

## CONSTRUCCIÓN DEL AUTOMATA LR(1) FUNCIONES CLOSURE1 Y PILOTO

Docente Juan Francisco Cardona Mc'Cormick

Curso ST0270-031 LENGUAJES FORMALES Y COMPILADORES

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## 1. Cálculos de Macro Estados

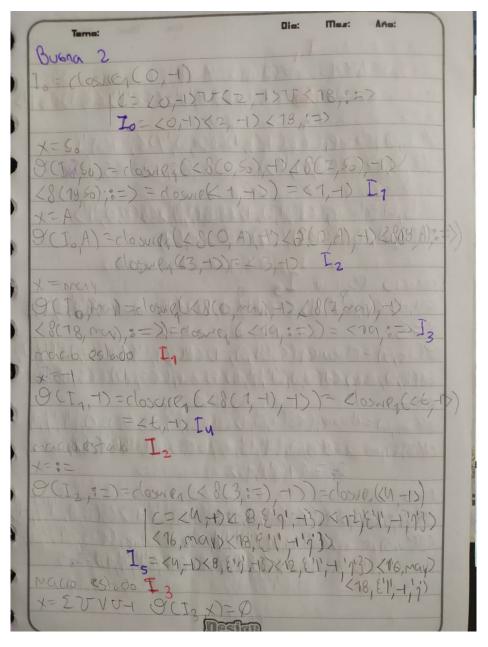


Figura 1: página 1

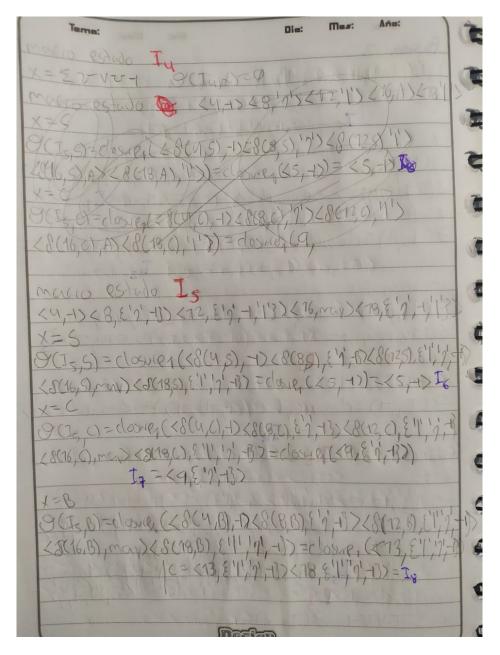


Figura 2: página 2

```
> (I, A) = dosne, (<8(4, A), -) <8(8, A), E'2', -B) ((012, A), E'1', 2', -B)
<8(8/1), mgv) <8(18/1), £11, 17, -13)= Hoxie, (<75, £11, 17, -13)
                 (-415 8 11 17 -13) Iq
9(15, mn)=dosne, (< 8(4, mn) +) (8(8, mn), E'n'+3(8(12, mn)) (11), +))
< 8(16, an) may> < 8(18, mn), E'11, 10, +3 = dosies (<17, may>)
              (=217, may) I10
9 (15, may) = classif (<8(ymay) +) <8(8, may) ; 17, -1
< S(16, max) max) < D(18, max), E11 17-132 = closur, (<101, 8
           (1- (= < 79, E1) 17, +3> I11
Macro estado I6 (5, 1)
Q(I, 1)=dosne (8(5/1), -1)=dosne (66,-1)
               (= (6,+) < 2,+) I12(18,:=)
                 ×10, 8'9' +37 (8, 8'1)'+1) <12, 9'1''1) +3)
            <16, mb, D<18, 811, 17, +3> I 13
7(18, A) 7(05, 18, (8(7)A), 8(1) 1) -37(8(78, A), 8(1)) 24(1)
            assig ( <14, 81/11, 43)) = <14, 81/17, +3) Ing
                         Design
```

