

Compilers 2015 Question 1

- (i)
- $\langle E \rangle \Rightarrow \langle E \rangle + \langle T \rangle$
 - $\langle E \rangle \Rightarrow \langle E \rangle - \langle T \rangle$
 - $\langle E \rangle \Rightarrow \langle T \rangle$
 - $\langle T \rangle \Rightarrow \langle T \rangle * \langle F \rangle$
 - $\langle T \rangle \Rightarrow \langle T \rangle / \langle F \rangle$
 - $\langle T \rangle \Rightarrow \langle F \rangle$
 - $\langle F \rangle \Rightarrow \langle P \rangle \uparrow \langle F \rangle$
 - $\langle F \rangle \Rightarrow \langle P \rangle$
 - $\langle P \rangle \Rightarrow (\langle E \rangle)$
 - $\langle P \rangle \Rightarrow \text{IDENT.}$

	First(α)	Follow($\langle A \rangle$)	Select($\langle A \rangle \rightarrow \alpha$)
$\langle E \rangle \Rightarrow \langle T \rangle \langle \text{ELIST} \rangle$	{Ident, (}		{Ident, (}
$\langle \text{ELIST} \rangle \Rightarrow + \langle T \rangle \langle \text{ELIST} \rangle$	{+ }		{+ }
$\langle \text{ELIST} \rangle \Rightarrow - \langle T \rangle \langle \text{ELIST} \rangle$	{- }		{- }
$\langle \text{ELIST} \rangle \Rightarrow \{$	{ }	{+ }	{+ }
$\langle T \rangle \Rightarrow \langle F \rangle \langle \text{TLIST} \rangle$	{Ident, (}		{Ident, (}
$\langle \text{TLIST} \rangle \Rightarrow * \langle F \rangle \langle \text{TLIST} \rangle$	{* }		{* }
$\langle \text{TLIST} \rangle \Rightarrow / \langle F \rangle \langle \text{TLIST} \rangle$	{/ }		{/ }
$\langle \text{TLIST} \rangle \Rightarrow \{$	{ }	{+, -, + }	{+, -, + }
$\langle F \rangle \Rightarrow \langle P \rangle \langle \text{Exp} \rangle$	{Ident, (}		{Ident, (}
$\langle \text{Exp} \rangle \Rightarrow \uparrow \langle F \rangle$	{↑ }		{↑ }
$\langle \text{Exp} \rangle \Rightarrow \{$	{ }	{+, -, *, /, + }	{+, -, *, /, + }
$\langle P \rangle \Rightarrow (\langle E \rangle)$	{(}		{(}
$\langle P \rangle \Rightarrow \text{Ident}$	{Ident }		{Ident }