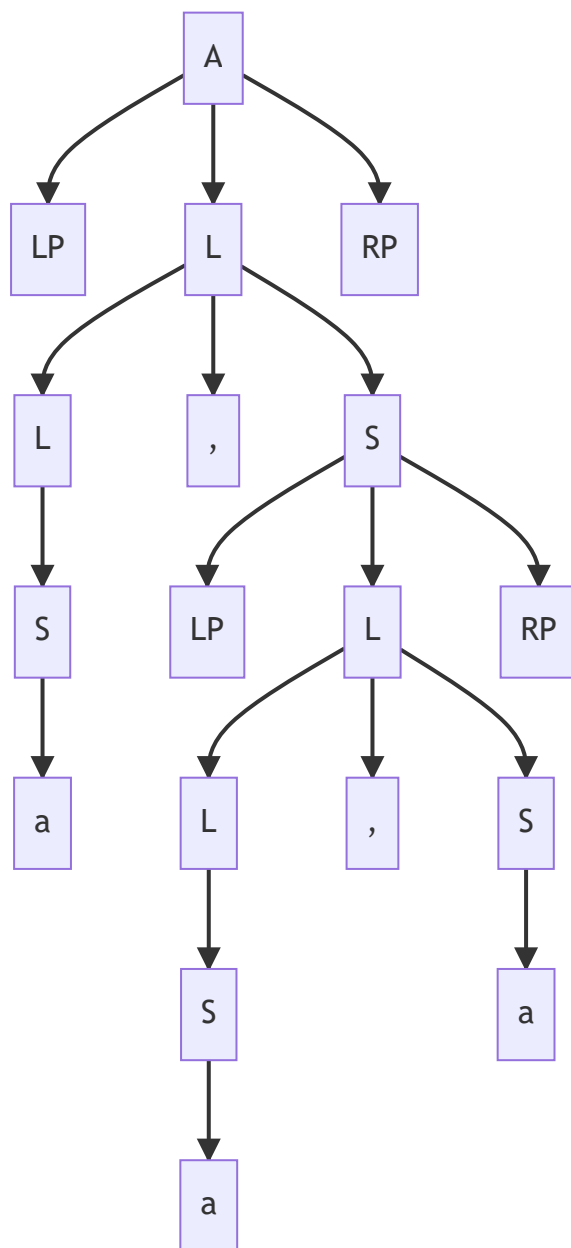


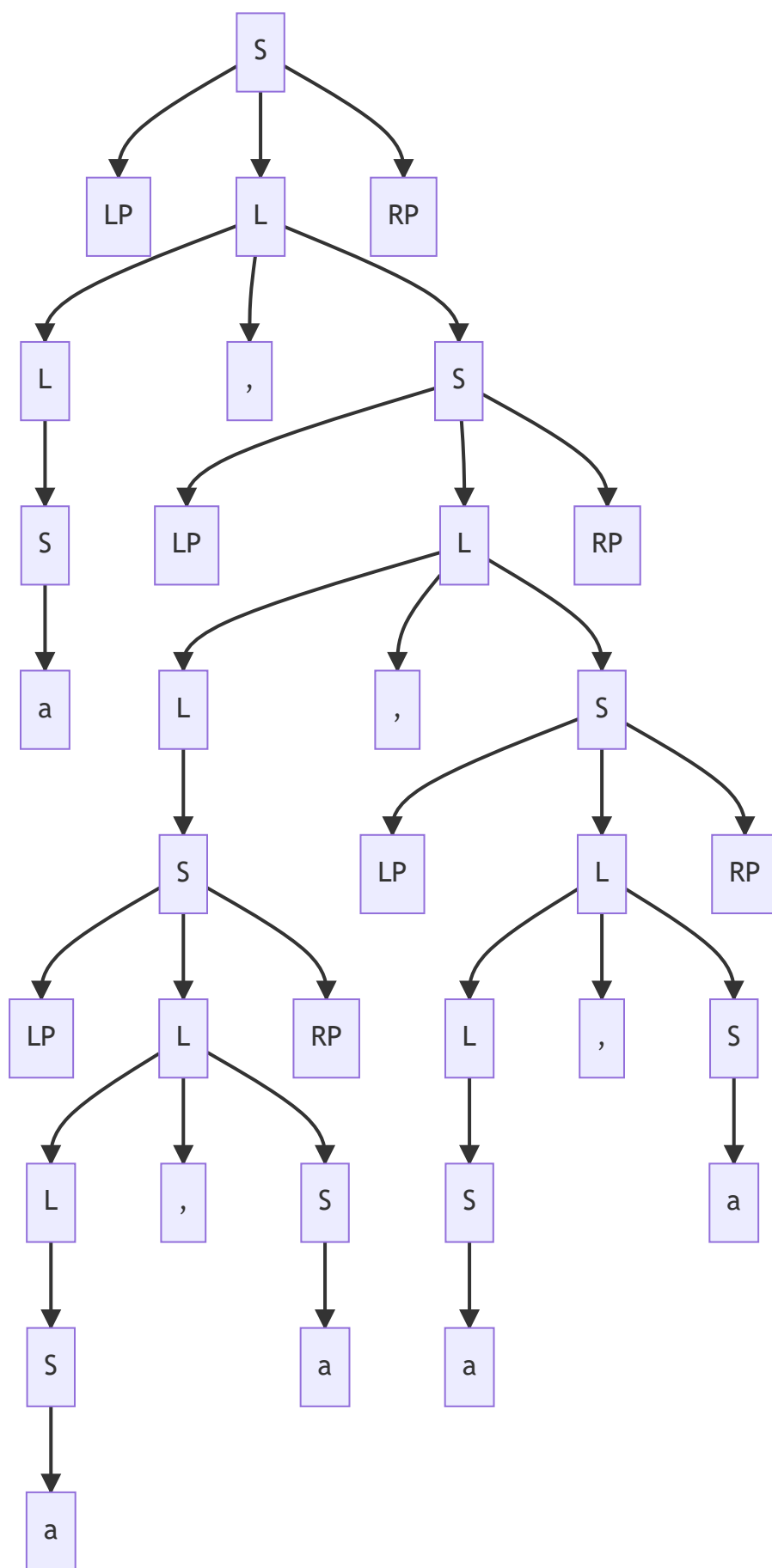
## PB21051012

### 3.1

(用LP表示

) 用RP表示

$$(a, (a, a))$$

$$(a, ((a, a), (a, a)))$$



## 3.2

$s \rightarrow \text{Im asbs} \rightarrow \text{Im abs} \rightarrow \text{Im abasbs} \rightarrow \text{Im ababs} \rightarrow \text{Im abab}$

$s \rightarrow \text{Im asbs} \rightarrow \text{Im absasbs} \rightarrow \text{Im abasbs} \rightarrow \text{Im ababs} \rightarrow \text{Im abab}$

## 3.10

$\text{first}(D) = \{\text{int}, \text{real}\}$

$\text{first}(T) = \{\text{int}, \text{real}\}$

$\text{first}(L) = \{\text{id}\}$

$\text{first}(R) = \{\epsilon, ,\}$

$\text{follow}(D) = \{\$\}$

$\text{follow}(T) = \{\text{id}\}$

$\text{follow}(L) = \{\$\}$

$\text{follow}(R) = \{\$\}$

	int	real	id	\$	,
D	$D \rightarrow \text{TL}$	$D \rightarrow \text{TL}$			
T	$T \rightarrow \text{int}$	$T \rightarrow \text{real}$			
L			$L \rightarrow \text{idR}$		
R				$R \rightarrow \epsilon$	$R \rightarrow ,\text{idR}$

## 3,11

$\text{first}(S) = \{a, b, \epsilon\}$

$\text{first}(A) = \{a, b\}$

$\text{first}(B) = \{a.b\}$

$\text{follow}(S) = \{\$\}$

$\text{follow}(A) = \{a, b, \$\}$

follow(B) = {a,b,\$}

	a	b	\$
S	$S \rightarrow aBS$	$S \rightarrow bAS$	$S \rightarrow \epsilon$
A	$A \rightarrow a$	$A \rightarrow bAA$	
B	$B \rightarrow aBB$	$B \rightarrow b$	