Figura 3: página 3

2 (12, ra) = dang (88(13, ray) (11, 1/1) × 8(13, ray) (1, 1/1) × 1/4 se capite  Macio estado I a +15 & 1/1 / -13)  × = 2 v v v + 9 (10, x = 0  Macio estado I m × 19, & 1/1 / 13)  × = 2 v v v + 9 (10, x = 0  Macio estado I m × 19, & 1/1 / 13)  × = 2 v v v + 9 (10, x = 0  Macio estado I m × 19, & 1/1 / 13)  × = 2 v v v + 9 (10, x = 0  Macio estado I m × 19, & 1/1 / 13)  × = 2 v v v + 9 (10, x = 0  Macio estado I m × 19, & 1/1 / 13)  × = 50  O(I m ) = dos (10, x = 0) + 1 × 8(2, x o) + 1 × 8(18, m) = 1)  (los (10, x = 0) + 1 × 10 × 10 × 10 × 10 × 10 × 10 × 10	Terre:		Die: Mes:	Año:
(13, ma) = (19, e(1) 11 - 13)				1
Macio estado I q 415 E 11 12 - 13)  X = S U V V - 1	1900	( -0 ) (	1112-130/81	18 ACON 4 39 10
Macro estado Iq (15, 21, 11, 11, 13)  X=2 V V V-1	13/10/1=40	burge 8 C13, months	1111111111	a) to
Macio estado Eno <17, mayo  X= EUVIV-1 O(In,X)=0  Macio estado In <19, (1/1/1/1-3)  X= EUVIV-1 O(In,X)=0  Macio estado In <19, (1/1/1/1-3)  X= EUVIV-1 O(In,X)=0  Macio estado In <19, (8/6,5)-1> (8/2,50)-1> (8/8,6)==)  X= So  O(T12,50)=dosue((8/6,50,-1) (8/2,50)-1> (8/8,6)==)  X=A  O(In,A)=dosue((8/6,1)-1) (8/2,A)-D<8(18,A)==)  X=mai  O(In, may)=dosue((8/6,1)-1)(8/2,1)+1> (8/8,mai)=>)  Macio estado In <10, (8/6,1)-1> (8/2,1)+1> (8/8,mai)=>)  Macio estado In <10, (8/6,1)-1> (8/2,1)+1> (8/8,mai)=>)  Macio estado In <10, (8/6,1)-1> (8/2,1)+1> (8/8,	0055	19,51,77,-1921	11 58 164	
The confection of the confecti	1 - E 85 ado	a \$15, 21, 1	-13)	4
Macio estado In < 19, 8, 11, 12, 13)  X = 27 VV-1 O(In, X) = 0  Macio estado I12 < 6, 12 < 2, 12 < 18, 12 = )  Macio estado I12 < 6, 12 < 2, 12 < 18, 12 = )  Macio estado I12 < 6, 12 < 2, 12 < 18, 12 = )  Macio estado I12 < 6, 12 < 2, 12 < 18, 12 = )  Macio estado I12 < 6, 12 < 2, 12 < 18, 12 = )  Macio estado I12 < 6, 12 < 2, 12 < 12 < 12 < 12 < 12 < 12 <	X=2012-1	907a, 40		
Macio estado In < 19, 8, 11, 12, 13)  X = 27 VV-1 O(In, X) = 0  Macio estado I12 < 6, 12 < 2, 12 < 18, 2 = 2)  X = 50  O(T12,50) = closure (< 8(6,5), 12 < 8(2,50), 12 < 8(18,0) = 2)  (losure (< 7, -12) = < 7, 12	macio estado	10 <17, may	1 2 9 000	
Macro estado In < 19, (1, 1, 13)  X = EU VV-1 O(In X) = 0  Macro estado I12 < 6, [7 < 2, 1) < 18, (= )  X = So  O(T + 2, So) = closure (< 8(6, So) - 12 < 8(2, So) - 1) < 8(8, So) = 2)  (losure (< 7, -1) = < 9, -1 > I 15  X = A  O(In A) = closure (< 8(6, A) - 1) < 8(0, A) - 10 < 8(18, A), (= ))  (losure (< 3, 1) = < 3, -1) I2 se coprise  X = may  O(In may) = closure (< 8(5, A) - 1) < 8(12, A) - 1) < 8(18, A), (= ))  (losure (< 3, 1) = < 3, -1) I2 se coprise  Macro estado I2 < 10, (= ) = < 10, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 12, (= ) + 10 < 1	X=2VVV-1	9(INX)=0	1	
