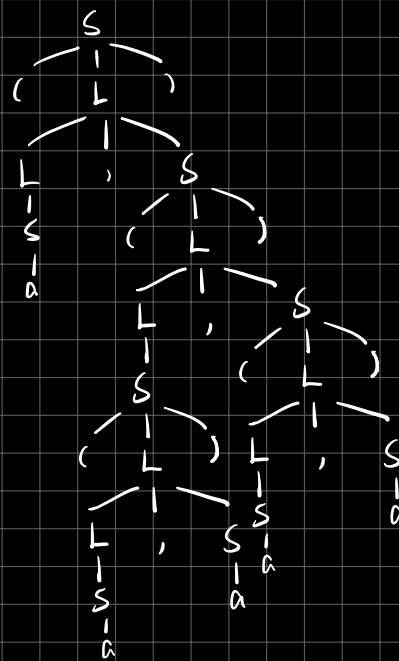
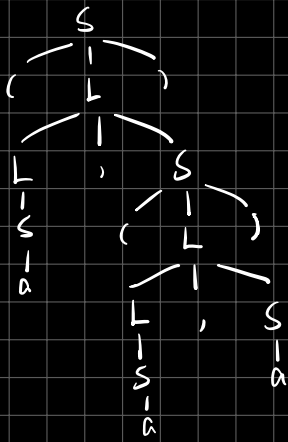


$(a, a), (a, a)$  的为


$$\text{thus } \Rightarrow asbs \Rightarrow abasbs \Rightarrow abasbs \Rightarrow abasbs \Rightarrow abab$$
$$\textcircled{2} S \Rightarrow aSbS \Rightarrow abS \Rightarrow abasbS \Rightarrow ababS \Rightarrow abab$$

故  $FIRST(S) = \{a, b, \epsilon\}$

$$\text{FOLLOW}(S) = \{ \$ \}$$
$$A \rightarrow bAA \mid a$$

FIRST(A) = {a, b}

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

$$B \rightarrow aBB \mid b$$
$$\text{FIRST}(B) = \{a, b\}$$
$$\text{FOLLOW}(B) = \{\$, a, b\}$$

故可得 LLC 分析表

非终结符	输入符号		
S	$S \rightarrow aBS$	$S \rightarrow bAS$	$S \rightarrow \epsilon$
A	$A \rightarrow a$	$A \rightarrow bAA$	
B	$B \rightarrow aBB$	$B \rightarrow b$	

