SLR(1)-автомат

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
1	S = • LstDecl "begin" LstStmt "end"	LstDecl	2	
	LstDecl = • Decl	Decl	3	
	LstDecl = • LstDecl Decl	LstDecl	2	
	Decl = • "id" A1 LstId ";" {A2}	id	4	
	Decl = • "struct" "id" A3 "{" LstDecl "}" {A4}	struct	5	
2	S = LstDecl • "begin" LstStmt "end"	begin	6	
	LstDecl = LstDecl • Decl	Decl	7	
	Decl = • "id" A1 LstId ";" {A2}	id	4	
	Decl = • "struct" "id" A3 "{" LstDecl "}" {A4}	struct	5	
3	LstDecl = Decl •	begin, id, struct, }		R2
4	Decl = "id" • A1 LstId ";" {A2}	A1	8	
	A1 = {A1} •	,, :		R33 {A1}
5	Decl = "struct" • "id" A3 "{" LstDecl "}" {A4}	id	9	
6	S = LstDecl "begin" • LstStmt "end"	LstStmt	10	
	LstStmt = • Stmt	Stmt	11	
	LstStmt = • LstStmt M Stmt {A8}	LstStmt	10	
	Stmt = • Var "=" A9 Expr ";" {A10}	Var	12	
	Stmt = • "repeat" "{" M LstStmt "}" "until" Expr {A11}	repeat	13	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
7	LstDecl = LstDecl Decl •	begin, id, struct, }		R3
8	Decl = "id" A1 • LstId ";" {A2}	LstId	16	
	LstId = • "," "id" A5 LstId {A6}	,	17	
	LstId = • ":" "id" {A7}	:	18	
9	Decl = "struct" "id" • A3 "{" LstDecl "}" {A4}	A3	19	
	A3 = {A3} •	{		R34 {A3}
10	S = LstDecl "begin" LstStmt • "end"	end	stop	
	LstStmt = LstStmt • M Stmt {A8}	M	20	
	M = {A29} •	id, repeat		R32 {A29}
11	LstStmt = Stmt •	end, id, }, repeat		R8
12	Stmt = Var • "=" A9 Expr ";" {A10}	=	21	
13	Stmt = "repeat" • "{" M LstStmt "}" "until" Expr {A11}	{	22	
14	Var = "id" {A12} •	end, id, ;, }, =, repeat,], rel, add, mul,)		R12 {A12}
	Var = "id" • "[" Expr "]" {A32}	[	23	
	StructVar = "id" {A14} •	.		R16 {A14}
15	Var = StructVar • "." "id" {A13}	.	24	
	Var = StructVar • "." "id" "[" Expr "]" {A33}	.	24	
	StructVar = StructVar • "." "id" {A15}	.	24	
16	Decl = "id" A1 LstId • ";" {A2}	;	25	
17	LstId = "," • "id" A5 LstId {A6}	id	26	
18	LstId = ":" • "id" {A7}	id	27	
19	Decl = "struct" "id" A3 • "{" LstDecl "}" {A4}	{	28	
20	LstStmt = LstStmt M • Stmt {A8}	Stmt	29	

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
	Stmt = • Var "=" A9 Expr ";" {A10}	Var	12	
	Stmt = • "repeat" "{" M LstStmt "}" "until" Expr {A11}	repeat	13	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
21	Stmt = Var "=" • A9 Expr ";" {A10}	A9	30	
	A9 = {A9} •	id, (, !, num, str, true, false		R36 {A9}
22	Stmt = "repeat" "{" • M LstStmt "}" "until" Expr {A11}	M	31	
	M = {A29} •	id, repeat		R32 {A29}
23	Var = "id" "[" • Expr "]" {A32}	Expr	32	
	Expr = • SmpExpr	SmpExpr	33	
	Expr = • SmpExpr "rel" A16 SmpExpr {A17}	SmpExpr	33	
	SmpExpr = • Term	Term	34	
	SmpExpr = • SmpExpr "add" A18 Term {A19}	SmpExpr	33	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	34	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
24	Var = StructVar "." • "id" {A13}	id	44	
	Var = StructVar "." • "id" "[" Expr "]" {A33}	id	44	
	StructVar = StructVar "." • "id" {A15}	id	44	
25	Decl = "id" A1 LstId ";" {A2} •	begin, id, struct, }		R4 {A2}
26	LstId = "," "id" • A5 LstId {A6}	A5	45	
	A5 = {A5} •	,, :		R35 {A5}
27	LstId = ":" "id" {A7} •	;		R7 {A7}
28	Decl = "struct" "id" A3 "{" • LstDecl "}" {A4}	LstDecl	46	
	LstDecl = • Decl	Decl	3	
	LstDecl = • LstDecl Decl	LstDecl	46	
	Decl = • "id" A1 LstId ";" {A2}	id	4	
	Decl = • "struct" "id" A3 "{" LstDecl "}" {A4}	struct	5	
29	LstStmt = LstStmt M Stmt {A8} •	end, id, }, repeat		R9 {A8}
30	Stmt = Var "=" A9 • Expr ";" {A10}	Expr	47	
	Expr = • SmpExpr	SmpExpr	33	
	Expr = • SmpExpr "rel" A16 SmpExpr {A17}	SmpExpr	33	

