

## Example 1

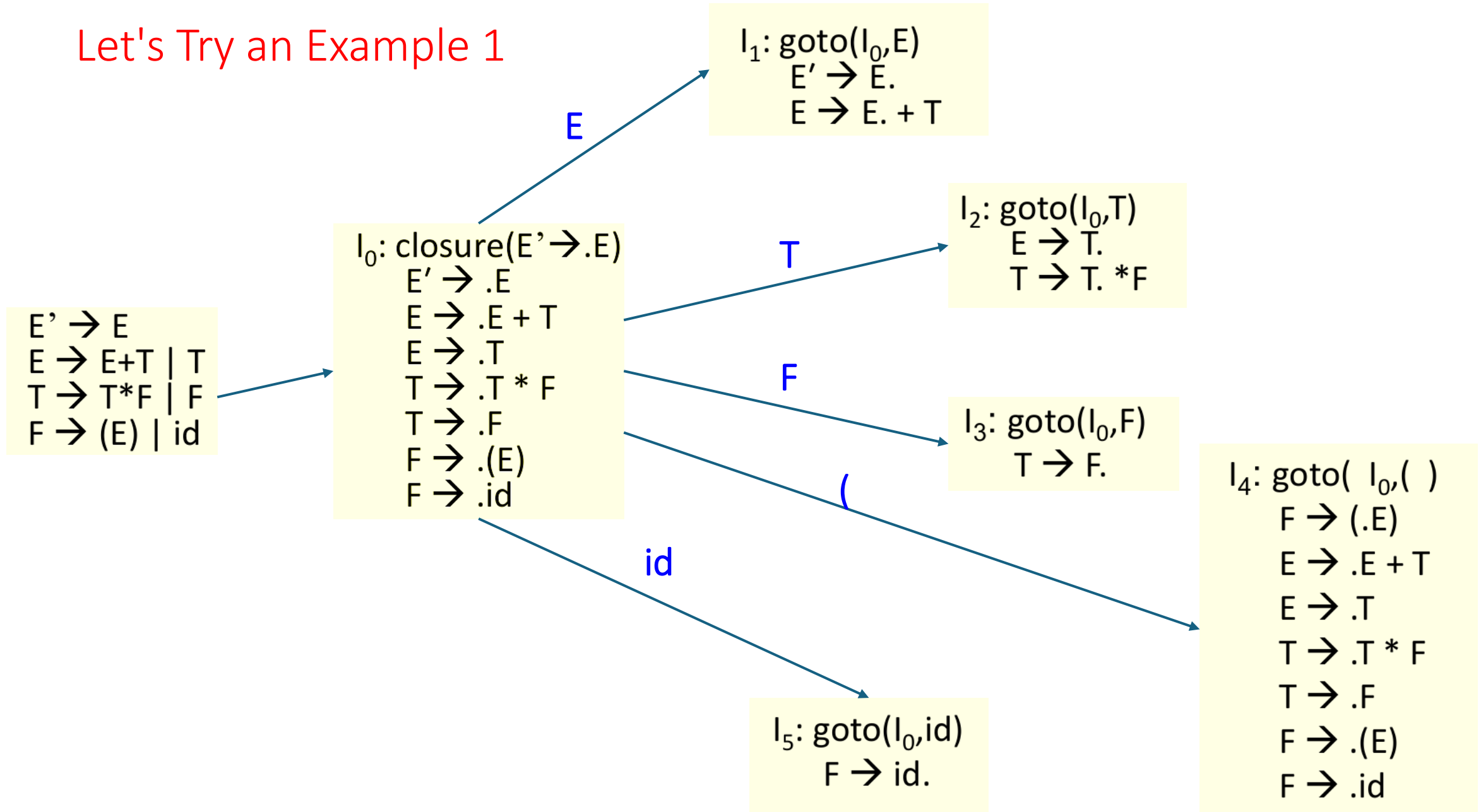
Given grammar

$$\begin{aligned} E' &\rightarrow E \\ E &\rightarrow E+T \mid T \\ T &\rightarrow T*F \mid F \\ F &\rightarrow (E) \mid \text{id} \end{aligned}$$

