

1. David Pager Grammar.

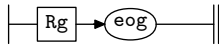
David Pager

The Lane Table Method Of Constructing LR(1) Parsers.

2. Fsm Cpager_2 class.

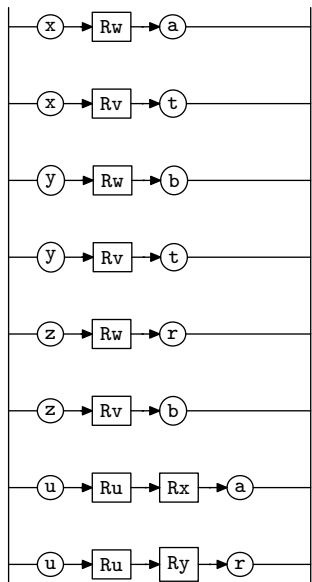
3. Rs rule.

Rs



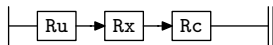
4. Rg rule.

Rg



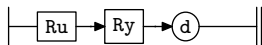
5. Rw rule.

Rw



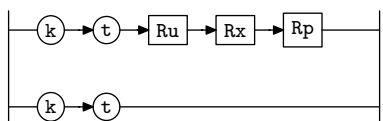
6. Rv rule.

Rv



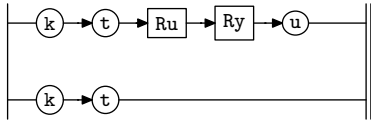
7. Rx rule.

Rx



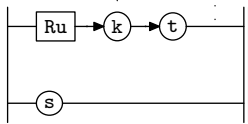
8. *Ry* rule.

Ry



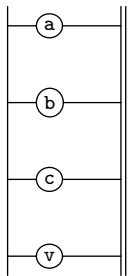
9. *Ru* rule.

Ru



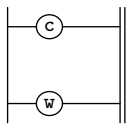
10. *Re* rule.

Re



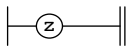
11. *Rc* rule.

Rc



12. *Rp* rule.

Rp



13. First Set Language for O_2^{linker} .

```
/*
  File: pager_2.fsc
  Date and Time: Fri Jan  2 09:49:34 2015
*/
transitive      n
grammar-name    "pager_2"
name-space      "NS_pager_2"
thread-name     "Cpager_2"
monolithic      y
file-name       "pager_2.fsc"
no-of-T         569
list-of-native-first-set-terminals 4
  raw_u
  raw_x
  raw_y
  raw_z
end-list-of-native-first-set-terminals
list-of-transitive-threads 0
end-list-of-transitive-threads
list-of-used-threads 0
end-list-of-used-threads
fsm-comments
"Test out David Pager LR(1) resolution page 61."
```

14. Lr1 State Network.

 \Rightarrow

←	rule	→	R#	sr#	Po	←
c	Rg		2	7	1	u
c	Rg		2	8	1	u
c	Rg		2	1	1	x
c	Rg		2	2	1	x
c	Rg		2	3	1	y
c	Rg		2	4	1	y
c	Rg		2	5	1	z
c	Rg		2	6	1	z
c	Rs		1	1	1	Rg <u>eog</u>

State: 1 state type: s

subrule element

→	Brn	Gto	Red	LA
	1	2	13	
	1	2	15	
	1	16	18	
	1	16	20	
	1	21	23	
	1	21	25	
	1	26	28	
	1	26	30	
	1	31	32	

 \Rightarrow^u

←	rule	→	R#	sr#	Po	←
c	Ru		7	2	1	s
t	Rg		2	7	2	Ru <u>Rx</u>
t	Rg		2	8	2	Ru <u>Ry</u>
c	Ru		7	1	1	Ru <u>k</u>

State: 2 state type: s

subrule element

→	Brn	Gto	Red	LA
	2	33	33	
	1	3	13	
	1	3	15	
	2	3	5	

 \Rightarrow^{Ru}

←	rule	→	R#	sr#	Po	←
c	Rx		5	2	1	k
c	Ry		6	1	1	k
c	Ry		6	2	1	k
t	Ru		7	1	2	k
c	Rx		5	1	1	k
t	Rg		2	7	3	Rx <u>a</u>
t	Rg		2	8	3	Ry <u>r</u>

