

$$\text{GOTO}(I_8, +) = I_6$$

$$\text{GOTO}(I_9, *) = I_7$$

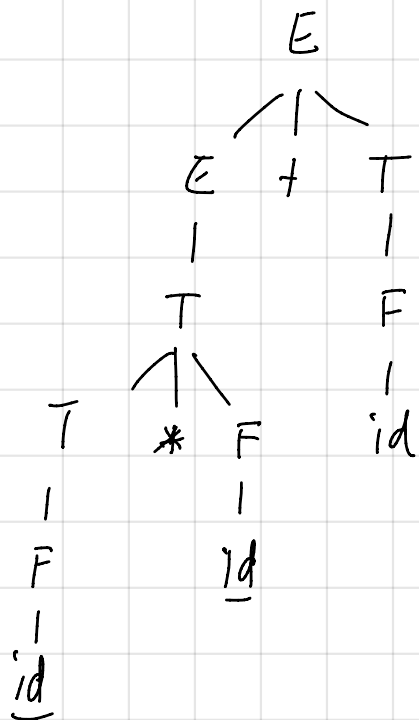
Parsing of $\underline{id} * \underline{id} + \underline{id}$

STATE STACK	SYMBOL STACK	INPUT	ACTION
\$0	\$	$\underline{id} * \underline{id} + \underline{id} \$$	shift 4
\$04	\$ $\underline{id} \leftarrow$ handle	$* \underline{id} + \underline{id} \$$	red $F \rightarrow \underline{id}$
\$03	\$ $\underline{F} \leftarrow$	$* \underline{id} + \underline{id} \$$	red $T \rightarrow F$
\$02	\$ \underline{T}	$* \underline{id} + \underline{id} \$$	shift 7
\$027	\$ $\underline{T} * \underline{id}$	$\underline{id} + \underline{id} \$$	shift 4
\$0274	\$ $\underline{T} * \underline{id}$	$+ \underline{id} \$$	red $F \rightarrow \underline{id}$
\$02710	\$ $\underline{T} * \underline{F}$	$+ \underline{id} \$$	red $T \rightarrow T * F$
\$02	\$ \underline{T}	$+ \underline{id} \$$	red $E \rightarrow T$
\$01	\$ \underline{E}	$+ \underline{id} \$$	shift 6
\$016	\$ $\underline{E} + \underline{id}$	$\underline{id} \$$	shift 4
\$0164	\$ $\underline{E} + \underline{id}$	\$	red $F \rightarrow \underline{id}$
\$0163	\$ $\underline{E} + \underline{F}$	\$	red $T \rightarrow F$
\$0169	\$ $\underline{E} + \underline{T}$	\$	red $E \rightarrow E + T$
\$01	\$ \underline{E}	\$	ACCEPT

Rightmost Derivation

$$E \Rightarrow_{ZM} E + T \Rightarrow_{ZM} E + F \Rightarrow_{ZM} E + \underline{id} \Rightarrow_{ZM} T + \underline{id} \Rightarrow_{ZM} T * F + \underline{id}$$

$$\Rightarrow_{ZM} T * \underline{id} + \underline{id} \Rightarrow_{ZM} F * \underline{id} + \underline{id} \Rightarrow_{ZM} \underline{id} * \underline{id} + \underline{id}$$

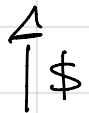


$S' \rightarrow S$ $a b b e$

$S \rightarrow a S \mid B a$

$B \rightarrow B e \mid b$

ACCEPT



$FIRST(S) = \{a, b\}$

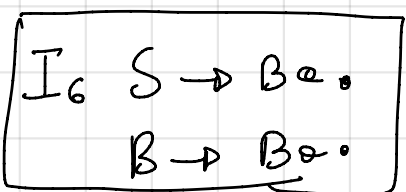
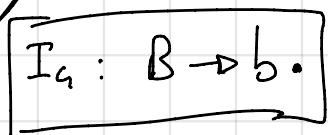
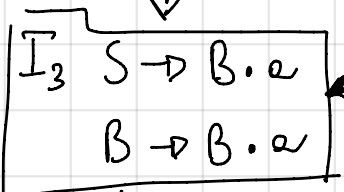
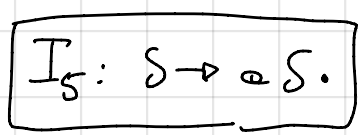
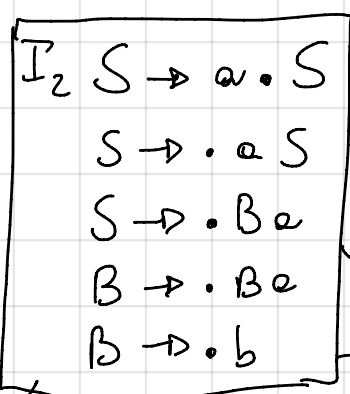
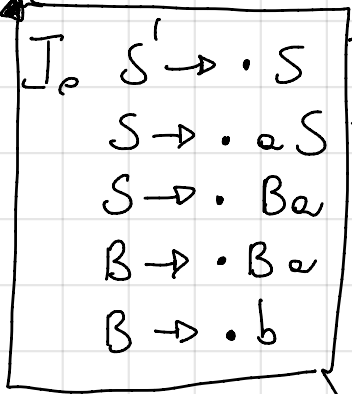
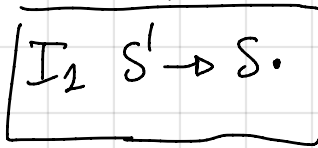
$FIRST(B) = \{b\}$

