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Exercício de Compiladores

(0) S = Ea
(1) Ea = Ea 'opa' Ta
(2) Ea = Ta
(3) Ta = Ta 'opm' Pa
(4) Ta = Pa
(5) Pa = Fa '**' Pa
(6) Pa = Fa
(7) Fa = '(' Ea ')'
(8) Fa = 'id'
(9) Fa = 'cten'

Cálculo

I0 = c({S = .Ea}) = {S=.Ea, Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}

T1 | I1 = goto(I0, Ea) =	{S=Ea., Ea=Ea.'opa'Ta}
T2 | I2 = goto(I0, Ta) =	{Ea=Ta., Ta=Ta.'opm'Pa}
T3 | I3 = goto(I0, Pa) =	{Ta=Pa.}
T4 | I4 = goto(I0, Fa) =	{Pa=Fa.'**'Pa, Pa=Fa.}
E5 | I5 = goto(I0, '(') =	{Fa='('.Ea')', Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E6 | I6 = goto(I0, 'id') =	{Fa='id'.}
E7 | I7 = goto(I0, 'cten') =	{Fa='cten'.}
E8 | I8 = goto(I1, 'opa') =	{Ea=Ea'opa'.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E9 | I9 = goto(I2, 'opm') =	{Ta=Ta'opm'.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E10 | I10 = goto(I4, '**') =	{Pa=Fa'**'.Pa, Pa =.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
T11 | I11 = goto(I5, Ea) =	{Fa='('Ea.')', Ea=Ea.'opa'Ta}
T2 | I2 = goto(I5, Ta) =	{Ea=Ta., Ta=Ta.'opm'Pa}
T3 | I3 = goto(I5, Pa) =	{Ta=Pa.}
T4 | I4 = goto(I5, Fa) =	{Pa=Fa.'**'Pa, Pa=Fa.}

E5 | I5 = goto(I5, '(') =	{Fa='('.Ea')', Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa='('Ea')', Fa=.'id', Fa=.'cten'}
E6 | I6 = goto(I5, 'id') =	{Fa='id'.}
E7 | I7 = goto(I5, 'cten') =	{Fa='cten'}
T12 | I12 = goto(I8, Ta) =	{Ea=Ea'opa'Ta., Ta=Ta.'opm'Pa}
T3 | I3 = goto(I8, Pa) =	{Ta=Pa.}
T4 | I4 = goto(I8, Fa) =	{Pa=Fa.'**'Pa, Pa=Fa.}
E5 | I5 = goto(I8, '(') =	{Fa='('.Ea')', Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E6 | I6 = goto(I8, 'id') =	{Fa='id'.}
E7 | I7 = goto(I8. 'cten') =	{Fa='cten'.}
T13 | I13 = goto(I9, Pa) =	{Ta=Ta'opm'Pa.}
T4 | I4 = goto(I9, Fa) =	{Pa=Fa.'**'Pa, Pa=Fa.}
E5 | I5 = goto(I9, '(') =	{Fa='('.Ea')', Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E6 | I6 = goto(I9, 'id') =	{Fa='id'.}
E7 | I7 = goto(I9, 'cten') =	{Fa='cten'.}
T14 | I14 = goto(I10, Pa) =	{Pa=Fa'**'Pa.}
T4 | I4 = goto(I10, Fa) =	{Pa=Fa.'**'Pa, Pa=Fa.}
E5 | I5 = goto(I10, '(') =	{Fa='('.Ea')', Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E6 | I6 = goto(I10, 'id') =	{Fa='id'.}
E7 | I7 = goto(I10. 'cten') =	{Fa='cten'.}
E15 | I15 = goto(I11, ')') =	{Fa='('Ea')'.}
E8 | I8 = goto(I11, 'opa') =	{Ea=Ea'opa'.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E9 | I9 = goto(I12, 'opm') =	{Ta=Ta'opm'.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}

Conjuntos

T1 | I1 = goto(I0, Ea) =	{S=Ea., Ea=Ea.'opa'Ta}
T2 | I2 = goto(I0, Ta) =	{Ea=Ta., Ta=Ta.'opm'Pa}
T3 | I3 = goto(I0, Pa) =	{Ta=Pa.}
T4 | I4 = goto(I0, Fa) =	{Pa=Fa.'**'Pa, Pa=Fa.}
E5 | I5 = goto(I0, '(') =	{Fa='('.Ea')', Ea=.Ea'opa'Ta, Ea=.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E6 | I6 = goto(I0, 'id') =	{Fa='id'.}
E7 | I7 = goto(I0, 'cten') =	{Fa='cten'.}
E8 | I8 = goto(I1, 'opa') =	{Ea=Ea'opa'.Ta, Ta=.Ta'opm'Pa, Ta=.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
E9 | I9 = goto(I2, 'opm') =	{Ta=Ta'opm'.Pa, Pa=.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
T10 | I10 = goto(I4, '**') =	{Pa=Fa'**'.Pa, Pa =.Fa'**'Pa, Pa=.Fa, Fa=.'('Ea')', Fa=.'id', Fa=.'cten'}
T11 | I11 = goto(I5, Ea) =	{Fa='('Ea.')', Ea=Ea.'opa'Ta}
T12 | I12 = goto(I8, Ta) =	{Ea=Ea'opa'Ta., Ta=Ta.'opm'Pa}
T13 | I13 = goto(I9, Pa) =	{Ta=Ta'opm'Pa.}
T14 | I14 = goto(I10, Pa) =	{Pa=Fa'**'Pa.}
E15 | I15 = goto(I11, ')') =	{Fa='('Ea')'.}

Ações

T1 | I1 = goto(I0, Ea)	[1, EOF] = ACEITA
T2 | I2 = goto(I0, Ta)	[2, EOF, 'opa', ')'] = R2
T3 | I3 = goto(I0, Pa)	[3, EOF, 'opm', 'opa', ')'] = R4
T4 | I4 = goto(I0, Fa)	[4, EOF, 'opm', 'opa', ')'] = R6
E6 | I6 = goto(I0, 'id'	[6, '**', EOF, 'opm', 'opa', ')'] = R8
E7 | I7 = goto(I0, 'cten')	[7, '**', EOF, 'opm', 'opa', ')'] = R9
T12 | I12 = goto(I8, Ta)	[12, EOF, 'opa', ')'] = R1

T13 | I13 = goto(I9, Pa)	[13, EOF, 'opm', 'opa', ')'] = R3
T14 | I14 = goto(I10, Pa)	[14, EOF, 'opm', 'opa', ')'] = R5
E15 | I15 = goto(I11, ')'	[15 '**', EOF, 'opm', 'opa', ')'] = R7

Tabela de análise

	opa	opm	**	(	)	id	cten	EOF	Ea	Ta	Pa	Fa
0				E5		E6	E7		1	2	3	4
1	E8							ACEITA				
2	R2	E9			R2			R2				
3	R4	R4			R4			R4				
4	R6	R6	E10		R6			R6				
5				E5		E6	E7		11	2	3	4
6	R8	R8	R8		R8			R8				
7	R9	R9	R9		R9			R9				
8				E5		E6	E7			12	3	4
9				E5		E6	E7				13	4
10				E5		E6	E7				14	4
11	E8											
12	R1	E9			R1			R1				
13	R3	R3			R3			R3				
14	R5	R5			R5			R5				
15	R7	R7	R7		R7			R7				