Universidad San Carlos de Guatemala

Lenguajes Formales y de Programación

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Documentación:

Operadores Aritméticos

- +|-|*|/|++|--

Operadores Relacionales

- >|<|>=|<=|==|!=

Operadores Lógicos

- &&|”||”|!

Expresiones regulares.

- Numero: "-"?[0-9]+("."[0-9]+)?$
- Cadena: “([Palabra]|[Espacio])+”
- Palabra: [a-z]|[A-Z]
- Letras: (L|LL+)$
- Boolean: verdadero falso

Signos de agrupación

- (|)

Asignacion o Fin de Sentencia

- ;|=

Comentarios

- /{/([char]|tab|space|)*}|{*([char][wspace])* */

Palabras reservadas:

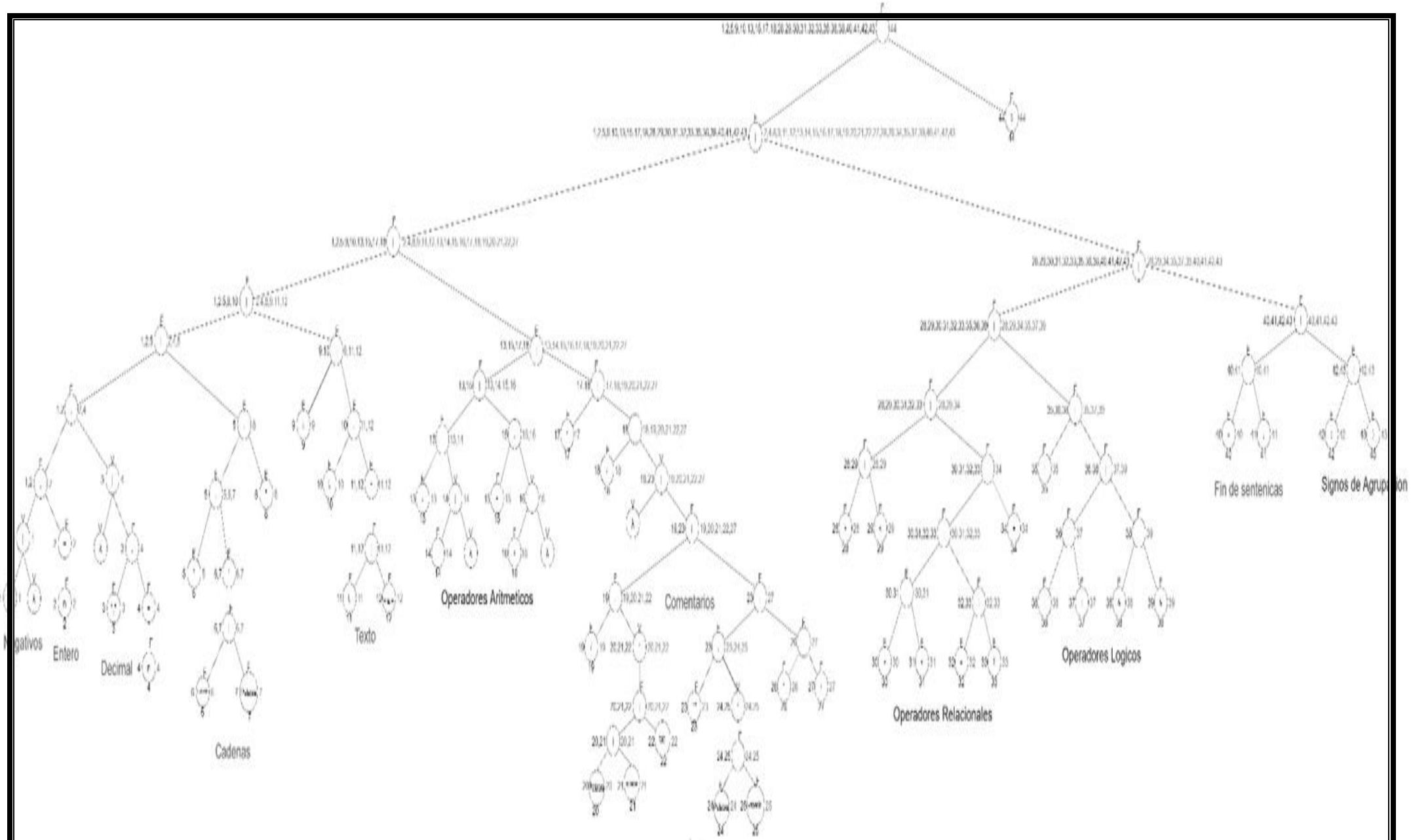
- entero
- decimal
- cadena
- booleano
- carácter
- verdadero
- falso
- SI
- SINO
- SINO_SI

- MIENTRAS
- HACER
- DESDE
- HASTA
- INCREMENTO

Cadenas en la que terminan.

