



INFORME DE LA SIMULACIÓN ASCENDENTE MÉTODO SLR

Producciones de la gramática:

P {
1) $S \rightarrow a A a$
2) $A \rightarrow a A a$
3) $A \rightarrow b B b$
4) $B \rightarrow b B b$
5) $B \rightarrow c$
}

Conjunto Primero y Siguiente:

Símbolos	Conjunto Primero	Conjunto Siguiente
S	a	\$
A	a b	a
B	b c	b

Funciones de Error:

No se han declarado Funciones de Error.

Cadena de Entrada:

a a b b c b b a a

Colección Canónica Elementos LR(0)

$I_0 = \{ S' \rightarrow \bullet S, S \rightarrow \bullet a A a \}$

$Ir_a(I_0, S) = \{ S' \rightarrow S \bullet \} = I_1$

$$lr_a(I0, a) = \{ S \rightarrow a \bullet A a, A \rightarrow \bullet a A a, A \rightarrow \bullet b B b \} = I2$$

$$\forall X \in a V: lr_a(I1, X) = \emptyset$$

$$lr_a(I2, A) = \{ S \rightarrow a A \bullet a \} = I3$$

$$lr_a(I2, a) = \{ A \rightarrow a \bullet A a, A \rightarrow \bullet a A a, A \rightarrow \bullet b B b \} = I4$$

$$lr_a(I2, b) = \{ A \rightarrow b \bullet B b, B \rightarrow \bullet b B b, B \rightarrow \bullet c \} = I5$$

$$lr_a(I3, a) = \{ S \rightarrow a A a \bullet \} = I6$$

$$lr_a(I4, A) = \{ A \rightarrow a A \bullet a \} = I7$$

$$lr_a(I4, a) = \{ A \rightarrow a \bullet A a, A \rightarrow \bullet a A a, A \rightarrow \bullet b B b \} = I4$$

$$lr_a(I4, b) = \{ A \rightarrow b \bullet B b, B \rightarrow \bullet b B b, B \rightarrow \bullet c \} = I5$$

$$lr_a(I5, B) = \{ A \rightarrow b B \bullet b \} = I8$$

$$lr_a(I5, b) = \{ B \rightarrow b \bullet B b, B \rightarrow \bullet b B b, B \rightarrow \bullet c \} = I9$$

$$lr_a(I5, c) = \{ B \rightarrow c \bullet \} = I10$$

$$\forall X \in a V: lr_a(I6, X) = \emptyset$$

$$lr_a(I7, a) = \{ A \rightarrow a A a \bullet \} = I11$$

$$lr_a(I8, b) = \{ A \rightarrow b B b \bullet \} = I12$$

$$lr_a(I9, B) = \{ B \rightarrow b B \bullet b \} = I13$$

$$lr_a(I9, b) = \{ B \rightarrow b \bullet B b, B \rightarrow \bullet b B b, B \rightarrow \bullet c \} = I9$$

$$lr_a(I9, c) = \{ B \rightarrow c \bullet \} = I10$$

$$\forall X \in a V: lr_a(I10, X) = \emptyset$$

$$\forall X \in a V: lr_a(I11, X) = \emptyset$$

$$\forall X \in a V: lr_a(I12, X) = \emptyset$$

$$lr_a(I13, b) = \{ B \rightarrow b B b \bullet \} = I14$$

$$\forall X \in a V: lr_a(I14, X) = \emptyset$$

Tabla LR:

PARTE ACCIÓN

Estados	a	b	c	\$
0	d2			

1				Aceptar
2	d4	d5		
3	d6			
4	d4	d5		
5		d9	d10	
6				r1
7	d11			
8		d12		
9		d9	d10	
10		r5		
11	r2			
12	r3			
13		d14		
14		r4		

PARTE IR_A

Estados	S	A	B
0	1		
1			
2		3	
3			
4		7	
5			8
6			
7			
8			
9			13
10			
11			
12			
13			
14			

Simulación Ascendente:

Pila	Entrada	Acción
0	a a b b c b b a a \$	d2
0 a 2	a b b c b b a a \$	d4
0 a 2 a 4	b b c b b a a \$	d5
0 a 2 a 4 b 5	b c b b a a \$	d9
0 a 2 a 4 b 5 b 9	c b b a a \$	d10

0 a 2 a 4 b 5 b 9 c 10	b b a a \$	r5 B → c
0 a 2 a 4 b 5 b 9 B 13	b b a a \$	d14
0 a 2 a 4 b 5 b 9 B 13 b 14	b a a \$	r4 B → b B b
0 a 2 a 4 b 5 B 8	b a a \$	d12
0 a 2 a 4 b 5 B 8 b 12	a a \$	r3 A → b B b
0 a 2 a 4 A 7	a a \$	d11
0 a 2 a 4 A 7 a 11	a \$	r2 A → a A a
0 a 2 A 3	a \$	d6
0 a 2 A 3 a 6	\$	r1 S → a A a
0 S 1	\$	Aceptar