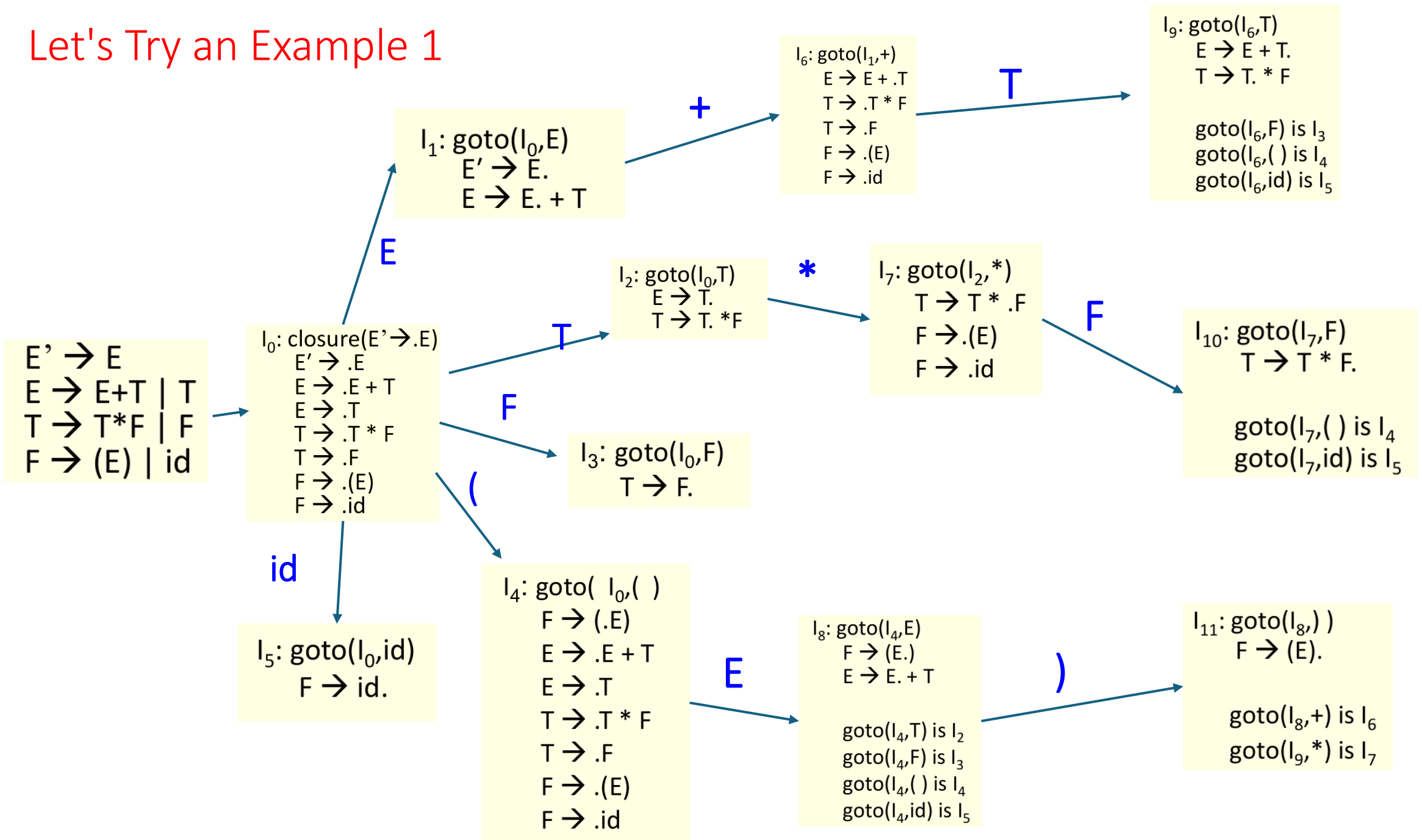
If  $I$  is  $\{E' \rightarrow .E\}$  then  
 $\text{closure}(I)$  is