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
	SmpExpr = • Term	Term	34	
	SmpExpr = • SmpExpr "add" A18 Term {A19}	SmpExpr	33	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	34	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
31	Stmt = "repeat" "{" M • LstStmt "}" "until" Expr {A11}	LstStmt	48	
	LstStmt = • Stmt	Stmt	11	
	LstStmt = • LstStmt M Stmt {A8}	LstStmt	48	
	Stmt = • Var "=" A9 Expr ";" {A10}	Var	12	
	Stmt = • "repeat" "{" M LstStmt "}" "until" Expr {A11}	repeat	13	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
32	Var = "id" "[" Expr • "]" {A32}	]	49	
33	Expr = SmpExpr •	end, id, ;, }, repeat,],)		R18
	Expr = SmpExpr • "rel" A16 SmpExpr {A17}	rel	50	
	SmpExpr = SmpExpr • "add" A18 Term {A19}	add	51	
34	SmpExpr = Term •	end, id, ;, }, repeat,], rel, add,)		R20
	Term = Term • "mul" A20 Factor {A21}	mul	52	
35	Term = Factor •	end, id, ;, }, repeat,], rel, add, mul,)		R22
36	Factor = Const {A22} •	end, id, ;, }, repeat,], rel, add, mul,)		R24 {A22}
37	Factor = Var •	end, id, ;, }, repeat,], rel, add, mul,)		R25
38	Factor = "(" • Expr ")"	Expr	53	
	Expr = • SmpExpr	SmpExpr	33	
	Expr = • SmpExpr "rel" A16 SmpExpr {A17}	SmpExpr	33	
	SmpExpr = • Term	Term	34	
	SmpExpr = • SmpExpr "add" A18 Term {A19}	SmpExpr	33	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	34	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
39	Factor = "!" • A23 Factor {A24}	A23	54	
	A23 = {A23} •	id, (, !, num, str, true, false		R40 {A23}
40	Const = "num" {A25} •	end, id, ;, }, repeat,], rel, add, mul,)		R28 {A25}
41	Const = "str" {A26} •	end, id, ;, }, repeat,], rel, add, mul,)		R29 {A26}
42	Const = "true" {A27} •	end, id, ;, }, repeat,], rel, add, mul,)		R30 {A27}
43	Const = "false" {A28} •	end, id, ;, }, repeat,], rel, add, mul,)		R31 {A28}
44	Var = StructVar "." "id" {A13} •	end, id, ;, }, =, repeat,], rel, add, mul,)		R13 {A13}
	Var = StructVar "." "id" • "[" Expr "]" {A33}	[	55	
	StructVar = StructVar "." "id" {A15} •	.		R17 {A15}
45	LstId = "," "id" A5 • LstId {A6}	LstId	56	
	LstId = • "," "id" A5 LstId {A6}	,	17	
	LstId = • ":" "id" {A7}	:	18	
46	Decl = "struct" "id" A3 "{" LstDecl • "}" {A4}	}	57	
	LstDecl = LstDecl • Decl	Decl	7	
	Decl = • "id" A1 LstId ";" {A2}	id	4	
	Decl = • "struct" "id" A3 "{" LstDecl "}" {A4}	struct	5	
47	Stmt = Var "=" A9 Expr • ";" {A10}	;	58	
48	Stmt = "repeat" "{" M LstStmt • "}" "until" Expr {A11}	}	59	
	LstStmt = LstStmt • M Stmt {A8}	M	20	
	M = {A29} •	id, repeat		R32 {A29}
49	Var = "id" "[" Expr "]" {A32} •	end, id, ;, }, =, repeat,], rel, add, mul,)		R14 {A32}
50	Expr = SmpExpr "rel" • A16 SmpExpr {A17}	A16	60	
	A16 = {A16} •	id, (, !, num, str, true, false		R37 {A16}
51	SmpExpr = SmpExpr "add" • A18 Term {A19}	A18	61	
	A18 = {A18} •	id, (, !, num, str, true, false		R38 {A18}
52	Term = Term "mul" • A20 Factor {A21}	A20	62	
	A20 = {A20} •	id, (, !, num, str, true, false		R39 {A20}
53	Factor = "(" Expr • ")"	)	63	
54	Factor = "!" A23 • Factor {A24}	Factor	64	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
55	Var = StructVar "." "id" "[" • Expr "]" {A33}	Expr	65	
	Expr = • SmpExpr	SmpExpr	33	
	Expr = • SmpExpr "rel" A16 SmpExpr {A17}	SmpExpr	33	
	SmpExpr = • Term	Term	34	
	SmpExpr = • SmpExpr "add" A18 Term {A19}	SmpExpr	33	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	34	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
56	LstId = "," "id" A5 LstId {A6} •	;		R6 {A6}
57	Decl = "struct" "id" A3 "{" LstDecl "}" {A4} •	begin, id, struct, }		R5 {A4}
58	Stmt = Var "=" A9 Expr ";" {A10} •	end, id, }, repeat		R10 {A10}
59	Stmt = "repeat" "{" M LstStmt "}" • "until" Expr {A11}	until	66	
60	Expr = SmpExpr "rel" A16 • SmpExpr {A17}	SmpExpr	67	
	SmpExpr = • Term	Term	34	
	SmpExpr = • SmpExpr "add" A18 Term {A19}	SmpExpr	67	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	34	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
61	SmpExpr = SmpExpr "add" A18 • Term {A19}	Term	68	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	68	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
62	Term = Term "mul" A20 • Factor {A21}	Factor	69	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
63	Factor = "(" Expr ")" •	end, id, ;, }, repeat,], rel, add, mul,)		R26
64	Factor = "!" A23 Factor {A24} •	end, id, ;, }, repeat,], rel, add, mul,)		R27 {A24}
65	Var = StructVar "." "id" "[" Expr • "]" {A33}	]	70	
66	Stmt = "repeat" "{" M LstStmt "}" "until" • Expr {A11}	Expr	71	
	Expr = • SmpExpr	SmpExpr	33	
	Expr = • SmpExpr "rel" A16 SmpExpr {A17}	SmpExpr	33	
	SmpExpr = • Term	Term	34	
	SmpExpr = • SmpExpr "add" A18 Term {A19}	SmpExpr	33	
	Term = • Factor	Factor	35	
	Term = • Term "mul" A20 Factor {A21}	Term	34	
	Factor = • Const {A22}	Const	36	
	Factor = • Var	Var	37	
	Factor = • "(" Expr ")"	(	38	
	Factor = • "!" A23 Factor {A24}	!	39	
	Const = • "num" {A25}	num	40	