0.  $E' \rightarrow E$

$$1. E \rightarrow E + T$$

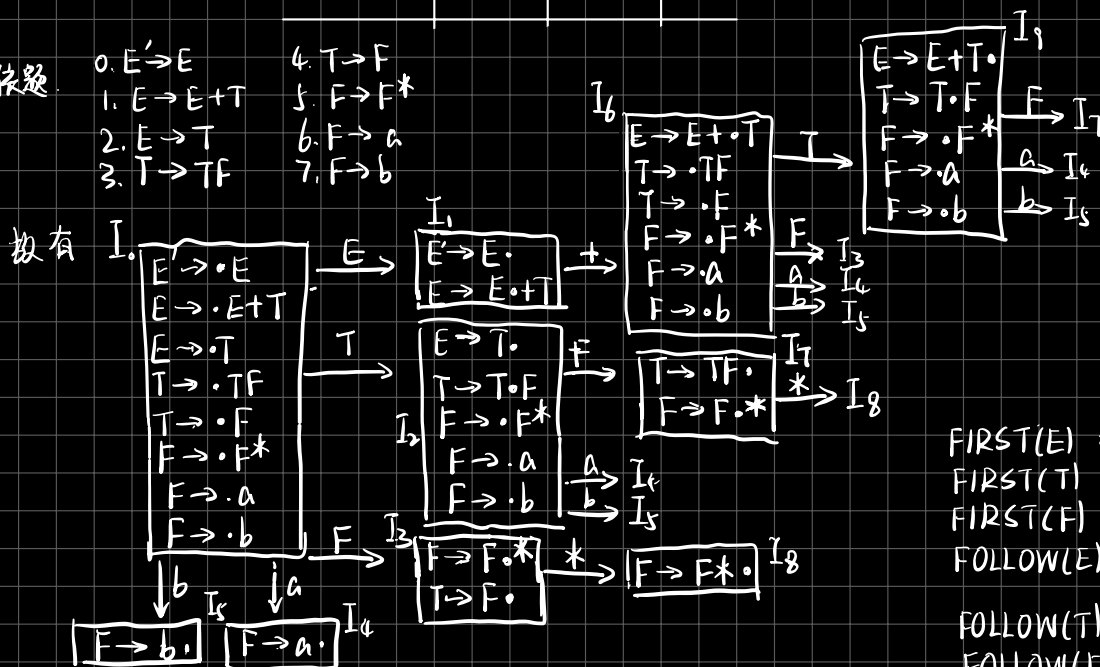
4.  $T \rightarrow F$

5.  $F \rightarrow F^*$

2.  $E \rightarrow T$

6.  $F \rightarrow a$

3.  $T \rightarrow TF$

$$7. F \rightarrow b$$

$$\text{FIRST}(E) = \{a, b\}$$

$\text{FIRST}(T) = \{a, b\}$

$$\text{FIRST}(F) = \{a, b\}$$
$$\text{FOLLOW}(E) = \{+, \$\}$$
$$\text{FOLLOW}(T) = \{a, b, \$, +\}$$

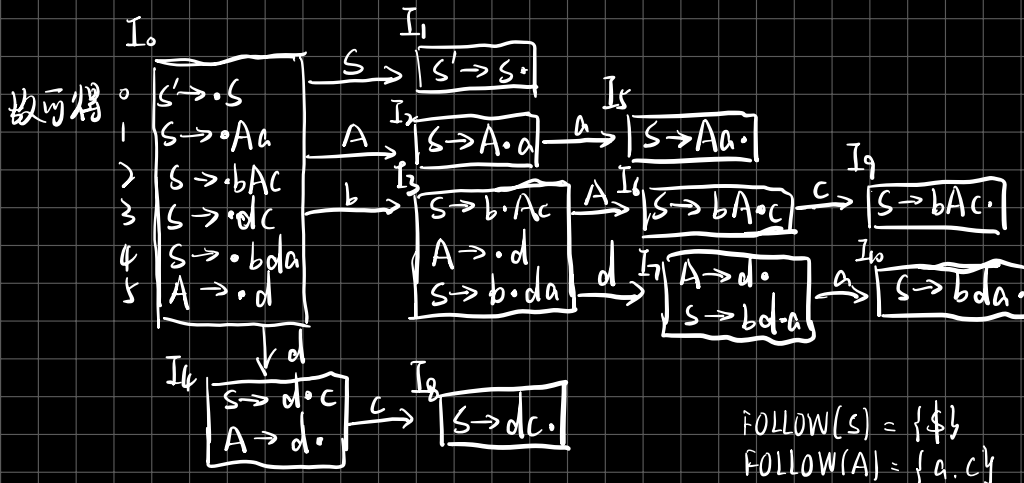
$\text{FOLLOW}(F) = \{*, \$, a, b, +\}$

所以有下表

状态	action					goto		
	a	b	+	*	\$	E	T	F
0	s4	s5				1	2	3
1			s6		acc			
2	s4	s5	r2		r2			7
3	r4	r4	r4	s8	r4			
4	r6	r6	r6	r6	r6			
5	r7	r7	r7	r7	r7			
6	s4	s5					9	3
7	r3	r3	r3	s7	r3			
8	r5	r5	r5	r5	r5			
9	s4	s5	r1		r1			7

证明: 依据

0.  $S' \rightarrow S$
1.  $S \rightarrow Aa$
2.  $S \rightarrow bAc$
3.  $S \rightarrow dc$
4.  $S \rightarrow bda$
5.  $A \rightarrow d$



所以有

state	action					goto	
	a	b	c	d	\$	S	A
0		s3		s4		1	2
1					acc		
2	s5						
3				s7			6
4	r5		s8, r5				
5					r1		
6			s9				
7	s10, r5			r5			
8					r3		
9					r2		
10					r4		

故分析表存在两处状态冲突, 所以不是 LR(0) 文法