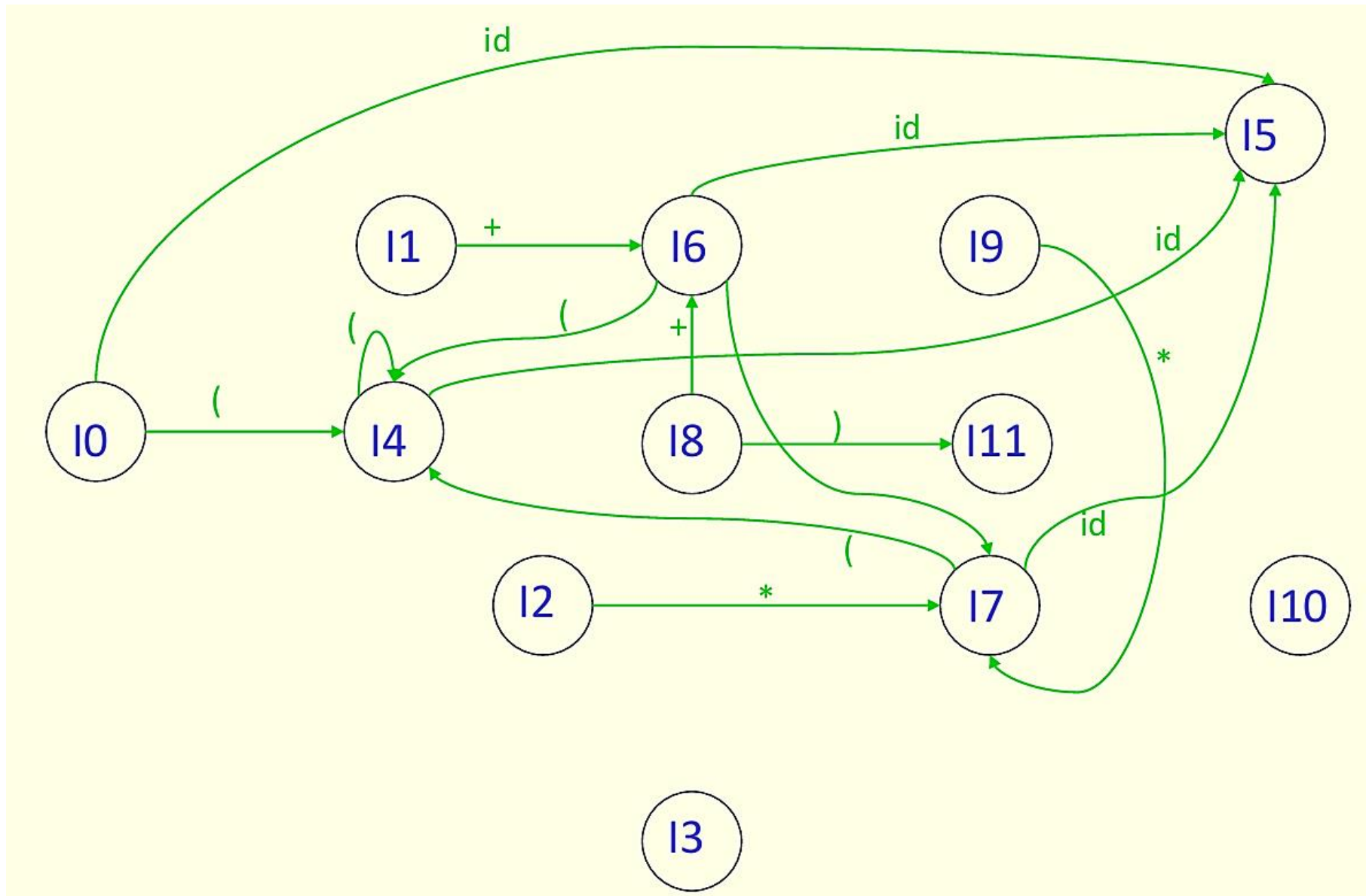
$$\begin{aligned} I_0: \text{closure}(E' \rightarrow .E) \\ E' &\rightarrow .E \\ E &\rightarrow .E + T \\ E &\rightarrow .T \\ T &\rightarrow .T * F \\ T &\rightarrow .F \\ F &\rightarrow .(E) \\ F &\rightarrow .\text{id} \end{aligned}$$

