```
introduce texpr ttype tvn tn
introduce tarq = ttype tvn
foreach nt:N
   include nt = \ll \text{expand } tn \ texpr^* \gg
   include nt = \ll if \ texpr^* \gg nt \ \ll else \gg nt \ \ll endif \gg
   include tmpl = \ll define |nt| tn tary^* \gg nt \ll enddef \gg
   include tstmt = nt
   include dn = |nt|
endfor
foreach nt:M
   fold nt_M = nt
   include nt_M = \ll texpr \gg
   include tstmt = nt_M
   include dn = |nt|
endfor
foreach nt:L
   fold nt_L = nt
   include nt_L = \ll \text{for } tvn \text{ in } texpr \gg nt \ll \text{endfor} \gg
   include tstmt = nt_L
endfor
introduce tcoll = tmpl^*
```