

To REO and back (5) - Atividade 3

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a)

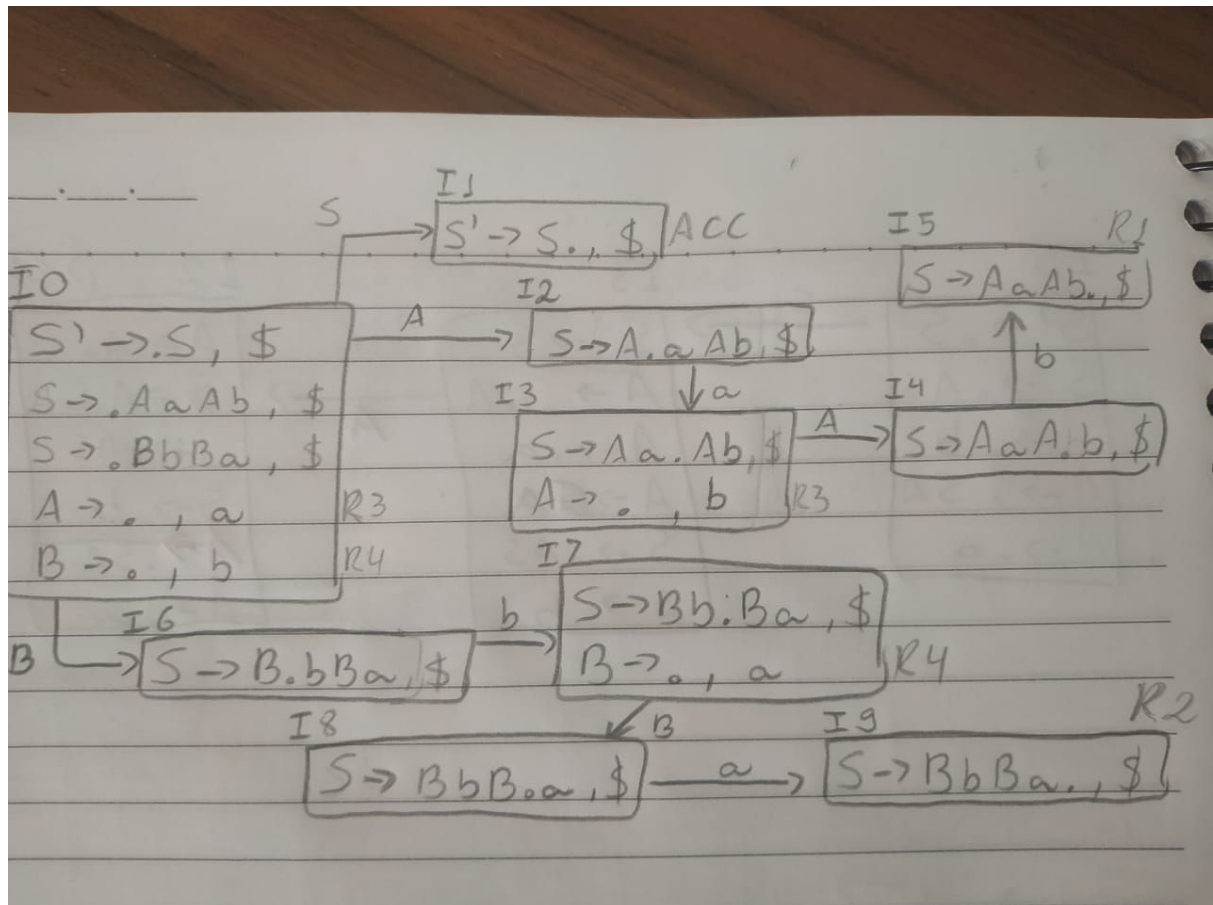
(0) $S' \rightarrow S$

(1) $S \rightarrow AaAb$

(2) $S \rightarrow BbBa$

(3) $A \rightarrow \epsilon$

(4) $B \rightarrow \epsilon$



CLR(1)	ACTION			GOTO		
	a	b	\$	S	A	B
0	R3	R4		1	2	6
1			ACC			
2	S3					

3		R3			4	
4		S5				
5			R1			
6		S7				
7	R4					8
8	S9					
9				R2		

b)