- =
- ;

ARBOL:


Entero
Decimal
Cadenas
Texto
Operadores Aritmeticos
Comentarios
Operadores Relacionales
Operadores Logicos
Fin de sentenicas

No.	Σ	Siguientes
1	-	2
2	n	2,3,44
3	.	4
4	n	4,44
5	"	5,6,7,8
6	palabra	6,7,8
7	espacio	6,7,8
8	"	44
9	L	44
10	L	11,12
11	L	11,12,44
12	-	11,12,44
13	=	14,44
14	-	44
15	+	16,44
16	+	16,44
17	*	44
18	/	19,23,44
19	/	20,21,22,44
20	palabra	20,21,22,44
21	space	20,21,22,44
22	tab	20,21,22,44
23	"	24,25,26
24	palabra	24,25,27
25	"	24,25,28
26	*	27
27	/	44
28	<	43
29	>	43
30	<	34
31	>	34
32	=	34
33	?	34
34	=	44
35	l	44
36	l	37
37	/	44
38	&	39

39	&	44
40	=	44
41	;	44
42	(	44
43	)	44
44	$	

Transiciones:

Transiciones			
d(S0,-)=S1	d(S0, >)=S17	d(S1,n)=S2	d(S8,") =S14
d(S0,n)=S2	d(S0, <)=S17	d(S2,n)=S2	d(S9,I) =S4
d(S0,")=S3	d(S0, =)=S17	d(S2,))=S11	d(S10,&) =S4
d(S0,L)=S4	d(S0, I)=S217	d(S3,palabra)=S3	d(11,n) =S15
d(S0,L)=S5	d(S0, I)=S4	d(S3,espacio)=S3	d(S12,L) =S12}
d(S0,-)=S6	d(S0, i)=S9	d(S5,*)=S4	d(S12,-) =S12
d(S0,+)=S7	d(S0, &)=S10	d(S5,L)=S12	d(S13,palabra) =S13
d(S0,¨*)=S4	d(S0, =)=S4	d(S8,")=S12	d(S13,space) =S13
d(S0,/)=S8	d(S0, ;)=S4	d(S6,*)=S4	d(S13,tab) =S13
d(S0,<)=S4	d(S0, ()=S4	d(S7,+)=S4	d(S14,palabra) =S14
d(S0, >)=S4	d(S0,))=S4	d(S8,/)=S12	d(S14,espacio) =S14
d(S17,espacio) =S4	d(S16,espacio) =S15	d(S15,espacio) =S16	d(S15,espacio) =S4

Estados:

→ S_0 (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 17, 18, 28, 29, 30, 31, 32, 33, 35, 36, 38, 40, 41, 42, 43)

sig(1) = 2 = S_1
sig(2) = (2, 3, 44) = S_2
sig(5) = (6, 7, 8) = S_3
sig(9) = (44) = S_4
sig(10) = (11, 12) = S_5
sig(13) = (14, 44) = S_6
sig(15) = (16, 4) = S_6
sig(17) = (44) = S_4
sig(18) = (19, 23, 44) = S_8
sig(28) = (44) = S_4
sig(30) = (34) = S_{17}
sig(31) = (34) = S_{11}
sig(32) = (34) = S_{17}
sig(35) = (44) = S_4
sig(36) = (37) = S_9
sig(38) = (39) = S_{10}
sig(40) = (44) = S_4
sig(41) = (44) = S_4
sig(42) = (44) = S_4
sig(43) = (44) = S_4

