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S	F	FIRST	FOLLOW
S	→ ABC D	{b}	{ ϵ }
A	→ b	{b}	{c}
B	→ c	{c}	{d}
C	→ d	{d}	{e}
D	→ e	{e}	{ ϵ }

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$A \rightarrow B$
 $follow(B) = follow(A)$
 $A \rightarrow BA$
 $follow(B) = first(A)$

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	FIRST	FOLLOW
S: → ABCD	{b, c}	{ ϵ }
A → b/ε	{b, ε}	{c}
B → c	{c}	{d}
C → d	{d}	{e}
D → e	{e}	{ ϵ }

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	FIRST	FOLLOW
S → ABCD	{b}	{ ϵ }
A → b	{b}	{c, d}
B → c/ε	{c, ε}	{d}
C → d	{d}	{e}
D → e	{e}	{ ϵ }

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	FIRST	FOLLOW
S → Bb/Cd	{a, b, c, d}	{ ϵ }
B → aB/ε	{a, ε}	{b}
C → cC/ε	{c, ε}	{d}

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	FIRST	FOLLOW
$E \rightarrow T E'$	{id, (}	{), \$}
$E' \rightarrow + T E' / \epsilon$	{+, \epsilon}	{), \$}
$T \rightarrow F T'$	{id, (}	{+, \$,)}
$T' \rightarrow * F T' / \epsilon$	{*, \epsilon}	{+, \$,)}
$F \rightarrow id / (E)$	{id, (}	{*, +, \$,)}

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	FIRST	FOLLOW
$S \rightarrow A C B$	{d, h, g, \epsilon}	{ \$ }
$A \rightarrow a / B c$	{c, b, a}	
$B \rightarrow g / \epsilon$	{d, g, c, \epsilon}	{h, g, \$}
$C \rightarrow h / \epsilon$	{g, \epsilon}	{ \$, a, c }
	{h, \epsilon}	{g, \$, b}

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	id	+	*	()	\$
E	$E \rightarrow T E'$	ER	.	$E \rightarrow T E'$		
E'		$E' \rightarrow T E'$			$E' \rightarrow \epsilon$	$E' \rightarrow \epsilon$
T				$T \rightarrow F T'$		
T'		$T' \rightarrow \epsilon$	$T' \rightarrow * F T'$		$T' \rightarrow \epsilon$	$T' \rightarrow \epsilon$
F	$F \rightarrow id$			$F \rightarrow (E)$		

+ 2XS

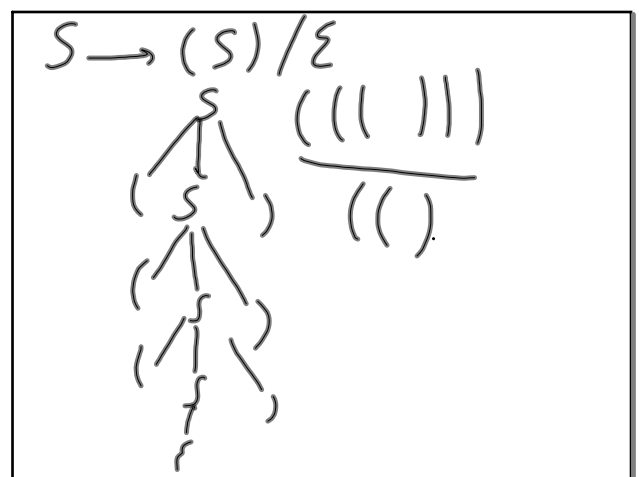
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$3 + 5 \times 7 \$$	E \$
$3 + 5 \times 7 \$$	T E' \$
$3 + 5 \times 7 \$$	F T' E' \$
$3 + 5 \times 7 \$$	T' E' \$
$+ 5 \times 7 \$$	T' E' \$
$+ 5 \times 7 \$$	E' \$

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$* 5 \times 7$	$* T' E' \$$
5×7	$T E' \$$
5×7	$F T' E' \$$
5×7	$id T' E' \$$
$* 7$	$T' E' \$$
$* 7$	$* F T' E' \$$
$* \$$	$* T' E' \$$
	$E' \$$

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$$S \rightarrow (S) / \epsilon$$

	FIRST	FOLLOW
S	{(, ϵ }	{\$,)}

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.	()	\$
S.	S → (S)	S → ε	S → ε

Input (())

(())
~~()~~
 ()

S\$
~~(S)\$~~
 S)\$

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()	S) \$
()	(S)) \$
)	S)) \$
))
))
))
))
\$	\$

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(() ERROR

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$X = 3 \cdot S + 2 \cdot S$

X: integer

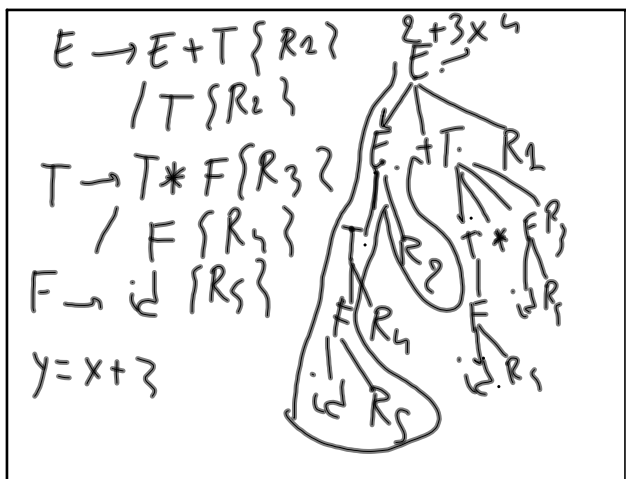
X / 0

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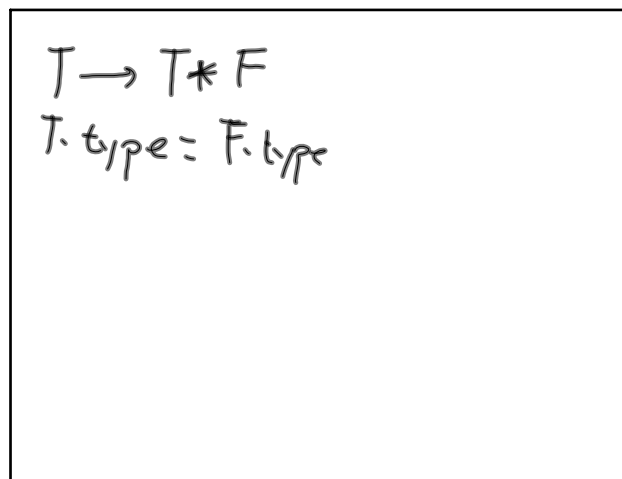
syntax directed translation

$S \rightarrow A \{ \text{semantic function} \}$

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