6.17 forslag

Grammar Rule	Semantic Rule
exp_1 → ***let*** *dec-list* ***in*** exp_2	*dec-list.intab* = exp_1*.symtab* *dec-list.locintab* = exp_1*.symtab* *dec-list.outtab* = exp_1*.symtab + dec-list.locouttab* exp_2*.symtab = dec-list.outtab*
$dec\text{-}list_1$ → $dec\text{-}list_2$, *decl*	$decl_2$*.intab* = $dec\text{-}list_1$*.intab* *decl.intab* = $dec\text{-}list_1$*.intab* $dec\text{-}list_2$*.locintab* = $dec\text{-}list_1$*.locintab* *decl.locintab = decl-list*$_2$*.locouttab* $dec\text{-}list_1$*.locouttab = decl.locouttab*
dec-list → *decl*	*decl.intab = decl-list.intab* *decl.locintab = dec-list.locintab* *dec-list.locouttab = decl.locouttab*
decl → ***id*** = *exp*	*decl.locouttab = ...* *insert(decl.locintab, ...)*

6.18 forslag

Grammar Rule	Semantic Rule
$exp_1 \rightarrow exp_2 + exp_3$	$exp_1.val =$ **if** $(exp_2.val =$ **error**$)$ **or** $(exp_3.val =$ **error**$)$ **then error** **else** $exp_2.val + exp_3.val$
$exp_1 \rightarrow (exp_2)$	$exp_1.val = exp_2.val$
$exp \rightarrow$ ***id***	$exp.val = lookupVal(exp.symtab,$ $id.name)$
$exp \rightarrow$ ***num***	$exp.val =$ ***num***$.val$
$exp_1 \rightarrow$ ***let*** $dec\text{-}list$ ***in*** exp_2	$exp_1.val =$ **if** $(decl\text{-}list.outtab = errtab)$ **then error** **else** $exp_2.val$

decl → ***id*** = *exp*	*decl.outtab* = **if** *(decl.intab = errtab)* **then** *errtab* **else** **if** *(lookupLevel(* *decl.intab,id.name) =* *decl.nestlevel)* **then** *errtab* **else** *insert(decl.intab,id.name,* *decl.nestlevel, exp.val)*