

$\langle \text{transl-unit} \rangle$	$::= \{ (\langle \text{function} \rangle \mid \langle \text{var-decl-stat} \rangle \mid \langle \text{struct-decl} \rangle) \}$
$\langle \text{function} \rangle$	$::= \text{'FUNC'} \langle \text{ident} \rangle \langle \text{params} \rangle \text{'->'} \langle \text{data-type} \rangle \text{'{' } \{ \langle \text{stat} \rangle \} \text{'}'}$
$\langle \text{params} \rangle$	$::= \text{'(' } [\langle \text{var-decl} \rangle \{ \text{' ,' } \langle \text{var-decl} \rangle \}] \text{'}'}$
$\langle \text{block} \rangle$	$::= \text{'{' } \{ \langle \text{stat} \rangle \} \text{'}'}$
$\langle \text{stat} \rangle$	$::= \langle \text{if} \rangle$ $\mid \langle \text{for} \rangle$ $\mid \langle \text{while} \rangle$ $\mid \langle \text{do-while} \rangle$ $\mid \langle \text{loop} \rangle$ $\mid \langle \text{break} \rangle$ $\mid \langle \text{continue} \rangle$ $\mid \langle \text{switch} \rangle$ $\mid \langle \text{bye} \rangle$ $\mid \langle \text{pprint} \rangle$ $\mid \langle \text{pprintln} \rangle$ $\mid \langle \text{empty} \rangle$ $\mid \langle \text{assign} \rangle$ $\mid \langle \text{var-decl-stat} \rangle$ $\mid \langle \text{block-stat} \rangle$ $\mid \langle \text{expr-stat} \rangle$
$\langle \text{if} \rangle$	$::= \text{'if'} \text{'(' } \langle \text{expr} \rangle \text{' ' } \langle \text{stat} \rangle [\text{'else'} \langle \text{stat} \rangle]$
$\langle \text{for} \rangle$	$::= \text{'for'} \text{'(' } \langle \text{ident} \rangle [\text{'=' } \langle \text{expr} \rangle] \text{'to'} \langle \text{expr} \rangle \text{' ' } \langle \text{stat} \rangle$
$\langle \text{while} \rangle$	$::= \text{'while'} \text{'(' } \langle \text{expr} \rangle \text{' ' } \langle \text{stat} \rangle$
$\langle \text{do-while} \rangle$	$::= \text{'do'} \langle \text{block} \rangle \text{'while'} \text{'(' } \langle \text{expr} \rangle \text{' ' } \text{' ;'}$
$\langle \text{loop} \rangle$	$::= \text{'loop'} \langle \text{block} \rangle$
$\langle \text{break} \rangle$	$::= \text{'break'} \text{' ;'}$
$\langle \text{continue} \rangle$	$::= \text{'continue'} \text{' ;'}$
$\langle \text{switch} \rangle$	$::= \text{'switch'} \text{'(' } \langle \text{expr} \rangle \text{' ' } \text{'{' } [\langle \text{case} \rangle \{ \text{' ,' } \langle \text{case} \rangle \}] \text{'}'}$
$\langle \text{case} \rangle$	$::= \text{'case'} \langle \text{expr} \rangle \langle \text{block} \rangle$

$\langle bye \rangle$::= 'bye' $\langle expr \rangle$ ';'
$\langle pprint \rangle$::= 'pprint' '(' $\langle expr \rangle$ ')' ';'
$\langle pprintln \rangle$::= 'pprintln' '(' $\langle expr \rangle$ ')' ';'
$\langle empty \rangle$::= ';'
$\langle assign \rangle$::= $\langle ident \rangle$ '[' $\langle ident \rangle$ ']' '[' '[' $\langle expr \rangle$ ']' ('=' '+=' '-=') $\langle expr \rangle$ ';'
$\langle var-decl-stat \rangle$::= $\langle var-decl \rangle$ '[' '=' $\langle expr \rangle$ ']' ';'
$\langle var-decl \rangle$::= $\langle modifiers \rangle$ $\langle data-type \rangle$ '->' $\langle ident \rangle$ '[' '[' $\langle expr \rangle$ ']' ']'
$\langle block-stat \rangle$::= $\langle block \rangle$
$\langle expr-stat \rangle$::= $\langle expr \rangle$ ';'
$\langle data-type \rangle$::= $\langle data-type-kind \rangle$ { '*' } '[' '[' $\langle number \rangle$ ']' ']'
$\langle data-type-kind \rangle$::= 'pp' // int 'p' // char 'nopp' // void 'booba' // bool 'yarn' // string 'ab' // ratio 'flaccid' // float 'struct' $\langle ident \rangle$ // record
$\langle modifiers \rangle$::= { $\langle modifier \rangle$ }
$\langle modifier \rangle$::= 'const'
$\langle struct-decl \rangle$::= 'struct' $\langle ident \rangle$ '{' { $\langle var-decl \rangle$ ',' } '}'
$\langle expr \rangle$::= $\langle equ \rangle$
$\langle equ \rangle$::= $\langle comp \rangle$ { ('!=' '==') $\langle comp \rangle$ }
$\langle comp \rangle$::= $\langle term \rangle$ { ('>' '>=' '<=' '<') $\langle term \rangle$ }
$\langle term \rangle$::= $\langle factor \rangle$ { ('+' '-') $\langle factor \rangle$ }
$\langle factor \rangle$::= $\langle unary \rangle$ { ('*' '/') $\langle unary \rangle$ }

$\langle unary \rangle ::= ('!' \mid '-') \langle unary \rangle \mid \langle primary \rangle$
 $\langle primary \rangle ::= \text{'yem'} \text{ // true}$
 $\quad \mid \text{'nom'} \text{ // false}$
 $\quad \mid \langle literal \rangle$
 $\quad \mid \text{'('} \langle expr \rangle \text{'})'}$
 $\quad \mid \langle ident-expr \rangle$
 $\langle ident-expr \rangle ::= \langle ident \rangle [\langle func-args \rangle \mid \langle struct-flds \rangle \mid \langle struct-fld-access \rangle$
 $\quad \mid \langle array-access \rangle]$
 $\langle func-args \rangle ::= \text{'('} [\langle expr \rangle \{ \text{' , ' } \langle expr \rangle \}] \text{'})'}$
 $\langle struct-flds \rangle ::= \text{'{' } \{ \langle expr \rangle \text{' , ' } \} \text{'}'}$
 $\langle struct-fld-access \rangle ::= \text{'.'} \langle ident \rangle$
 $\langle array-access \rangle ::= \text{'['} \langle expr \rangle \text{']'}$