

First and Follow sets for TruPL v2.0

α	First(α)	Follow(α)
<i>program</i>	<i>program</i>	
identifier	identifier	
;	;	
:	:	
,	,	
<i>int</i>	<i>int</i>	
<i>bool</i>	<i>bool</i>	
<i>begin</i>	<i>begin</i>	
<i>end</i>	<i>end</i>	
<i>procedure</i>	<i>procedure</i>	
((
))	
:=	:=	
<i>if</i>	<i>if</i>	
<i>then</i>	<i>then</i>	
<i>else</i>	<i>else</i>	
<i>while</i>	<i>while</i>	
<i>loop</i>	<i>loop</i>	
<i>print</i>	<i>print</i>	
<i>relop</i>	<i>relop</i>	
addop	addop	
mulop	mulop	
num	num	
<i>not</i>	<i>not</i>	
PROGRAM	<i>program</i>	<eof>
DECL_LIST	$\lambda, \text{procedure}, \text{identifier}$	<i>begin</i>
VARIABLE_DECL_LIST	$\lambda, \text{identifier}$	<i>procedure, begin</i>
VARIABLE_DECL	identifier	;

PROCEDURE_DECL_LIST	$\lambda, \text{procedure}$	<i>begin</i>
IDENTIFIER_LIST	<i>identifier</i>	:
IDENTIFIER_LIST_PRIME	$\lambda, ,$:
STANDARD_TYPE	<i>int, bool</i>	;,)
BLOCK	<i>begin</i>	;, <i>else</i>
PROCEDURE_DECL	<i>procedure</i>	;
PROCEDURE_ARGS	$\lambda, \text{identifier}$)
FORMAL_PARM_LIST	<i>identifier</i>)
FORMAL_PARM_LIST_HAT	$\lambda, ;$)
STMT_LIST	;, <i>identifier, if, while, print</i>	<i>end</i>
STMT_LIST_PRM	$\lambda, \text{identifier, if, while, print}$	<i>end</i>
STMT	<i>identifier, if, while, print</i>	;
IF_STMT	<i>if</i>	;
IF_STMT_HAT	λ, else	;
WHILE_STMT	<i>while</i>	;
PRINT_STMT	<i>print</i>	;
AD_HOC_AS_PC_TAIL	$:=, ($;
EXPR_LIST	$\lambda, \text{identifier, num, (, not, +, -}$)
ACTUAL_PARM_LIST	<i>identifier, num, (, +, -, not</i>)
ACTUAL_PARM_LIST_HAT	$\lambda, ,$)
EXPR	<i>identifier, num, (, +, -, not</i>	;, <i>then, loop, ,,)</i>
EXPR_HAT	λ, relop	;, <i>then, loop, ,,)</i>
SIMPLE_EXPR	<i>identifier, num, (, +, -, not</i>	<i>relop, ;, then, loop, ,,)</i>
SIMPLE_EXPR_PRM	λ, addop	<i>relop, ;, then, loop, ,,)</i>
TERM	<i>identifier, num, (, +, -, not</i>	<i>addop, relop, ;, then, loop, ,,)</i>
TERM_PRM	λ, mulop	<i>addop, relop, ;, then, loop, ,,)</i>
FACTOR	<i>identifier, num, (, +, -, not</i>	<i>mulop, addop, relop, ;, then, loop, ,,)</i>
SIGN	$+, -, \text{not}$	<i>identifier, num, (, +, -, not</i>