LALR(1) Parson Look, Ahead LR(1)

\* In LALR(1), find LR(1) items LR(±) = LR(0) - êtems + Look ahead

Construction of LALR(1) parsing Table

Step 1 find White the Augmnented Grammar.

Step 2 find the LR(1) items

LR(1) = LR(0) + Leokahead.

· Step 3 Defendy & function, goto(NT) & setion (T).

Step-4. Create Parsing table

Step-5 Check weather string (we) is

accepted agnot.

Date-18/10/22

Eurostion Construction of LALR(1) parsing table
of given grammar. S-> AA
A-> aA/B
And Check weather string (w=aabb) is accepted
as not.

Answer - S > AA - production (1)
A > aA - production (2)
A > b - production (3)

(Step-1) Write Augmented Grammar. S'-> S

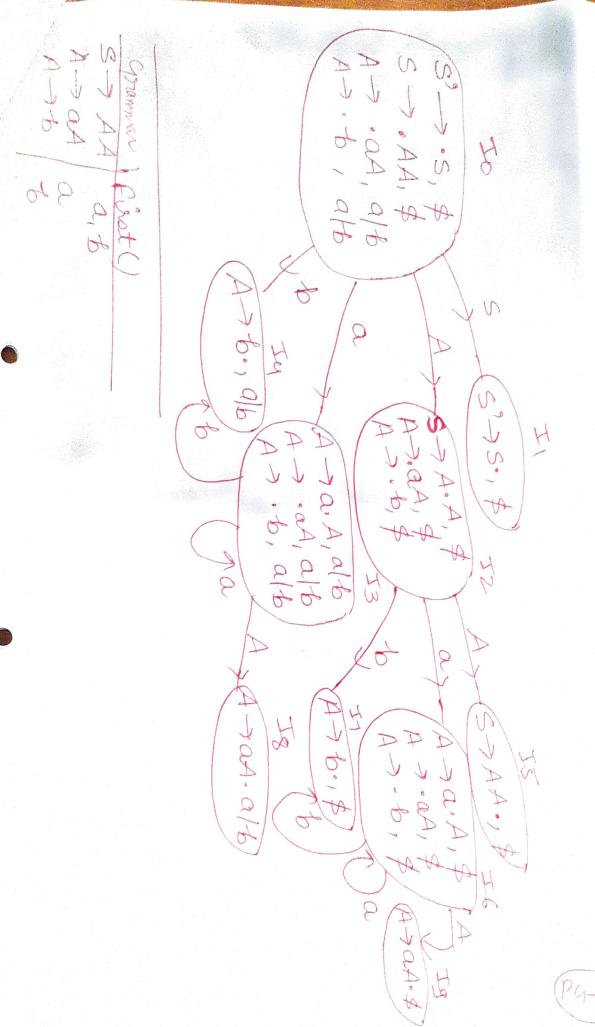
 $S \rightarrow AA$   $A \rightarrow aA$ 

A -> aA A -> b

(Step-2) find the LR(1) items; means LR(1) = LR(0) + Lookahead

\* For Lookahead, we find first() of grammas.

(PG-2)



## Sty-4 Rarring table LATER CLP(1).

AA I	T 1	lien	and the second of the second s	1	- +	and the same recovery to the week a state of the same to the same of the same	
Stat	e He	and the second s	and the same of th		GOLO		-
and the state of t	a	6	18		5	A	
0	S3	Su			4	2 America	and the second s
1			Accepto	id			
2	56	57			The control of the co	5	The same of the sa
3	53	Sq				8	
4	R3	R3					
5			RI				
6	56	S7				9	
7			R3				
8	R2	R2					and the state of t
9			R2			and the part and we have constituted the factor of a signer or an emble of the constitution and the part and the factor of the constitution and the constitu	
		T <sub>1</sub>			- Control of the Cont		

. \* This is a CLR(1) parsing table.

\* In LAIR(1) We reduce the size the of table. Nears reduce states.

\* And the state is reduce when the LR(0)

\* Semilers any state but hook ahead is

different.

× 50, that state will be mearged.

By considering the state 8 branstian diagrams

O I3, I6 asesame but Lookahead different.

(3) I8, I9 " " " " " "

50, I34I6 change by I36 intable

50, I44I7 11 11 I47 11 11

Ig4I9 "" " " " " "

State	Action			C	ioto	•
• State	a	1 6	\$	\$	A	
0	\$3 <sub>6</sub>	547		1	2	
1	4		Aec.		5	and account of the plants are constrained and appropriate
2	563	574			: 89	
36	S 36	S47 R3				17.7
1047	<u>R3</u>		RI			
0.63	S <sub>63</sub>	S74				
74			R3	na sandaggan Saintananan ar Paring saintan and pake a saniga sing da		
1 99	R2	R2	R2			(PG-3)

finally, LALR(1) Parsing table

State	l Ac	tion		90		
Q	a	в	1\$	5	A	
0	S <sub>36</sub>	547		1	2	
1			Accepted			
2	536	547			5	
36	536	547			89	
47	R3	R3	R3			
S			R1			
<b>8</b> 9	R2	R2	R2	*		1
	/	A	A	4,	/	1
			X			
stin-		heck 4	reather	r'sl	sung is c	accept
Step-	3 de et	- by	thio.			

Step-5 Check wearners
arnot by this.
w=eabb

Append & end the of string

aabb &

(PG-6)

Passer Tell 0 2 36 18 14 A 89 A 80 A Accepted

Shortalinari

(PG-7)