Laboratorio 02

Parser generator
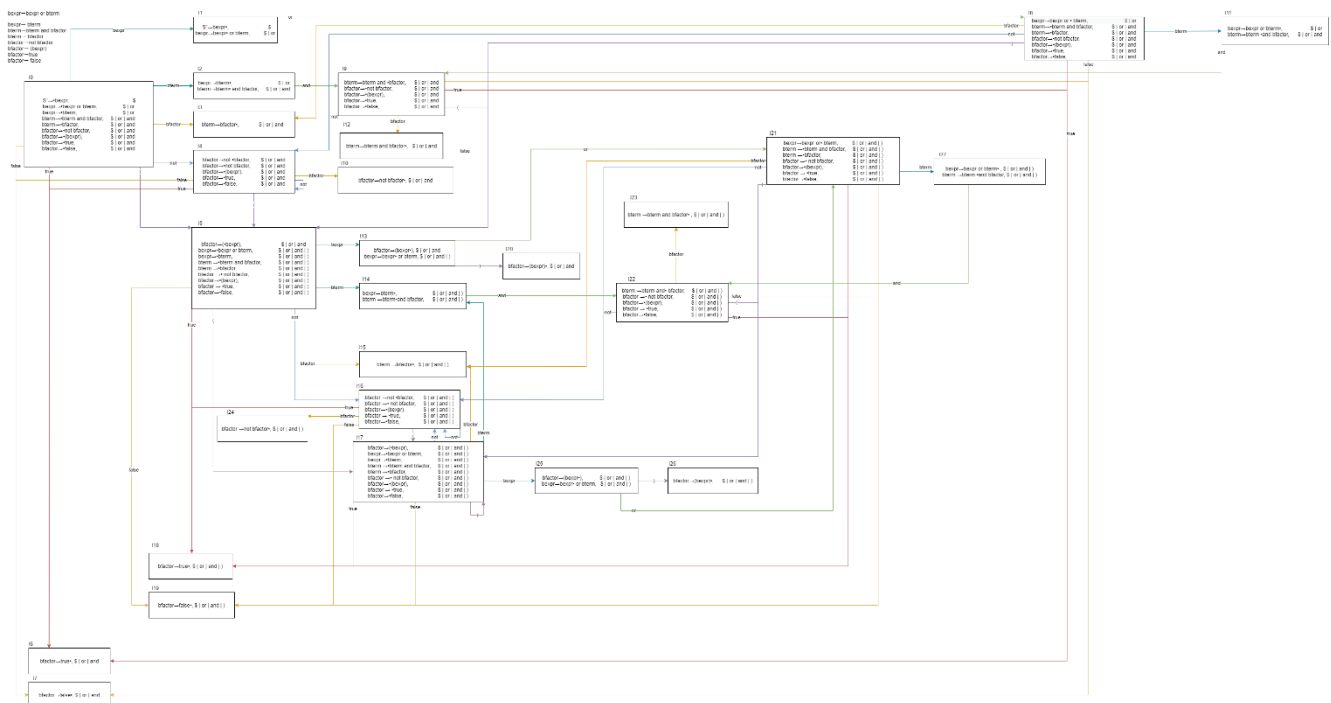
Gramatica

$$bexpr \rightarrow bexpr \; or \; bterm \mid bterm$$
$$bterm \rightarrow bterm \; and \; bfactor \mid bfactor$$
$$bfactor \rightarrow not \; bfactor \mid (bexpr) \mid true \mid false$$

Gramatica

$$bexpr \rightarrow bexpr \; or \; bterm$$
$$bexpr \rightarrow bterm$$
$$bterm \rightarrow bterm \; and \; bfactor$$
$$bterm \rightarrow bfactor$$
$$bfactor \rightarrow not \; bfactor$$
$$bfactor \rightarrow (bexpr)$$
$$bfactor \rightarrow true$$
$$bfactor \rightarrow false$$

Grafo CLR (1)

GRAFO LALR (1)

Tabla LALR(1)

States	Variables							$	Goto		
	and	or	not	(	)	true	false		bexpr	bterm	bfactor
0			S416	S517		S618	S719		1	214	315
1		821						Accept			
214	922	R2			R2			R2			
315	R4	R4			R4			R4			
416			S416	S517		S618	S719				1024
517			S416	S517		S618	S719		1325	214	315
618	R7	R7			R7			R7			
719	R8	R8			R8			R8			
821			S416	S517		S618	S719			1127	315
922			S416	S517		S618	S719				1223
1024	R5	R5			R5			R5			
1127	S922	R1			R1			R1			
1223	R3	R3			R3			R3			
1325		S821			S2026						
2026	R6	R6			R6			R6			

Cadena de Prueba

aceptada: *not*(*true or false*) *and true*

Stack	Symbols	Inputs	Action
0	#	*not*(*true or false*) *and true*$	S416
0,416	not#	(*true or false*) *and true*$	S517
0,416,517	(not#	*true or false*) *and true*$	S618
0,416,517,S618	true (not#	*or false*) *and true*$	R7
0,416,517,315	bfactor(not#	*or false*) *and true*$	R4
0,416,517,214	bterm(not#	*or false*) *and true*$	R2
0,416,517,1325,	bexpr(not#	*or false*) *and true*$	S821
0,416,517,1325, 821	or bexpr(not#	*false*) *and true*$	S719
0,416,517,1325, 821, 719	false or bexpr(not#	) *and true*$	R8
0,416,517,1325, 821, 315	bfactor or bexpr(not#	) *and true*$	R4
0,416,517,1325, 821, 1127	bterm or bexpr(not#	) *and true*$	R1
0,416,517,1325	bexpr(not#	) *and true*$	S2026
0,416,517,1325,2026	)bexpr(not#	*and true*$	R6
0,416,1024	bfactor not#	*and true*$	R5
0,315	bfactor#	*and true*$	R4
0,214	bterm#	*and true*$	S922
0,214,922	and bterm#	*true*$	S618
0,214,922,618	true and bterm#	$	R7
0,214,922,1223	bfactor and bterm	$	R3
0,214	bterm	$	R2
0,1	bexpr	$	*Accept*

Estado generado BISON	Estado LALR(1) Manual
0	-
1	0
2	-
3	618
4	719
5	416
6	-
7	517
8	1
9	214
10	315
11	1024
12	1325
13	821
14	-
15	922
16	2026
17	1127
18	1223