X= 2000-1 3(14, X)= 0  Maccio estado 142 46, [242, 1) (18, 13; =)  X= 50  9(1,2,50) = closure, (8(6,50, 12 68(2,50) -1) (8(18, 1); =))  (losure, (27, -1)) = (7, -1) [15]  X= A  9(1,2, A)=closure, (8(6, 1), 1) (8(2, A), -1) (8(18, 1); =))  (losure, (3, +)) = (3, +)	Macio estudo	In < 19, 811	12,-13)	
Macio estado 112 46,-1242,-12(18,:=)  X=80  9(1,2,50)=closure, (886,50,-1268(2,50),-1268(18,6):=)  (losure, (27,-12)= (7,-12) [15]  X=A  9(1,2,A)=closure, (886,A)-128(2,A)-126(18,A),==)  (losure, (3, -12)= (3, -12) [2, -12] [2, -12]  X=may  O(1,2,A)=closure, (886, -12) (802, A)-126(18,A),==)  (losure, (3, -12)= (3, -12) [2, -12] [2, -12] [2, -12]  Macio estado [3, -12] [2, -12]	X= EUVV-1	O(IMX)=0		
X=So 9(T <sub>12</sub> So) = closure (< 8(6, So)-12 < 8(2, So)-1) < 8(18, O)=2) X=A 9(I <sub>12</sub> A)=closure (< 8(6, A)-1) < 8(2, A)-10 < 8(18, A)=2) closure (<3, +))=<3, +) T <sub>2</sub> Se copite X=man 9(I <sub>12</sub> man)=closure (<8(6, M)-1) < 8(18, man)=2) Closure (<10, E) -10 < 8(10, E) -10 < 8(18, man)=2) maio escaso I <sub>1</sub> <10, E'1'-13 < 8, E'1'-10 < 12, E'1'-12'+13 ×=S 9(I <sub>12</sub> S)=closure (<8(10, S) E'1'+1) ×8(8, S) (1'+1) ×8(12, E'1'-12'+13) <8(16, man) <10, E'1'-13 ×8(8, S) (1'+1) ×8(12, E'1'-12'+13)			1) < 18, 3=	>
9(1,2,5)=dosine, (<8(6,5)+1) <8(2,5)+1) <8(18,5)=2)  (losine, (<7,-1))= (7,-1) Ing  X=A  9(In, A)=dosine, (<8(6,4)+1) ×8(2, A),-1) <8(18,A),==))  (losine, (<3,+1)= <3,+1) Ing  X=mai  V=mai  OCIn, may)=dosine, (<8(6,4),-1) <8(2,4),-1) <8(18,4),==))  (dosine, (<3,4))= <3,+1) Ing  Acron (<3(8,6),-1) +1 ×8(2,4),-1) ×8(18,4),=>)  (dosine, (<10,:=))= <10,:=) Ing  Acron (<10,:=) -10,:=) -10,:=) Ing  (10, may) <18,:= 1,1 ,1 ,1 )  X=S  (Connected (<3(10,5):= 1,1 ,1 ) ×8(8,5);= 1,1 ,1 ,1 ,1 ,1 ,1 ,1 ,1 ,1 ,1 ,1 ,1 ,1		A-KILLING C	Man Andrew	7
(102164(<7,-12)= (7,-12) [15]  X=A  9(In_A)=dosury(<8(6,A)-1)<8(18,A)=2)  (102164(<3,+1))= (3,+1) In Se (opte)  X=may  O(In_may)=dosury(<8(6,A)-1)<8(2,A)-12<8(18,A)=2)  (102164(<10,:=2)=<10:=2 In Se (opte)  (102164((102164(<10,:=2)=<10:=2 In Se (opte)  (102164((10	19(+ sa) =do	(1866)	(8(250)-1	(2:0808)
X= A  9 (In, A)=down (<8(6,A)-1) <8(18,A)=>)  (lower (<3, +))= <3,+) In Se (opte)  X=man  OCIp, man)=down (<8(6, +), +)<8(2, -), +) <8(18, man)=>)  down (<6(10, :=))=<10, :=> In Se (opile)  macio estato In <10, (:'1', -1) <8, ('1', -1) <12, ('1', '2', +)  X=S  9(In, S)=down (<8(0, 5) ('1', 1) ×8(8,5) ('1', 1) ×8(18, 1) ('1', 2', 1)  (8(16, 5), man) <8(18, 5) ('1', 1) ×8(8,5) ('1', 1) ×8(18, 1) ('1', 2', 1)  (8(16, 5), man) <8(18, 5) ('1', 1) ×8(8,5) ('1', 1) ×8(18, 1) ('1', 2', 1)	(12,00)	50(17-15)-1	7 1 1 1	
