Languages-beta: SIMPLE-5-Programs *

The PLanCompS Project

SIMPLE-5-Programs.cbs | PLAIN | PRETTY

Language "SIMPLE"

5 Programs

Syntax Pgm : pgm ::= decls

Semantics run⟦ $Decls$: pgm ⟧ : ⇒ values
  = scope(
      collateral(declarations⟦ $Decls$ ⟧),
      sequential(
        initialisations⟦ $Decls$ ⟧,
        apply(assigned(bound("main")), tuple( ))))

Syntax $Decls$: decls ::= decl decls?

Semantics declarations⟦ _ : decls ⟧ : (⇒ environments)$^+$
  Rule declarations⟦ $Decl$ ⟧ = declare⟦ $Decl$ ⟧
  Rule declarations⟦ $Decl$ $Decls$ ⟧ = declare⟦ $Decl$ ⟧, declarations⟦ $Decls$ ⟧

Semantics initialisations⟦ _ : decls ⟧ : (⇒ null-type)$^+$
  Rule initialisations⟦ $Decl$ ⟧ = initialise⟦ $Decl$ ⟧
  Rule initialisations⟦ $Decl$ $Decls$ ⟧ =
        initialise⟦ $Decl$ ⟧, initialisations⟦ $Decls$ ⟧