State: 3 state type: s

subrule element

→	Brn	Gto	Red	LA
	3	4	5	
	3	4	11	
	3	4	5	
	2	4	5	
	3	4	9	
	1	12	13	
	1	14	15	

 \Rightarrow^k

←	rule	→	R#	sr#	Po	←
t	Rx		5	2	2	t
t	Ry		6	1	2	t
t	Ry		6	2	2	t
t	Ru		7	1	3	t
t	Rx		5	1	2	t

State: 4 state type: s

subrule element

→	Brn	Gto	Red	LA
	3	5	5	
	3	5	11	
	3	5	5	
	2	5	5	
	3	5	9	

 \Rightarrow^t

←	rule	→	R#	sr#	Po	←
t	Rx		5	2	3	
t	Ry		6	2	3	
t	Ru		7	1	4	
c	Ru		7	2	1	s
t	Ry		6	1	3	Ru <u>Ry</u>
c	Ru		7	1	1	Ru <u>k</u>
t	Rx		5	1	3	Ru <u>Rx</u>

State: 5 state type: s/r^2

subrule element

→	Brn	Gto	Red	LA
	3	0	5	1
	3	0	5	2
	2	0	5	3
	5	33	33	
	3	6	11	
	5	6	5	
	3	6	9	

 \Rightarrow^{Ru}

←	rule	→	R#	sr#	Po	←
c	Rx		5	2	1	k

State: 6 state type: s

subrule element

→	Brn	Gto	Red	LA
	6	4	5	

c Ry		6	1	1	k		6	4	11		
c Ry		6	2	1	k		6	4	5		
t Ru		7	1	2	k		5	4	5		
c Rx		5	1	1	k		6	4	9		
t Rx		5	1	4	R _x <u>Rp</u>		3	7	9		
t Ry		6	1	4	R _y <u>u</u>		3	10	11		
\Rightarrow^{Rx}						State: 7 state type: <i>s</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
c Rp			10	1	1	z		7	8	8	
t Rx			5	1	5	Rp		3	9	9	
\Rightarrow^z						State: 8 state type: <i>r</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Rp			10	1	2			7	0	8	1
\Rightarrow^{Rp}						State: 9 state type: <i>r</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Rx			5	1	6			3	0	9	1
\Rightarrow^{Ry}						State: 10 state type: <i>s</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Ry			6	1	5	u		3	11	11	
\Rightarrow^u						State: 11 state type: <i>r</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Ry			6	1	6			3	0	11	2
\Rightarrow^{Rx}						State: 12 state type: <i>s</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Rg			2	7	4	a		1	13	13	
\Rightarrow^a						State: 13 state type: <i>r</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Rg			2	7	5			1	0	13	4
\Rightarrow^{Ry}						State: 14 state type: <i>s</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Rg			2	8	4	r		1	15	15	
\Rightarrow^r						State: 15 state type: <i>r</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
t Rg			2	8	5			1	0	15	4
\Rightarrow^x						State: 16 state type: <i>s</i>					
←	rule	→	R#	sr#	Po	←	subrule element		→ Brn Gto Red LA		
c Ru			7	2	1	s		16	33	33	
t Rg			2	1	2	R _w <u>a</u>		1	17	18	
t Rg			2	2	2	R _v <u>t</u>		1	19	20	
c R _w			3	1	1	R _u <u>R_x</u>		16	34	38	
c R _v			4	1	1	R _u <u>R_y</u>		16	34	40	
c Ru			7	1	1	R _u <u>k</u>		16	34	5	