9(In A)=down ((8(GA)-1) (8(D) A)-D (8(18, A))=>)  (los 19((3, 1))=(3, 1) In Se (opte  X=may  8(In may)=down ((8(G, 1), 1)(8(2mi), 1) (8(18, may)=>)  (down ((8(G, 1), 1)(8(2mi), 1) (8(18, may)=>))  (down ((8(G, 1), 1)(8(2mi), 1) (8(18, may)=>))  (down ((8(G, 1), 1)(8(2mi), 1) (8(18, 1)(1)(1)) (1)  (down ((8(G, 1), 1)(1)(1)) (1)  (16, may) (18, 1)(1)(1)(1)  += S  (S(16, 3), may) (3(18, 5), 1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1		214617, 121-6	115	101
CIp, may) = dowing (\$866, 10), -Dx8(2, 100), +) < 8(18, 100), (2))  dowing (\$10, \in \in) = <10, \in		10 (CS(GAVA))	SCO AN-NO	1010 A) =- ))
DCIp, may) = doxicy (<866, 10), -D(8(2, 10), +) <8(18, may); =>)  doxicy (<10; =>) = <10; => Iz se (pite)  mucro escalo Iz <10, E'1', -13) < 8, E'1', -10 <12, E'1', '2', -18  <16, may> <18, U'1', '2', -1>  += S  9(11, 5) -doxicy (<8(0, 5), E'1', 1) ×8(8, 5), (1), 1) ×8(12, 5), (11', 2', 1)  <8(16, 5), may) <0(18, 5), E'1', 13 ×8(8, 5), (1), 1) ×8(12, 5), (11', 2', 1)  <8(16, 5), may) <0(18, 5), E'1', 12, 13) > (10, 11), (10, 12), (11', 2', 1)	0 0 0	10 (13 -11) - 1	2 12 0	011011111111111111111111111111111111111
3CIp may) = day(q (<8(6, m), -1)<8(2, m), +1) <8(18, may); >)  (dox)(q(<19,:=>) = <19,:>> Iz se (ppide)  (16, may) <18, (11, 17, -1)  += S  (S(16, S), may) < (3(18, S), (1, 1), 1) < (3(12, S), (11, 1), 1)  (S(16, S), may) < (3(18, S), (1, 1), 1) < (3(12, S), (11, 1), 1)	Vancin III	344(C13) 131-2	7,772	e copite
(16, may) < 18, (11, 12, 13) = < 19; => 12 Se (ppide)  (16, may) < 18, (11, 12, 13)  += S  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S), (11, 12, 13)  (S(16, S), may) < (18, S),		2 (20(0))	.00	/
(16, may) < 18, (11) (21, -1) \ (18, may) < 18, (18, -1) (21, -1) \ (18, may) < 18, (18, -1) (21, -1) (21, -1) \ (18, may) < 18, (18, -1) (21, -1) (	( 15 ( L) ( L) = (1)	ance (29,00,40)-150	8(5 mg) -1><	8(18,may) (=>)
X=5 9(3/1)5)=dome(< 3(10,5) & 1', 1) X8(8,5) (h', 1) X8(1) (h') 1', 13 XS(16,5), mark (3(18,5) & 1', 1) X8(8,5) (h', 1) X8(12,5) & 1'' 1', 13	do	mer((10:=>)=	<19:5> [	3 Se (00:18
X=5 9(3/1)5)=dome(< 3(10,5) & 1', 1) X8(8,5) (h', 1) X8(1) (h') 1', 13 XS(16,5), mark (3(18,5) & 1', 1) X8(8,5) (h', 1) X8(12,5) & 1'' 1', 13	macio estado I	(10, 8, 1, -13) < 8, 1	(21) (11)	E'11' 121 -13
10 10 10 10 10 10 10 10 10 10 10 10 10 1	(16, may) < 18, 8/11/	21,-12		
10 10 10 10 10 10 10 10 10 10 10 10 10 1	X=S			
10 10 10 10 10 10 10 10 10 10 10 10 10 1	OCIOS)=dosue(<)	10.5 8171.43 X8000	W +8 > 1000 0	1011111
(=<11,87,132 I46	(S(165) man) (1210	(8) 8 11 12 13 13	11 Kalis	451,7,7
46	List strategy	< 11 917 12 TELLE	2011/1/5/1/6	7,-15)
		46		

