

LR(0) Parser

Date: 20/10/2025

Step 1:

Augment the grammar and number it.

Step 2:

Draw DFA (Diagram).

Step 3:

Parsing Table.

Step 4:

Stack Implement.

Step 5:

Parse Tree.

Q:

$$E \rightarrow BB$$

$$B \rightarrow cB \mid d$$

string: $ccdd\$$

Sol:

Step 1:

Augment the grammar

and number it

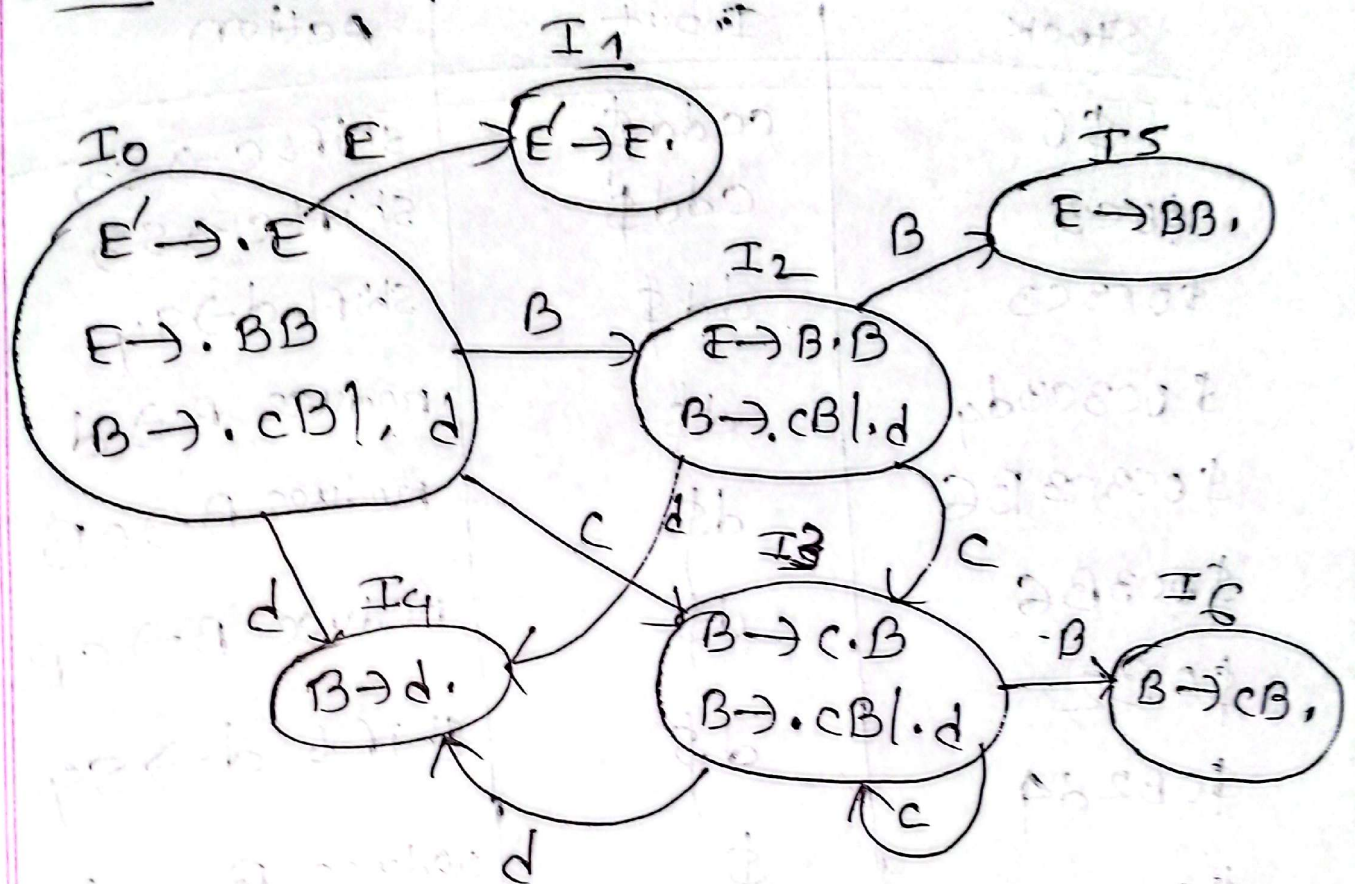
$$E' \rightarrow E \quad (0)$$

$$E \rightarrow BB \quad (1)$$

$$B \rightarrow cB \mid d$$

(2) (3)

Step 2: Draw DFA Diagram



Step 3: Parsing Table

State	Action			Goto	
	c	d	\$	B	E
I_0	S ₃	S ₄	A	2	1
I_1	S ₃	S ₄		5	
I_2	S ₃	S ₄		6	
I_3	R ₃	R ₃	R ₃		
I_4	R ₁	R ₁	R ₁		
I_5	R ₂	R ₂	R ₂		
I_6					