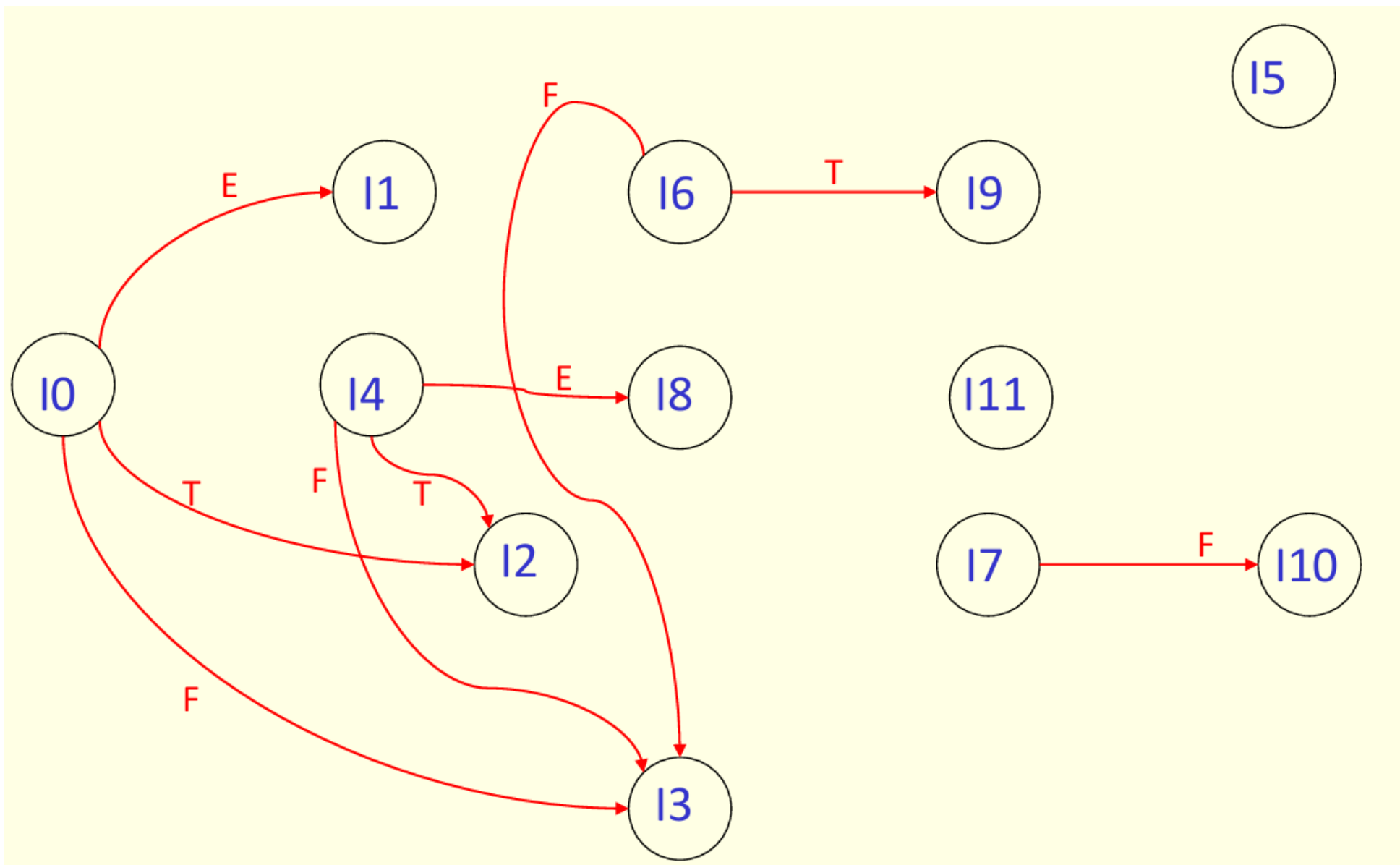
## Let's Try an Example 1

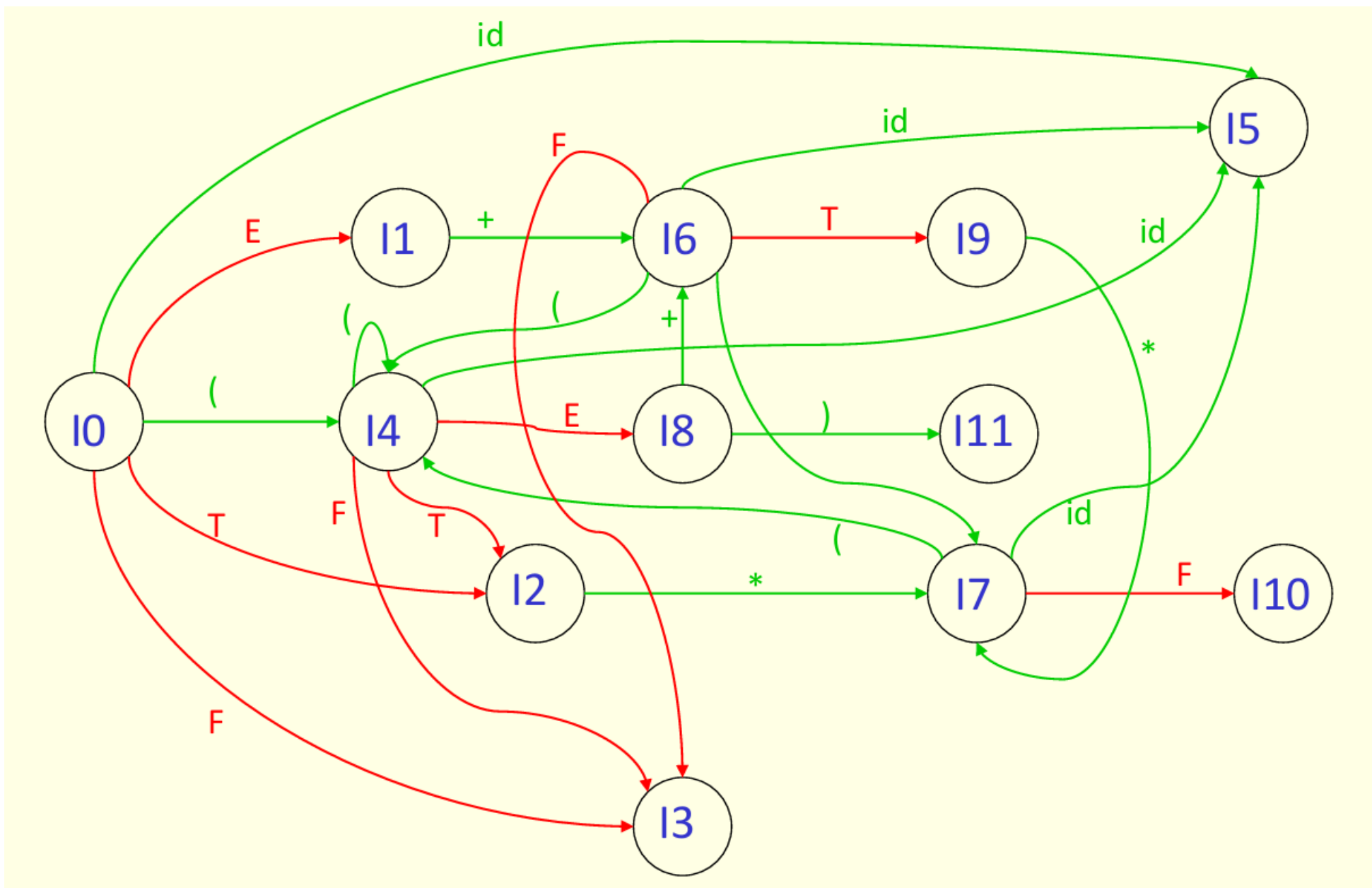