(0) $S' \rightarrow E$

(1) $E \rightarrow E + T$

(2) $E \rightarrow T$

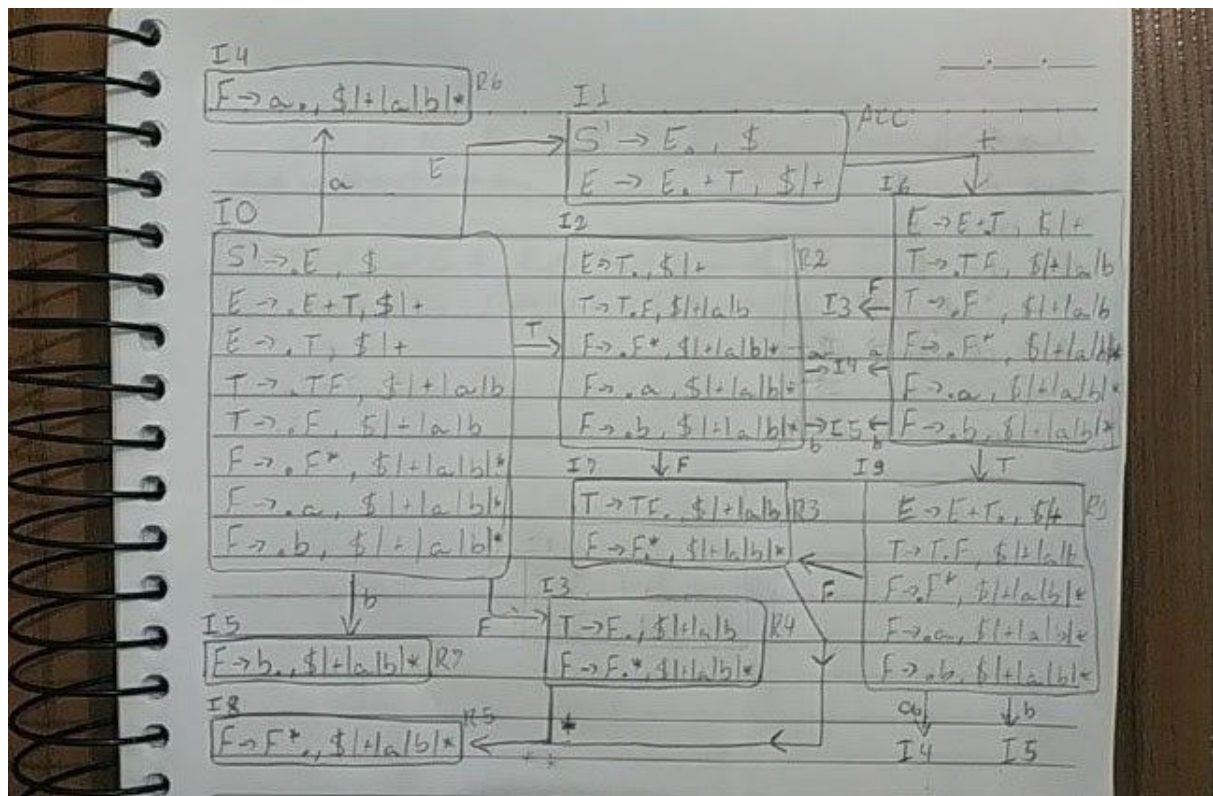
(3) $T \rightarrow TF$

(4) $T \rightarrow F$

(5) $F \rightarrow F^*$

(6) $F \rightarrow a$

(7) $F \rightarrow b$



CLR(1)	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	S8	R3			
8	R5	R5	R5	R5	R5			
9	S4	S5	R1		R1			7

c)