3.17

$I_0 :$

$S \rightarrow \cdot S$

$S \rightarrow \cdot (L)$

$S \rightarrow \cdot a$

$I_1$

$S \rightarrow S \cdot$

$I_2$

$S \rightarrow (\cdot L)$

$L \rightarrow \cdot L, S$

$L \rightarrow \cdot S$

$S \rightarrow \cdot (L)$

$S \rightarrow \cdot a$

$I_3$

$S \rightarrow a \cdot$

$I_4$

$L \rightarrow L, \cdot S$

$S \rightarrow \cdot (L)$

$S \rightarrow \cdot a$

$I_5$

$S \rightarrow (L \cdot)$

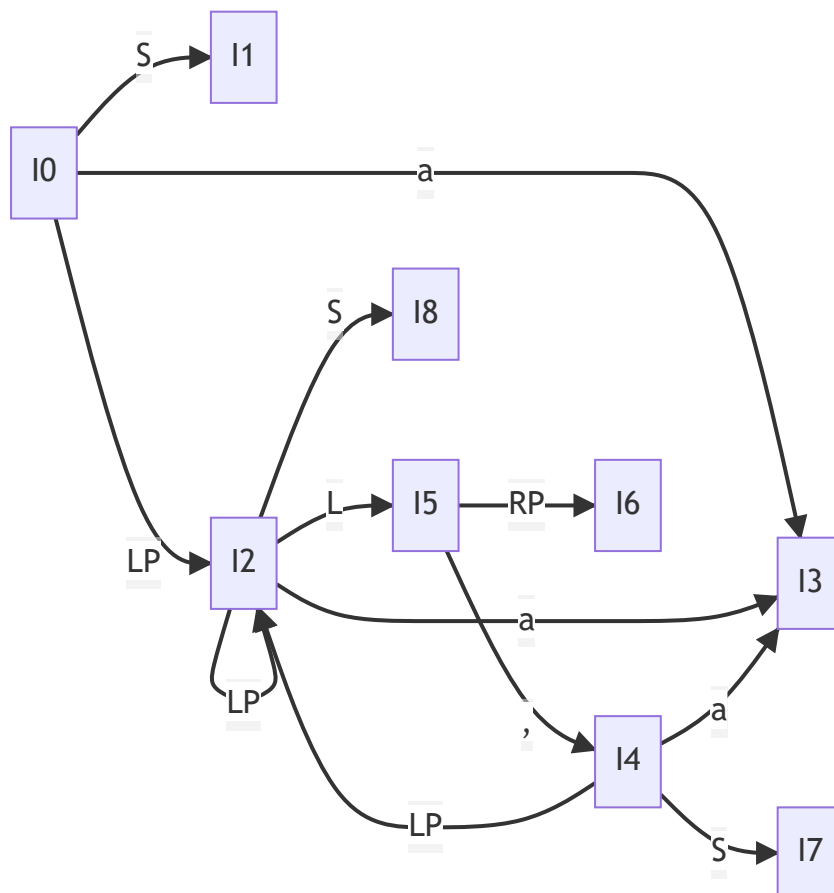
$L \rightarrow L \cdot, S$

$I_6$

$S \rightarrow (L) \cdot$

$I_7$

$L \rightarrow L, S \cdot$



3.19

$I_0$

$E \rightarrow \cdot E$

$$E- > \cdot E + T$$

$$E- > \cdot T$$

$$T- > \cdot TF$$

$$F- > \cdot F^*$$

$$F- > \cdot a$$

$$F- > \cdot b$$

$$I_1$$

$$E- > E \cdot$$

$$E- > E \cdot + T$$

$$I_2$$

$$E- > T \cdot$$