## Let's Try an Example 1

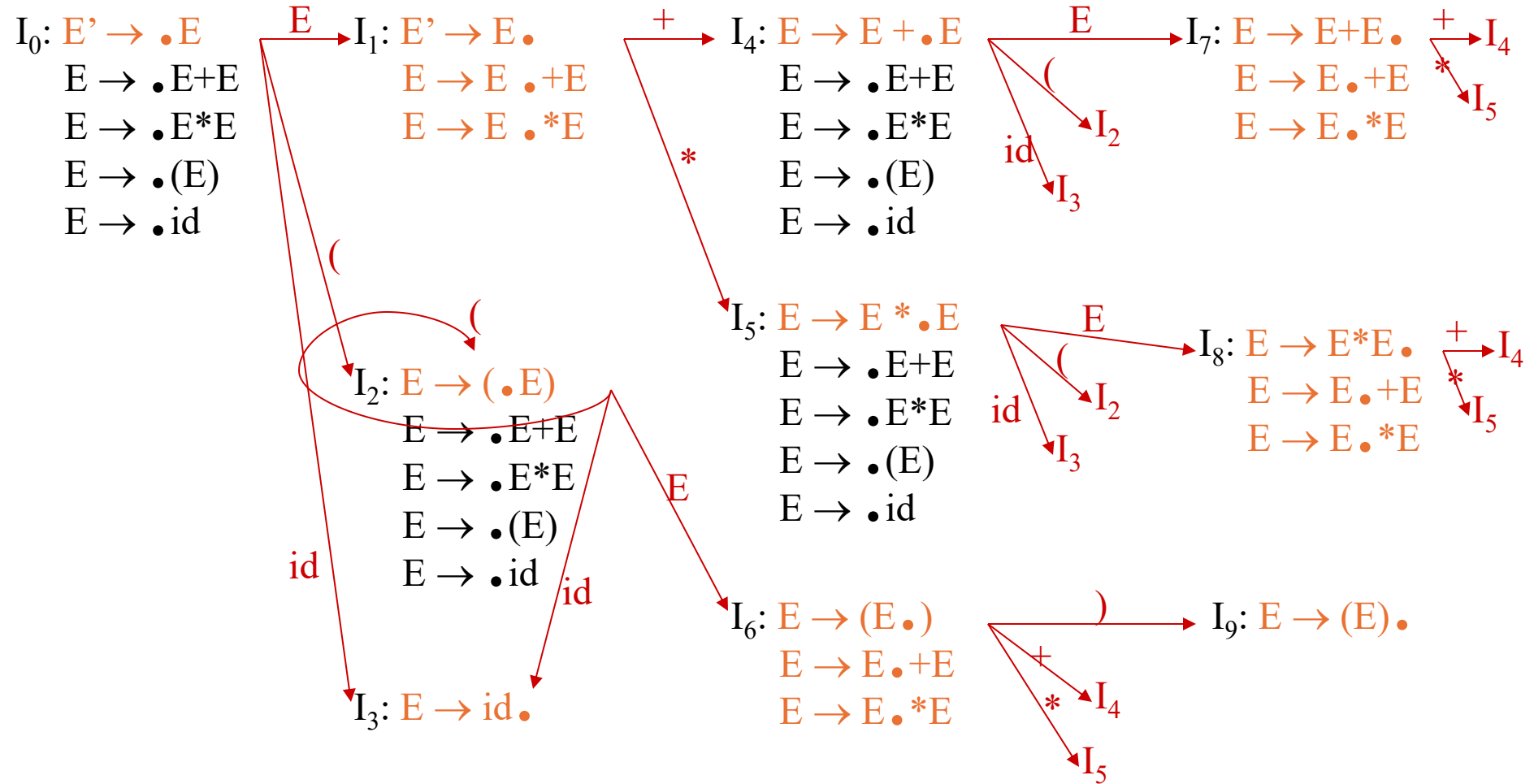








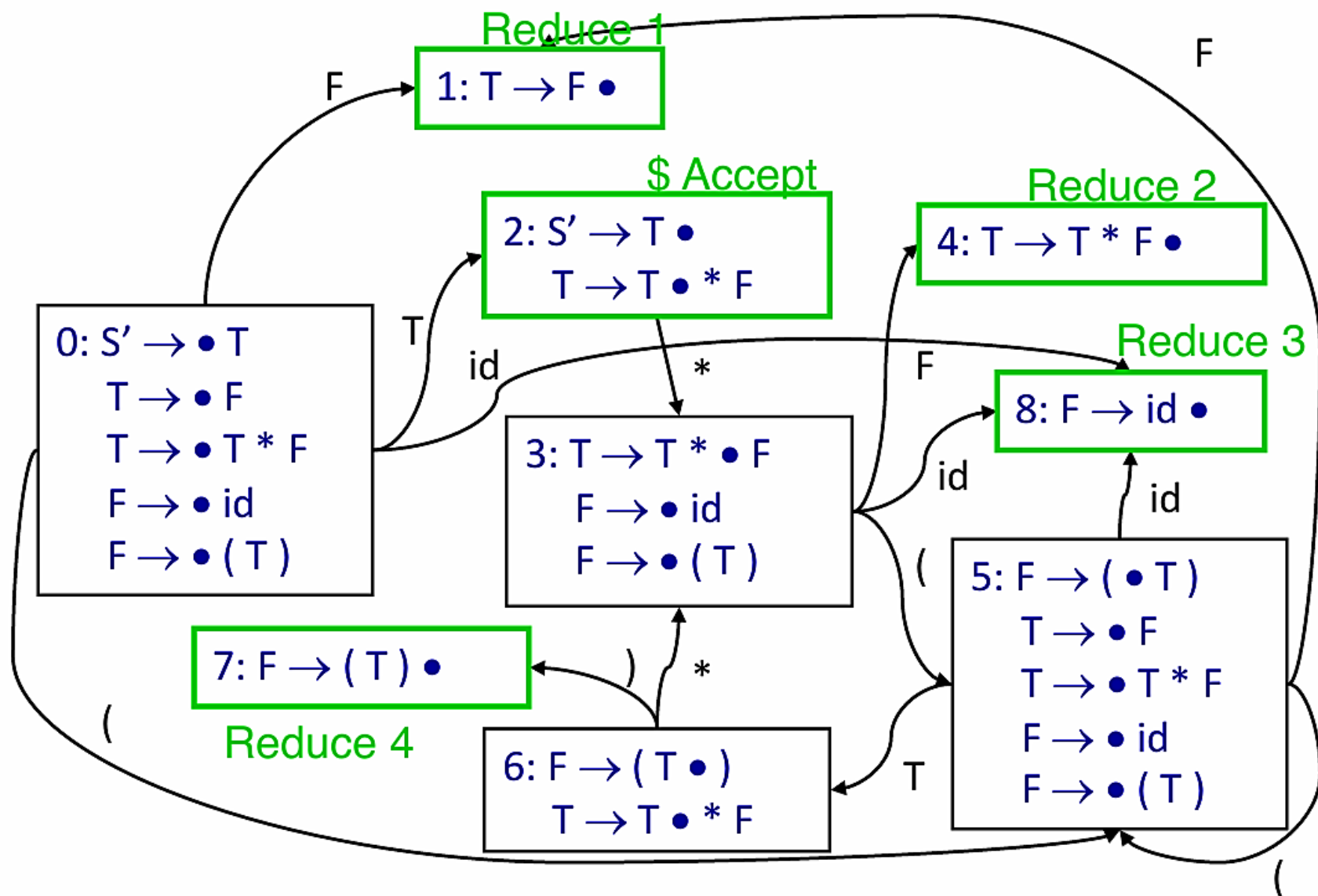
## Example 3



Productions	
