" args? ")" · ";"]
State 14	[for_stmt → "for" ID "=" NUMBER · "to" NUMBER ";"]
State 15	[call_stmt → ID "(" args? ")" ";" ·]
State 16	[for_stmt → "for" ID "=" NUMBER "to" · NUMBER ";"]
State 17	[for_stmt → "for" ID "=" NUMBER "to" NUMBER · ";"]
State 18	[for_stmt → "for" ID "=" NUMBER "to" NUMBER ";" ·]

From State	Symbol	To State
0	"for"	7
0	ID	1
0	call_stmt	4
0	for_stmt	6
0	program	5
0	stmt	3
0	stmt_list	2
1	("	8
3	"for"	7
3	ID	1
3	call_stmt	4
3	for_stmt	6
3	stmt	3
3	stmt_list	9
7	ID	10
8	args?	11
10	"+"	12
11)	13
12	NUMBER	14
13	";"	15
14	"to"	16
16	NUMBER	17
17	";"	18