3.17

给出拓广文法：

$$S' \to S \quad S \to (L) \mid a \quad L \to L, S \mid S$$

下面构造项目集：

$I_0 = closure(\{[S' \to \cdot S]\}) = \{S' \to \cdot S, S \to \cdot(L), S \to \cdot a\}$

$I_1 = goto(I_0, S) = closure(\{[S' \to S\cdot]\}) = \{S' \to S\cdot\}$

$I_2 = goto(I_0, () = closure(\{[S \to (\cdot L)]\}) = \{S \to (\cdot L), L \to \cdot L, S,\ L \to \cdot S, S \to \cdot(L), S \to \cdot a\}$

$I_3 = goto(I_0, a) = closure(\{[S \to a\cdot]\}) = \{S \to a\cdot\}$

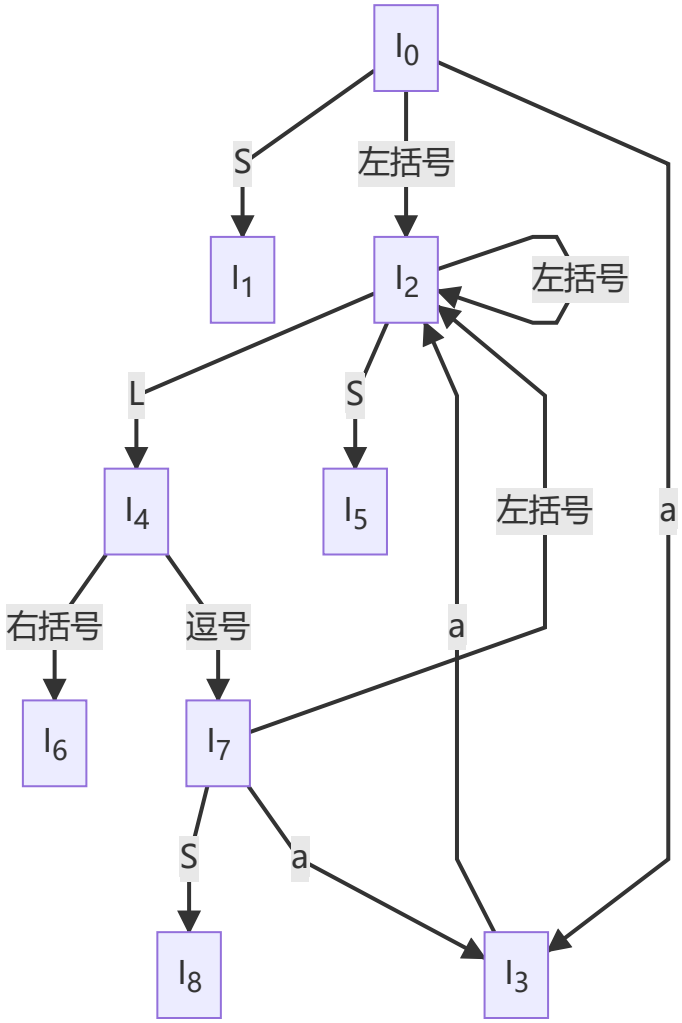
$I_4 = goto(I_2, L) = closure(\{[S \to (L\cdot)], [L \to L\cdot, S]\}) = \{S \to (L\cdot), L \to L\cdot, S\}$

$I_5 = goto(I_2, S) = closure(\{[L \to S\cdot]\}) = \{L \to S\cdot\}$

$I_6 = goto(I_4,)) = closure(\{[S \to (L)\cdot]\}) = \{S \to (L)\cdot\}$

$I_7 = goto(I_4, ,) = closure(\{[S \to L, \cdot S]\}) = \{L \to L, \cdot S, S \to \cdot(L), S \to \cdot a\}$

$I_8 = goto(I_7, S) = closure(\{[L \to L, S\cdot]\}) = \{L \to L, S\cdot\}$



3.19-a

$(0)E^{'} \to E$
$(1)E \to E+T$
$(2)E \to T$
$(3)T \to TF$
$(4)T \to F$
$(5)F \to F*$
$(6)F \to a$
$(7)F \to b$

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

3.21-a

$FIRST(AaAb) \cap FIRST(BbBa) = \{a\} \cap \{b\} = \emptyset$

$FOLLOW(A) \cap FOLLW(B) = \{a,b\} \cap \{a,b\} \neq \emptyset$

所以是$LL(1)$文法不是$SLR(1)$文法