№ сост	Конфигурация	Символ перехода (свертки)	Состояние-преемник	Свертка {действие}
	Const = • "str" {A26}	str	41	
	Const = • "true" {A27}	true	42	
	Const = • "false" {A28}	false	43	
	Var = • "id" {A12}	id	14	
	Var = • StructVar "." "id" {A13}	StructVar	15	
	Var = • "id" "[" Expr "]" {A32}	id	14	
	Var = • StructVar "." "id" "[" Expr "]" {A33}	StructVar	15	
	StructVar = • "id" {A14}	id	14	
	StructVar = • StructVar "." "id" {A15}	StructVar	15	
67	Expr = SmpExpr "rel" A16 SmpExpr {A17} •	end, id, ;, }, repeat,],)		R19 {A17}
	SmpExpr = SmpExpr • "add" A18 Term {A19}	add	51	
68	SmpExpr = SmpExpr "add" A18 Term {A19} •	end, id, ;, }, repeat,], rel, add,)		R21 {A19}
	Term = Term • "mul" A20 Factor {A21}	mul	52	
69	Term = Term "mul" A20 Factor {A21} •	end, id, ;, }, repeat,], rel, add, mul,)		R23 {A21}
70	Var = StructVar "." "id" "[" Expr "]" {A33} •	end, id, ;, }, =, repeat,], rel, add, mul,)		R15 {A33}
71	Stmt = "repeat" "{" M LstStmt "}" "until" Expr {A11} •	end, id, }, repeat		R11 {A11}

SLR(1)-грамматика

Множества Follow нетерминалов

Follow(S)={}; Follow(LstDecl)={begin,id,struct,}}; Follow(LstStmt)={end,id,},repeat}; Follow(Decl)={begin,id,struct,}};
Follow(A1)={,,:}; Follow(LstId)={;}; Follow(A3)={{}; Follow(A5)={,,:}; Follow(Stmt)={end,id,},repeat};
Follow(M)={id,repeat}; Follow(Var)={end,id,;,},=,repeat,],rel,add,mul,)}; Follow(A9)={id,(,!,num,str,true,false};
Follow(Expr)={end,id,;,},repeat,],)}; Follow(StructVar)={.}; Follow(SmpExpr)={end,id,;,},repeat,],rel,add,)};
Follow(A16)={id,(,!,num,str,true,false}; Follow(Term)={end,id,;,},repeat,],rel,add,mul,)};
Follow(A18)={id,(,!,num,str,true,false}; Follow(Factor)={end,id,;,},repeat,],rel,add,mul,)};
Follow(A20)={id,(,!,num,str,true,false}; Follow(Const)={end,id,;,},repeat,],rel,add,mul,)};
Follow(A23)={id,(,!,num,str,true,false};