

SLR [ Follow of Final position (Reduce) ]

Example: (a)

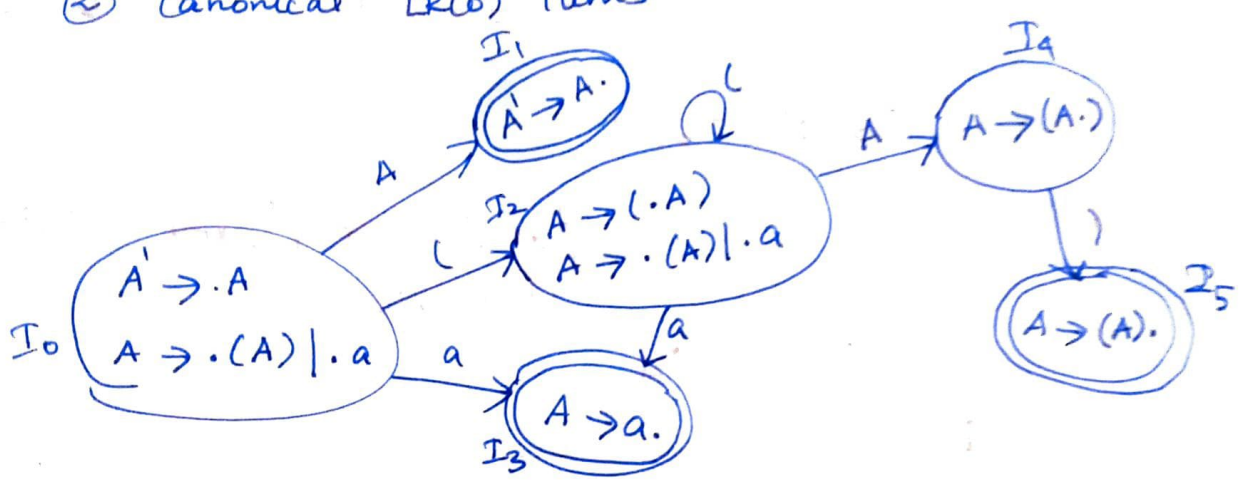
$A \rightarrow (A) | a \rightarrow \{ (, a \}$

FOLLOW  
 $\{ \$, ) \}$

① Augmented Grammar

$A' \rightarrow A$   
 $A \rightarrow (A) | a$

② Canonical LR(0) items



1.  $A \rightarrow (A)$
2.  $A \rightarrow a$

③ LR(0) parse Table

	ACTION					GOTO
	a	(	)	\$		
I <sub>0</sub>	S <sub>3</sub>	S <sub>2</sub>			A	
I <sub>1</sub>				Acc	1	
I <sub>2</sub>	S <sub>3</sub>	S <sub>2</sub>			4	
I <sub>3</sub>	r <sub>2</sub>	r <sub>2</sub>	r <sub>2</sub>	r <sub>2</sub>		
I <sub>4</sub>			S <sub>5</sub>			
I <sub>5</sub>	r <sub>1</sub>	r <sub>1</sub>	r <sub>1</sub>	r <sub>1</sub>		

processing Input (a)

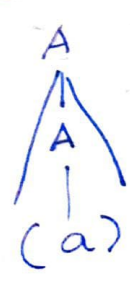
STACK	I/P	ACTION
\$ 0	(a)\$	
\$ 0 ( <u>2</u>	<u>a</u> ) \$	shift ( 2
\$ 0 ( 2 a <u>3</u>	<u>)</u> \$	shift a 3
\$ 0 ( 2 A 4	) \$	Reduce 2
\$ 0 ( <u>2 A 4</u> ) 5	\$	shift ) 5
\$ 0 A <u>1</u>	\$	Reduce 1
		<u>Accept</u>

SLR Table Final Items - Reduce operation (Follow of (-FIRST of LHS) LHS)

$A \rightarrow (A) | a$ ,  $\frac{\text{FIRST}}{\{ (, a \}}$  |  $\frac{\text{FOLLOW}}{\{ ), \$ \}}$

ITEM	ACTION				GOTO
	a	(	)	\$	
I <sub>0</sub>	S <sub>3</sub>	S <sub>2</sub>			A
I <sub>1</sub>				Accept	
I <sub>2</sub>	S <sub>3</sub>	S <sub>2</sub>			A
I <sub>3</sub>			r <sub>2</sub>	r <sub>2</sub>	
I <sub>4</sub>			S <sub>5</sub>		
I <sub>5</sub>			r <sub>1</sub>	r <sub>1</sub>	

parse Tree



$A \rightarrow (A) | a \rightarrow \frac{\text{FIRST}}{\{ (, a \}}$   $\frac{\text{FOLLOW}}{\{ \$, ) \}}$