(0) $S' \rightarrow S$

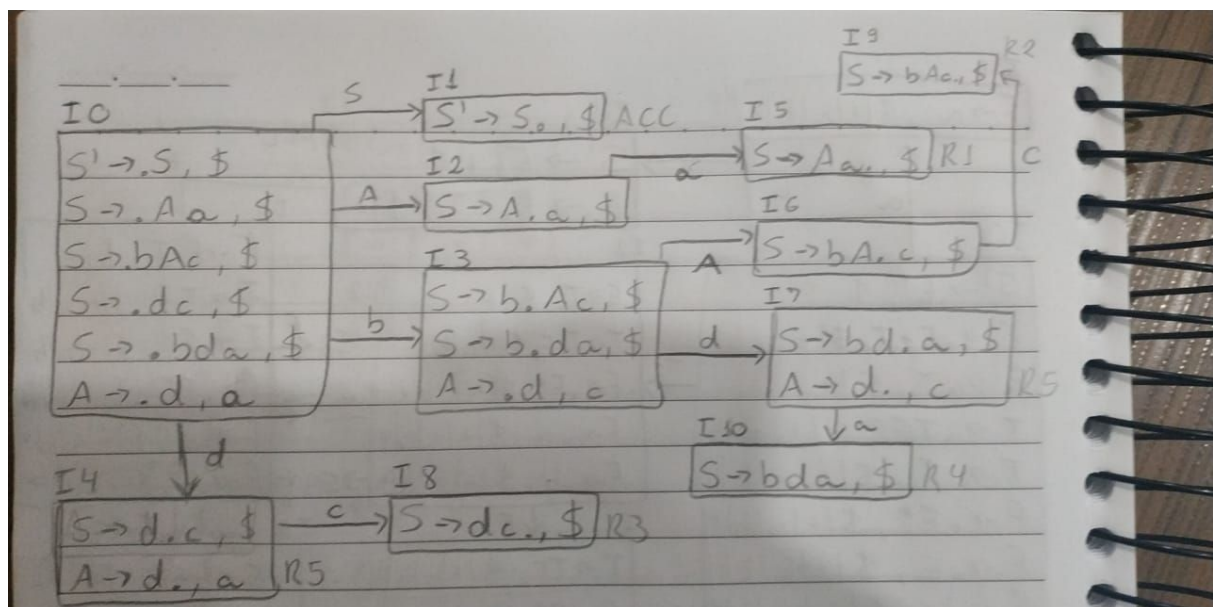
(1) $S \rightarrow Aa$

(2) $S \rightarrow bAc$

(3) $S \rightarrow dc$

(4) $S \rightarrow bda$

(5) $A \rightarrow d$



CLR(1)	ACTION					GOTO	
	a	b	c	d	\$	S	A
0		S3		S4		1	2
1					ACC		
2	S5						
3				S7			6
4	R5		S8				
5					R1		
6			S9				
7	S10		R5				
8					R3		
9					R2		
10					R4		

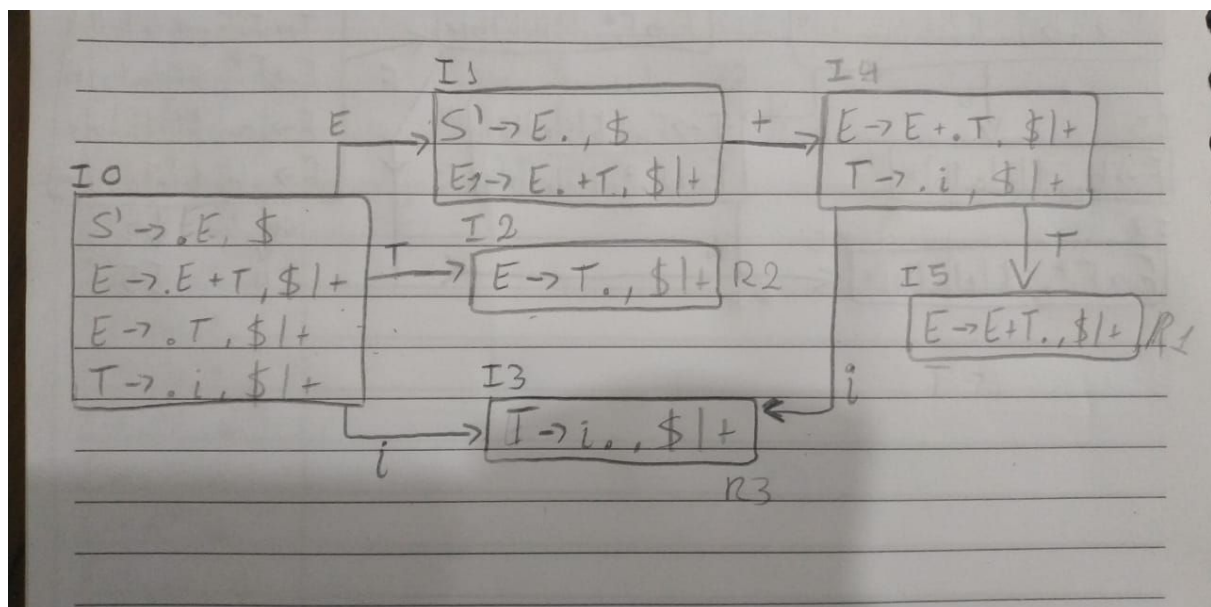
d)

(0) $S' \rightarrow E$

(1) $E \rightarrow E + T$

(2) $E \rightarrow T$

(3) $T \rightarrow i$



“Errata”: faltou incluir ACC visualmente no estado 1.

CLR(1)	ACTION			GOTO	
	i	+	\$	E	T
0	S3			1	2
1		S4	ACC		
2		R2	R2		
3		R3	R3		
4	S3				5
5		R1	R1		

Obs: todas as gramáticas são CLR(1), mas nenhum autômato apresenta estados que podem ser aglutinados em itens LALR, logo, todas as tabelas LALR(1) são exatamente iguais às CLR(1).