Figura 4: página 4

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Mes:
       Tema:
9(1,3,C)=dove,(8(10,0), E'7', +1)) (8(8,0, E'1), +3) (8(12), E'1), 1)
 X=C
 (3(16,0), mg/) (5(18,0), ("1"/1"/-13)=dovie, (ca)(12"/-13))
                (= <9, 817, -13) I7 56 16pite
 V=B
 9(13,B)=dosne(8(10,B), E')',-13) < 8(8,B), E')',-13) < 8(12,B), E')',-13)
< 8(16, B), mgv >< 8(18, B), E'11', 17', +3) = closury (<13, E'1', 17', +13)

(-<13, E'1', 17', +13) <18, E'1', 17', -13) I8 58 (60: +8)
 X=A
O(B, A) = dosug(38(10, A), (1), -B) (8(8, A), (1), -17) > (8(12, A), (1), 17-10)
(3(16, A), may) (8(18, A), {11,12, -13)}= closur, (<15, 21,1,1)
                (= <15, 8'1' 17, +3) Iq se sepste
9(In, min) = closing (< 8(10, min), 6'1', +3) (8(8, min), 6'1', +3) < 8(12, min) (6'1', 13)
<8(16, min) may> <8(18, min), {11/17/, +3) = closure, (<17, mays)
                  (= <17, may) Igo se repite
9(1,2 may) = (losing (< 8(10, may), E') +3) (3(8, may) E') + t) Xd(12, may) [1]
(8(16, may) (8(18, may), E'11, 77, -13))-closure, (< 79, E'11, 71, -13) [11 se sep: te
Macio estado I14 (14, (11/1/43)
X=EUVUH OCLIMX)=Q
Macro estado I 15 (7,1)
x=2000-1 9(]15)X)=0
                             Design
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Figura 5: página 5

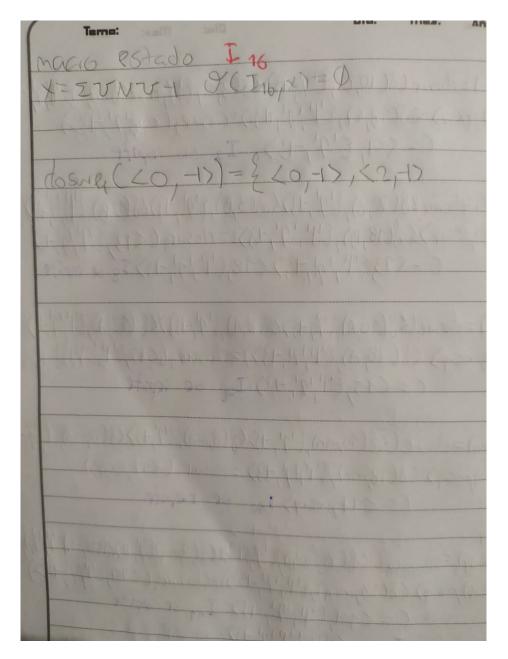


Figura 6: página 6

## 2. Piloto

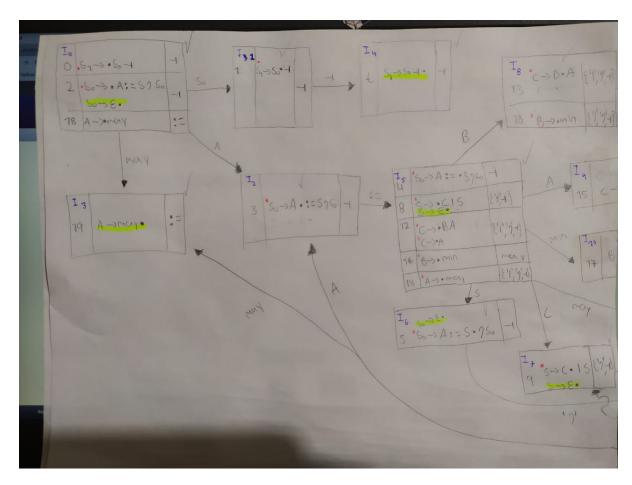


Figura 7: Parte 1

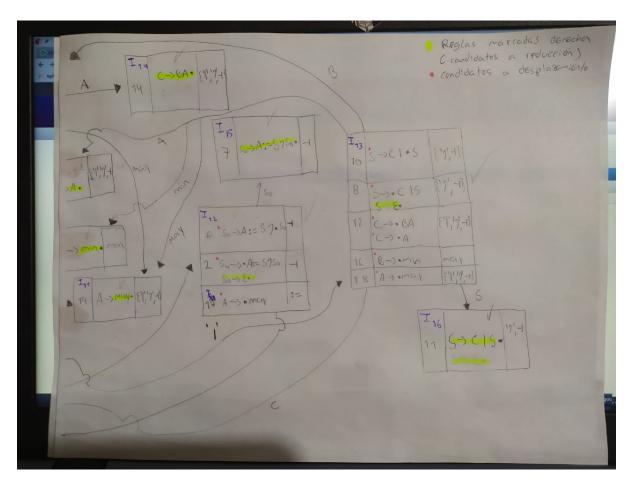


Figura 8: Parte 2



Figura 9: Parte Completa