$$E- > T \cdot E$$

$$F- > \cdot F^*$$

$$F- > \cdot a$$

$$F- > \cdot b$$

$$I_3$$

$$T- > F \cdot$$

$$T- > F \cdot ^*$$

$$I_4$$

$$F- > a \cdot$$

$$I_5$$

$$F- > b \cdot$$

$$I_6$$

$$E- > E+ \cdot t$$

$$T- > \cdot TF$$

$$F- > \cdot F^*$$

$$F- > \cdot a$$

$$F- > \cdot b$$

$$I_7$$

$$T- > TF \cdot$$

$$F- > F \cdot$$

$$I_8$$

$$F- > F^* \cdot$$

$$I_9$$

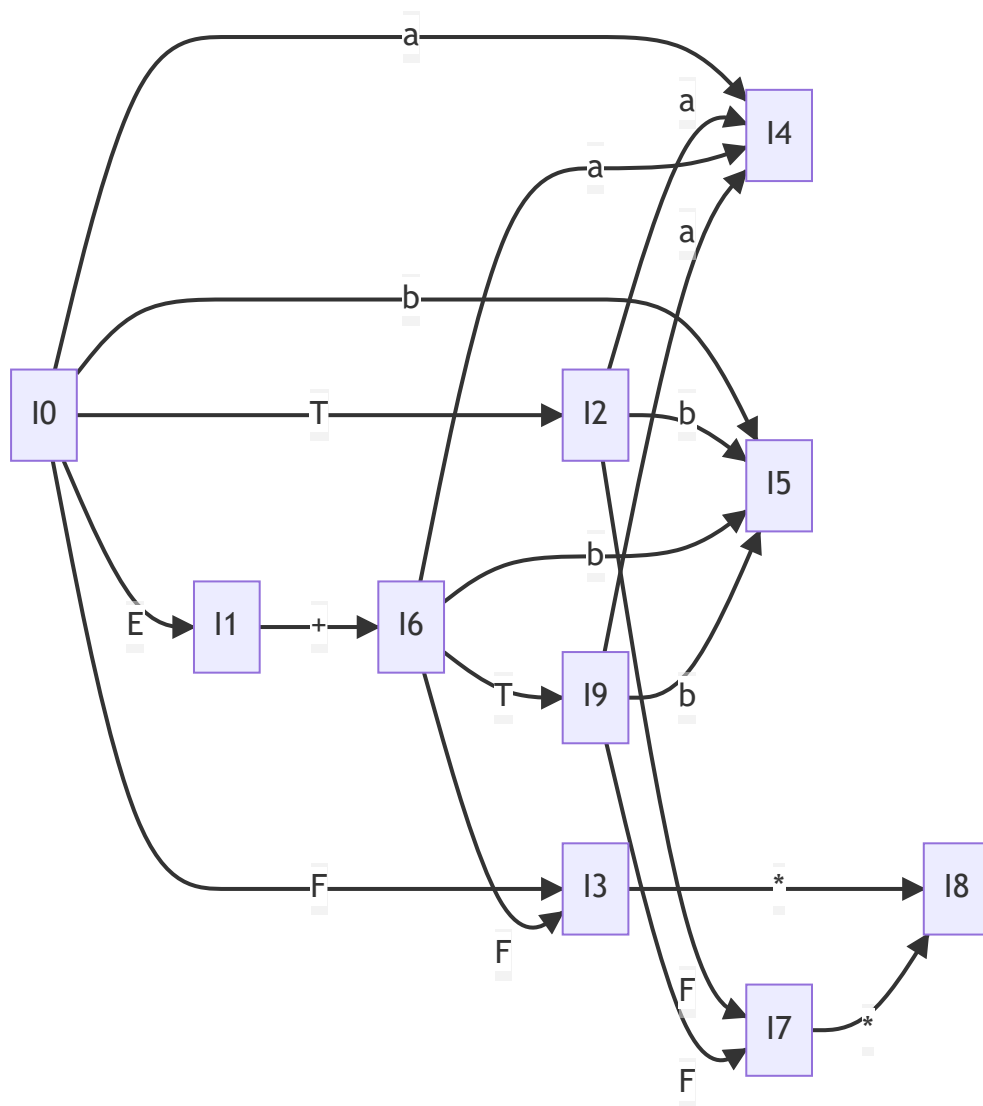
$$E- > E+ T \cdot$$

$$T- > T \cdot F$$

$$F- > \cdot F^*$$

$$F- > \cdot a$$

$$F- > \cdot b$$



SLR分析表:

	action					goto		
	+	*	a	b	\$	E	T	F
0			s4	s5		1	2	3
1	s6				acc			
2	r2		s4	s5	s6			7
3	r4	s8	r4	r4	r4			
4	r6	r6	r6	r6	r6			
5	r7	r7	r7	r7	r7			



	action				action	goto		goto
6			s4	s5			9	3
7	r3	s8	r3	r3	r3			
8	r5	r5	r5	r5	r5			
9	r1		s4	s5	r1			7