$FOLLOW(S') = \{\$ \}$

$FOLLOW(S) = \{\$ \}$

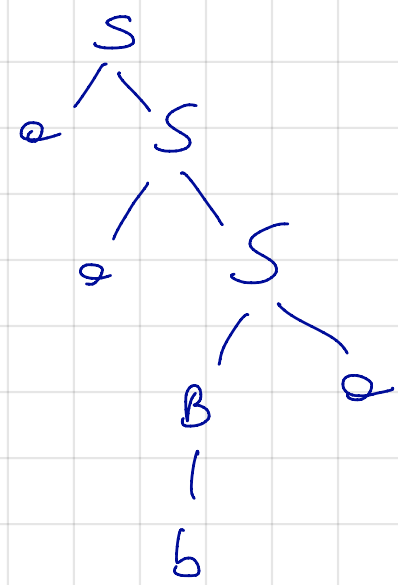
$FOLLOW(B) = \{a\}$

#5



	a	b	\$	S	B
0	S2	S4		1	3
1			ACC		
2	S2	S4		5	3
3	S6				
4	Z4				
5			Z1		
6	Z3		Z2		

STACK	INPUT	ACTION
\$ ∅	a b a \$	shift 2
\$ ∅ a 2	a b a \$	shift 2
\$ ∅ a 2 a 2	b a \$	shift 4
\$ ∅ a 2 a 2 b 4	a \$	red B → b
\$ ∅ a 2 a 2 B 3	a \$	shift 6
\$ ∅ a 2 a 2 B 3 a 6	\$	red S → Ba
\$ ∅ a 2 a 2 S 5	\$	red S → aS
\$ ∅ a 2 S 5	\$	red S → aS
\$ ∅ S 1	\$	ACCEPT



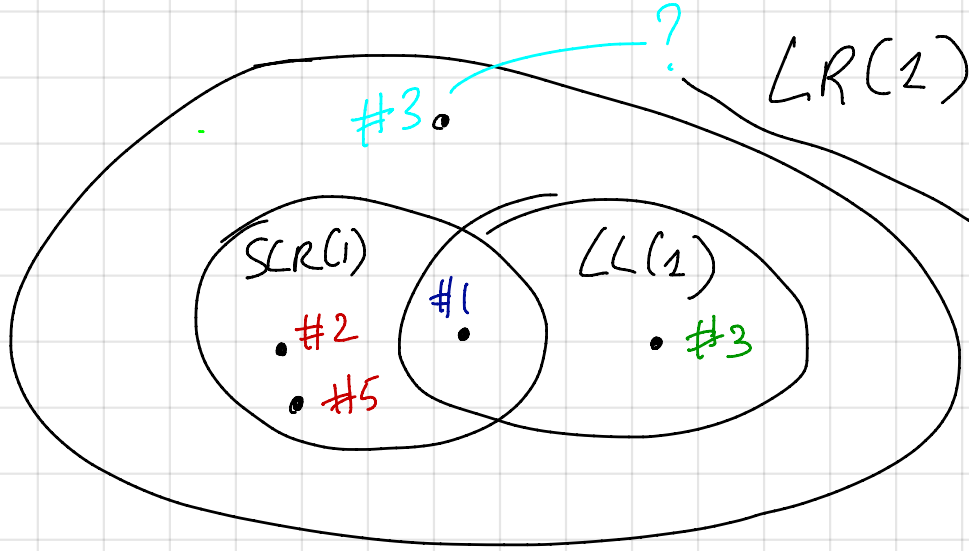
#3

$S \rightarrow AaAb \mid BbBa$
 $A \rightarrow \epsilon$
 $B \rightarrow \epsilon$

#2

$S \rightarrow SA \mid A$
 $A \rightarrow a$

The grammar is left-recursive,
 so it can not be LL(1)



We will have soon an example

#1

$S \rightarrow a \in SLR(1)$
 $\in LL(1)$