1	$T \rightarrow F$
2	$T \rightarrow T * F$
3	$F \rightarrow id$
4	$F \rightarrow (T)$

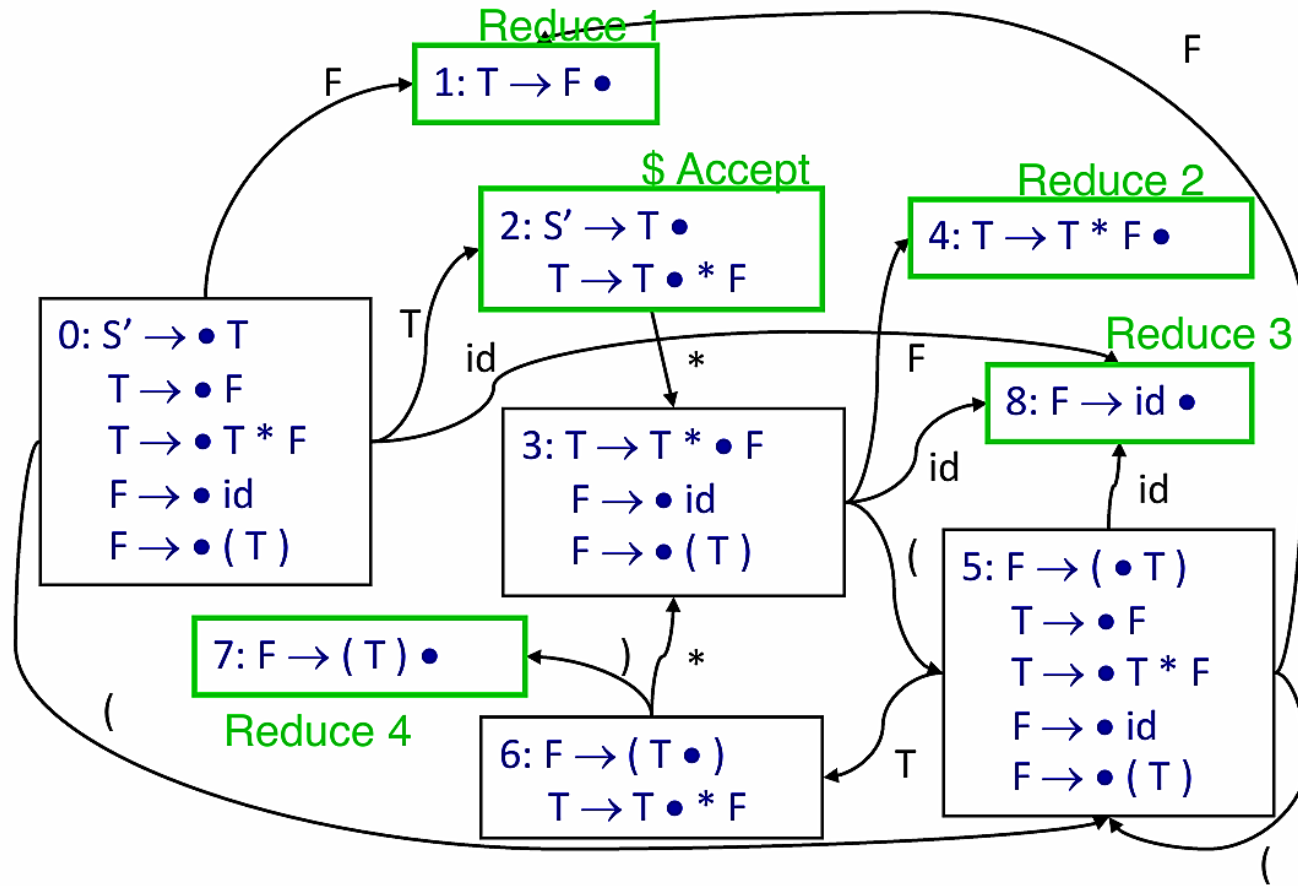
## Example 2

$S' \rightarrow T$   
 $T \rightarrow F \mid T * F$   
 $F \rightarrow id \mid (T)$



