$E \rightarrow TX$

$T \rightarrow (E) \mid int\ Y$

$X \rightarrow +E \mid \varepsilon$

$Y \rightarrow *T \mid \varepsilon$

Assumption

int is a terminal

① Augment Grammar

$E' \rightarrow E\ \$$

$E \rightarrow TX$

$T \rightarrow (E) \mid int\ Y$

$X \rightarrow +E \mid \varepsilon$

$Y \rightarrow *T \mid \varepsilon$

② Construct Follow set for every non terminal symbol.

FOLLOW(E') = { }

FOLLOW (E) = {$,) }

FOLLOW (T) = {+, $,) }

FOLLOW (X) = {), $ }

FOLLOW (Y) = {+, $,) }

③ Construct FIRST$^+$(·) for every substitution rule.

FIRST (E') = {(, int }

FIRST (E) = {(, int }

FIRST (T) = {(, int }

FIRST (X) = {+, ε }

FIRST (Y) = {*, ε }

FIRST (TX) = {(, int }

FIRST ((E)) = {(}

FIRST (intY) = { int }

FIRST (+E) = {+ }

FIRST (*T) = {* }

FIRST (ε) = {ε }

$FIRST^+(E' \to E\$) = \{ (, int \}$

$FIRST^+(E \to TX) = \{ (, int \}$

$FIRST^+(T \to (E)) = \{ (\}$

$FIRST^+(T \to int\ Y) = \{ int \}$

$FIRST^+(X \to +E) = \{ + \}$

$FIRST^+(X \to \varepsilon) = \{ \varepsilon,), \$ \}$ $\quad [\{\varepsilon\} \cup \{), \$ \}]$

FIRST(ε) FOLLOW(X)

$FIRST^+(Y \to *T) = \{ * \}$

$FIRST^+(Y \to \varepsilon) = \{ \varepsilon, +, \$,) \}$ $\quad [\{\varepsilon\} \cup \{+, \$\}]$

FIRST(ε) FOLLOW(Y)

④ Construct LL(1) parsing table:

	(	)	int	+	*	$	ε
E'	1		1				
E	2		2				
T	3		4				
X		6		5		6	6
Y		8		8	7	8	8

Legend for numbering:

① $E' \to E\$$

② $E \to TX$

③ $T \to (E)$

④ $T \to int\ Y$

⑤ $X \to +E$

⑥ $X \to \varepsilon$

⑦ $Y \to *T$

⑧ $Y \to \varepsilon$