

Department of Computer Science & Engineering

Assignment

Course Code : CSE 429

Course Title : Compiler Design

Submitted by:

Submitted To:

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Department of CSE

Section : B

University of Asia Pacific

LL(1) PANSET

An advantage to the second sec
id, 9,83, 6\$3
(id7 64,=}
, id & } fg, = }

Pansing table:

	=	a	Ь	*	id	\$
5		SHABR		571=	5-128	345
1				L-J/朱R	Pity	
R	RJE	•		R-> L	RIL	RAE

There is no multiple entry in a single cell so, the

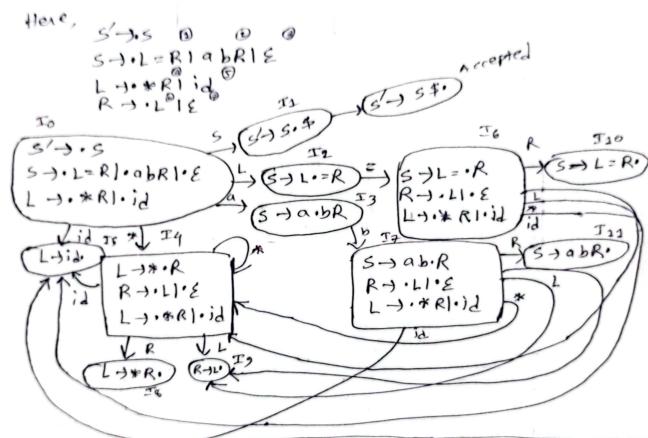
Given input strings * id = id \$

Stack	Input	Action
\$S	*id=id\$	S+ L=R
9 RZL	₩ id= id \$	L→ KR
キR=R米	* id = id \$	Match & pop
\$ R2R	1d = 1d \$	RAL
FR=L	19 = 17 2	L->id
4 R= id	id = id q	Match & pop
\$ R =	= 193	Martch & pop
FR	id \$	R→L
\$ L	17 2	Laid
5 14	ias	Month & pop
\$	4	Accept

so the input string is parsed.

SLR(1) parser

c F g	Finst	F0110W
SAL-RIALRIE LARRIID RALIE	54, 12, 23 54, 123 54, 12, 23	\$ 4, = } \$ & = }



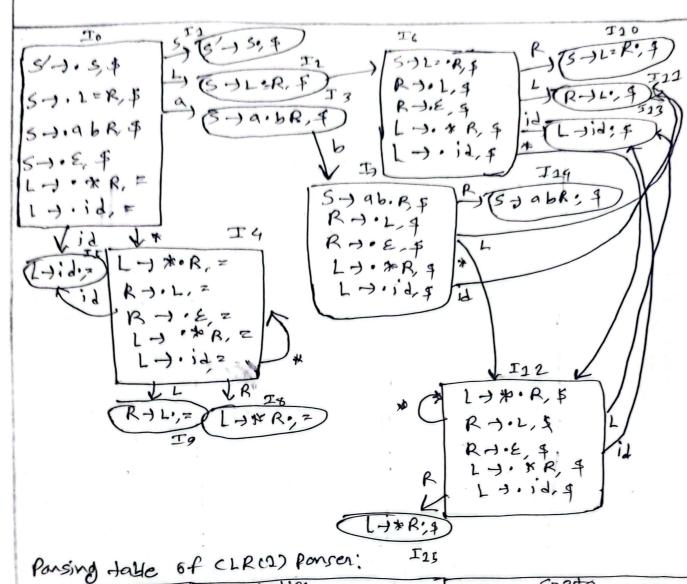
Pansing t	aye		Ac	tion				cnot	0
	1	0	16	est.	id	4	5	2	R
State	=	53		54	55	V3	1	2	
0	1					Accepted			
2	56								
3			57					-	
4	77			54	55	44		9	8
9	Y5					NE			
6	77			54	55	アラ		9	
7	v7	-		54	55	rz		9	20
4	14					Y4			25
9	16	The same of the sa				46			F
10				4		1 N Z		+	4

There is no conflict because there is no multiple enthies in single cell. so it is slrw, Input stoling + tid=id

Stack	Input	Action
0	* id= id \$	shift 4
0*4	idzias	shift 5
0 * 4 125	= 14 9	Reduce Laid
0+469	= 12\$	Reduce R+2
07486	= 14\$	Reduce LyrR
OLZ	= 124	shift 6
01226	1 d \$	shift 5
012=6125	9	Reduce L - id
012 = 619	\$	Reduce R-12
012 = 6R10 1	9	Reduce S+1=R
051	4	Accept

CFG	Rinst .	Follow
5-1 LZRIabRIE	94, id, 9, e}	. 9 \$ 3
L > * Rlid	5*,127	5 4, = 3
R-1 11E	ξ x, id, ε 3	6 4, = 3

5/35 @ @ @ @ @ S > L=R|abR| & @ L > DR | S d & @ R | S d & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ R > L @ | & @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L @ | & R > L & R



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state	2	a	6	4	jd	\$	5	1	R
0		53		54	55	Y3	1	2	
1						A ccept L			
2	56			-		-			
3			57				-		
4	77			54	55			9	8
9	75			,				4	
6	-			512	513	, r7		11,	10
	-			512	513		h.	21	24
7 8	124								
9	16					7. V.			
10						2	The state of	1. 111	~
11			_	312	513	76 77			
12		+				75		11	15
13	*	-	+	-	•	r2.	-	-	
15	-+-	-	1		de la companya della companya della companya de la companya della	my	-	-	

there is no conflict in the pansing table because there is no multiple entries in a single cell of the table. So it is CLR12), input string -> *id=id,

	. , ,		1
Stack	Input		Action
0	7 17=19 4	. '	. shift 4
0*4	id = id 7	1	Shift 5
0 * 4 1 2 5	= ids	1	Meduce Loid
0 * 4 6 9	= id \$		neduce R-) 2
0 × 4 R8	= id \$		Reduce LAR
012=6	= 19 4		Shift 6
012=61213	ids		shift 13
012=6112	\$		reduce 1+12
1012 = 6 R20	4		reduce R + 2
051		,	Reduce StER
	7		Accept
			Accept

The input string is parsed with CLR(1) parson.
LALR(1) parson

St. L=RlabR18

L-J. *Rlid

R+ ·L18

Here, we can observe (I4, I12), (I5, I13),

(I2, I11), (I6, I15) has same production

So, we merge those states.

parsing table of LALROD!

The second section of the second second second second second				Acti	14	***		Chodo	
State	-2	a	b	J.	1.7	1 9	5	1	IR
Stace	and the second second	53		5412	5 523	3 p3	1	2,	•
1						Accept	in the state of th	The said of the sa	
2	56		9					-	
3			57	1					
412	ヤチ		V	3412	5 523	77		211	
513	ry			_		pt		1 /11	815
6				5412	5513	77	-	911	10
7	1			5912	5 525			911	14
815	14					P4	-		
911	PG					p6			- 4
10						na	. /		
, 14	ì					72	1		

No, multiple entries, so the CFG is LAIR (1)

Input string: * id=id

•		
Stack	Input	Action
0	Phi = bi or	shift 412
0*412	id = id 4	Shift 523
0842212 523	= 198	Reduce 1-3id
0 * 42 2 1912	= 198	Reduce R-12
070412R815	= 193	REDUCE LINR
OLZ	= 194	sufff 6
01226	idf	Shi# 523
012-612513	9	Reduce Loid
012=61911	9	Reduce RoL
012= 6R10	\$	Reduce SteR
052	9	Accept

is passed with LALR(2) parser.