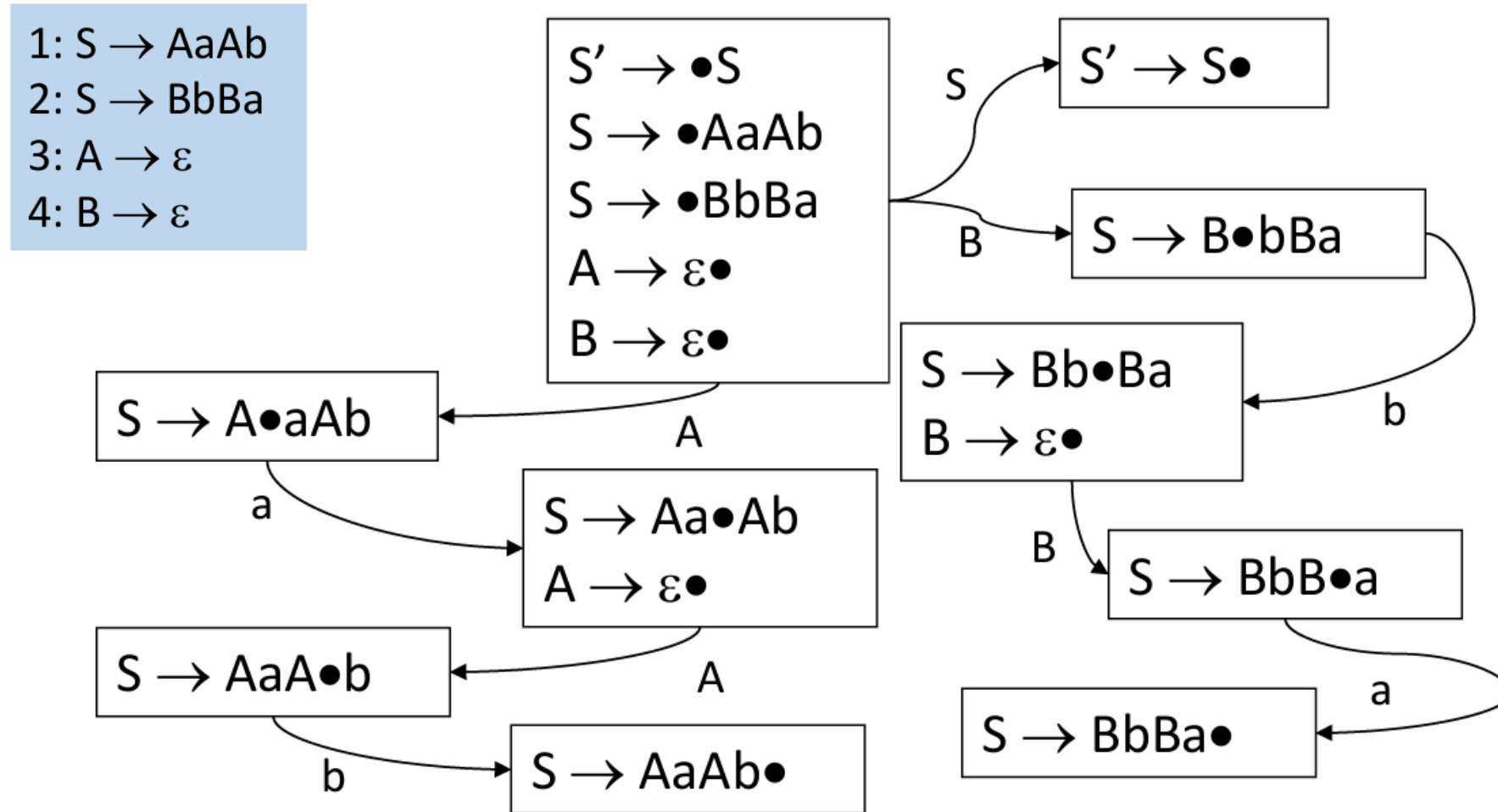


## Example 2



	*	(	)	id	\$	T	F
0		S5		S8		2	1
1	R1	R1	R1	R1	R1		
2	S3				A		
3		S5		S8			4
4	R2	R2	R2	R2	R2		
5		S5		S8		6	1
6	S3		S7				
7	R4	R4	R4	R4	R4		
8	R3	R3	R3	R3	R3		

## Example 4 with Epsilon rules



## Example 4 with Epsilon rules