\Rightarrow^{Rw}						State: 17 state type: s		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	1	3 a			1 18 18
\Rightarrow^a						State: 18 state type: r		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	1	4			1 0 18 4
\Rightarrow^{Rv}						State: 19 state type: s		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	2	3 t			1 20 20
\Rightarrow^t						State: 20 state type: r		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	2	4			1 0 20 4
\Rightarrow^y						State: 21 state type: s		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
c Ru			7	2	1 s			21 33 33
t Rg			2	3	2 $Rw \underline{b}$			1 22 23
t Rg			2	4	2 $Rv \underline{t}$			1 24 25
c Rw			3	1	1 $Ru \underline{Rx}$			21 34 38
c Rv			4	1	1 $Ru \underline{Ry}$			21 34 40
c Ru			7	1	1 $Ru \underline{k}$			21 34 5
\Rightarrow^{Rw}						State: 22 state type: s		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	3	3 b			1 23 23
\Rightarrow^b						State: 23 state type: r		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	3	4			1 0 23 4
\Rightarrow^{Rv}						State: 24 state type: s		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	4	3 t			1 25 25
\Rightarrow^t						State: 25 state type: r		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
t Rg			2	4	4			1 0 25 4
\Rightarrow^z						State: 26 state type: s		
\leftarrow	rule	\rightarrow	R#	sr#	Po	subrule element	\rightarrow	Brn Gto Red LA
c Ru			7	2	1 s			26 33 33
t Rg			2	5	2 $Rw \underline{r}$			1 27 28
t Rg			2	6	2 $Rv \underline{b}$			1 29 30
c Rw			3	1	1 $Ru \underline{Rx}$			26 34 38
c Rv			4	1	1 $Ru \underline{Ry}$			26 34 40
c Ru			7	1	1 $Ru \underline{k}$			26 34 5
\Rightarrow^{Rw}						State: 27 state type: s		

← t Rg	rule	→ R# sr# Po ← 2 5 3 r	subrule element	→ Brn Gto Red LA 1 28 28
⇒ ^r			State: 28 state type: ^r	
← t Rg	rule	→ R# sr# Po ← 2 5 4	subrule element	→ Brn Gto Red LA 1 0 28 4
⇒ ^{Rv}			State: 29 state type: ^s	
← t Rg	rule	→ R# sr# Po ← 2 6 3 b	subrule element	→ Brn Gto Red LA 1 30 30
⇒ ^b			State: 30 state type: ^r	
← t Rg	rule	→ R# sr# Po ← 2 6 4	subrule element	→ Brn Gto Red LA 1 0 30 4
⇒ ^{Rg}			State: 31 state type: ^s	
← t Rs	rule	→ R# sr# Po ← 1 1 2 eog	subrule element	→ Brn Gto Red LA 1 32 32
⇒ ^{eog}			State: 32 state type: ^r	
← t Rs	rule	→ R# sr# Po ← 1 1 3	subrule element	→ Brn Gto Red LA 1 0 32 5
⇒ ^s			State: 33 state type: ^r	
← t Ru	rule	→ R# sr# Po ← 7 2 2	subrule element	→ Brn Gto Red LA 2 0 33 3
⇒ ^{Ru}			State: 34 state type: ^s	
← c Rx c Ry c Ry t Ru c Rx t Rw t Rv	rule	→ R# sr# Po ← 5 2 1 k 6 1 1 k 6 2 1 k 7 1 2 k 5 1 1 k 3 1 2 Rx <u>Rc</u> 4 1 2 Ry <u>d</u>	subrule element	→ Brn Gto Red LA 34 4 5 34 4 11 34 4 5 16 4 5 34 4 9 16 35 38 16 39 40
⇒ ^{Rx}			State: 35 state type: ^s	
← c Rc c Rc t Rw	rule	→ R# sr# Po ← 9 1 1 c 9 2 1 w 3 1 3 Rc	subrule element	→ Brn Gto Red LA 35 36 36 35 37 37 16 38 38
⇒ ^c			State: 36 state type: ^r	
← t Rc	rule	→ R# sr# Po ← 9 1 2	subrule element	→ Brn Gto Red LA 35 0 36 6
⇒ ^w			State: 37 state type: ^r	
← t Rc	rule	→ R# sr# Po ← 9 2 2	subrule element	→ Brn Gto Red LA 35 0 37 6
⇒ ^{Rc}			State: 38 state type: ^r	

← t R _w	rule	→ R# sr# Po ← 3 1 4	subrule element	→ Brn Gto Red LA 16 0 38 6
⇒ ^{Ry}			State: 39 state type: ^s	
← t R _v	rule	→ R# sr# Po ← 4 1 3 d	subrule element	→ Brn Gto Red LA 16 40 40
⇒ ^d			State: 40 state type: ^r	
← t R _v	rule	→ R# sr# Po ← 4 1 4	subrule element	→ Brn Gto Red LA 16 0 40 7

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pager_2 Grammar

Date: January 2, 2015 at 11:27

File: pager_2.lex

Ns: NS_pager_2

Version: 1.0

Debug: false

Grammar Comments:

Type: Monolithic

Test out David Pager LR(1) resolution page 61.

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