→ S_1 = (2)
sig(2) = (2, 3, 44) = S_2

S_2 = (2, 3, 44)
sig(2) = (2, 3, 44) = S_2
sig(3) = (44) = S_4

→ S_3 = (6, 7, 8)
sig(6) = S_2
sig(7) = S_3
sig(8) = S_4

→ S_5 = (11, 12)
sig(11) = (11, 12, 44) = S_{12}
sig(12) = (11, 12, 44) = S_{12}

→ S_6 = (14, 44)
sig(14) = 44 = S_4

→ S_7 = (16, 44)
sig(16) = S_4

→ S_8 = (19, 23, 44)
sig(19) = S_{13}
sig(23) = S_{14}

→ S_9 = (37)
sig(37) = S_4

→ S_{10} = 39
sig(39) = S_4

→ sig(4) = S_{15}

→ sig(37) = sig(37) = (44) = S_4

→ S_{10} {4} = sig(4) = S_{15}

→ S_{12} = (11, 12, 13)
sig(11) = S_{12}
sig(12) = S_{12}
sig(13) = S_{12}

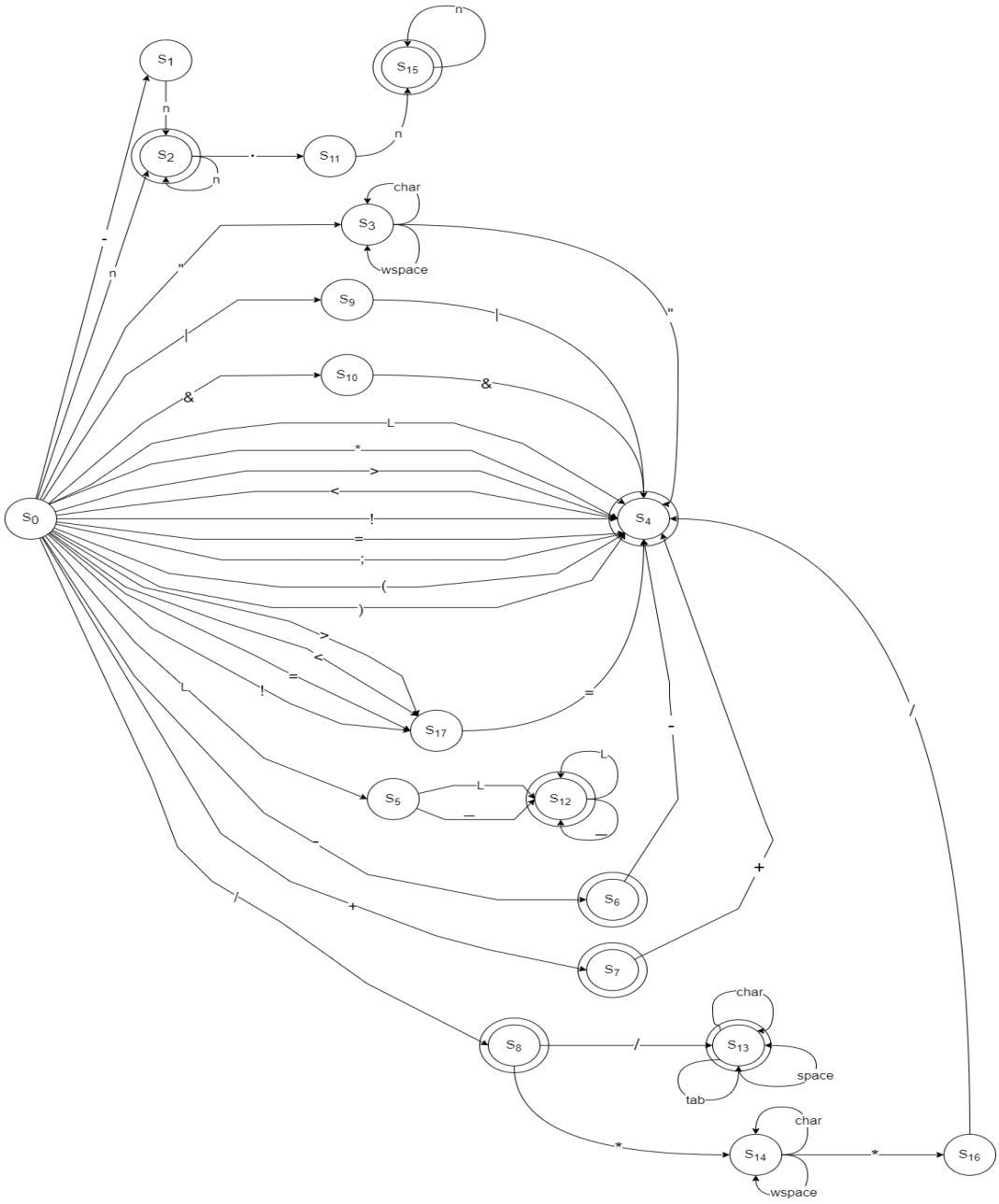
→ S_{13} = (20, 21, 22, 24)
sig(20) = S_{13}
sig(21) = S_{13}
sig(22) = S_{13}

→ S_{14} (24, 25, 26)
→ sig(24) = S_{14}
sig(25) = S_{14}
sig(26) = S_{16}

→ S_{15} = (4, 44)
sig(4) = S_{15}

→ S_{16} = (27)
sig(27) = S_4

→ S_{17} = (34)
sig(34) = S_4


S0
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
n
.
char
wspace
"
|
&
L
*
>
<
!
=
;
(
)
-
+
/
_
space
tab