

Gramáticas

1 Gramáticas

$v, \text{ name} \in \text{Var} = \text{String} \quad d \in \text{RawValue} ::= \mathbf{nil} \mid d . d' \quad \text{Value} ::= d \mid p$

$p \in \text{Prog} ::= \mathbf{proc} \text{ name} : \text{bp}$
 $\quad \mid \mathbf{proc} \text{ name} : \text{xp}$

$e \in \text{Expr} ::= v \mid \mathbf{nil} \mid \mathbf{cons} \ e \ e'$
 $\quad \mid \mathbf{hd} \ e \mid \mathbf{tl} \ e \mid \mathbf{=?} \ e \ e'$
 $\quad \mid * \mid \mathbf{univ} \ e \ e'$

$c \in \text{Comm} ::= v := e$
 $\quad \mid \mathbf{while} \ e \ \mathbf{do} \ c \ \mathbf{od}$
 $\quad \mid c ; c'$

$\text{bp} \in \text{BaseProg} ::= \mathbf{read} \ v ; c ; \mathbf{write} \ w ;$

$\text{pat} \in \text{Pattern} ::= \mathbf{nil} \mid \text{pat} . \text{pat}' \mid v$

$\text{xc} \in \text{ExtComm} ::= v := e$
 $\quad \mid v := \text{name } v'$
 $\quad \mid \mathbf{while} \ e \ \mathbf{do} \ \text{xc} \ \mathbf{od}$
 $\quad \mid \text{xc} ; \text{xc}'$
 $\quad \mid \mathbf{if} \ e \ \mathbf{then} \ \text{xc} \ \mathbf{fi}$
 $\quad \mid \mathbf{if} \ e \ \mathbf{then} \ \text{xc} \ \mathbf{else} \ \text{xc}' \ \mathbf{fi}$
 $\quad \mid \mathbf{rewrite} \ [v_1, \dots, v_n] \ \mathbf{by}$
 $\quad \quad [pat_1^1, \dots, pat_n^1] ==> (\text{xc} \mid [e_1^1, \dots, e_n^1])$
 $\quad \quad \vdots$
 $\quad \quad [pat_1^m, \dots, pat_n^m] ==> (\text{xc} \mid [e_1^m, \dots, e_n^m])$
 $\quad \mathbf{end}$
 $\quad \mid \mathbf{case} \ v \ \mathbf{of}$
 $\quad \quad pat^1 ==> \text{xc}^1$
 $\quad \quad \vdots$
 $\quad \quad pat^m ==> \text{xc}^m$
 $\quad \mathbf{end}$

$\text{xp} \in \text{ExtProg} ::= \mathbf{read} \ v ; \text{xc} ; \mathbf{write} \ w ;$