***Run***[[Program]] =

***Execute***[[Declarations ; Statements]]

HALT

***Execute***[[Declarations ; Statements]] =

***Elaborate***[[**decs** OneDeclaration\* **sced**]]

***Execute***[[Statements]]

***Elaborate***[[OneDeclaration\*]] =

***Elaborate***[[Declaration1]]

***Elaborate***[[Declaration2]]

...

***Elaborate***[[Declarationn]]

***Elaborate***[[**def8** Identifier ( **HeaderList** ) **~** OneStatement \* **~;** ]] =

***Elaborate***[[HeaderList]]

***Elaborate***[[OneStatement \*]]

RETURN;

***Elaborate***[[HeaderList]] =

***Elaborate***[[Header1]]

***Elaborate***[[Header2]]

…

***Elaborate***[[Headern]]

***Execute***[[Statement\*]] =

***Execute***[[Statement1]]

***Execute***[[Statement2]]

…

***Execute***[[Statementn]]

**Execute[[if8** LogicalExpression **~** OneStatement1\* **~ else8 ~** OneStatement2\* **~]]** =

***Evaluate[[***LogicalExpression***]]***

JUMPIF (1) e

***Execute[[***OneStatement1\****]]***

JUMP d

e: ***Execute[[***OneStatement2\****]]***

d:

***Execute[[*while8** LogicalExpression **~** OneStatement\* **~*]]*** =

r: ***Evaluate[[***LogicalExpression***]]***

JUMPIF (0) d

***Execute[[***OneStatement\****]]***

JUMP r

d:

***Evaluate*[[**Identifier **8=** Expression**]]** =

***Evaluate*[[**Expression**]]**

STORE varoffset[varreg]

LOAD varoffset[varreg]

***Execute*[[plint(**Expression**)]]** =

***Evaluate*[[**Expression**]]**

CALL putint

CALL puteol

***Evaluate*[[call8** Identifier **(** ExpressionList **)]]** =

***Evaluate*[[**ExpressionList**]]**

CALL (funcreg) funcadr[CB]

***Evaluate*[[**Expression (**,** Expression)\***]]** =

***Evaluate*[[**Expression1**]]**

***Evaluate*[[**Expression2**]]**

…

***Evaluate*[[**Expressionn**]]**

***Evaluate*[[**primary-Expression1 **Operator** primary-Expression2**]]** =

***Evaluate*[[**Expression1**]]**

***Evaluate*[[**Expression2**]]**

CALL operator

***Evaluate*[[-**Expression**]]** =

***Evaluate*[[**Expression**]]**

CALL neg

***Evaluate*[[+**Expression**]]** =

***Evaluate*[[**Expression**]]**

***Elaborate*[[TypeIdentifier** Identifier**;]]** =

***Evaluate*[[**Identifier**]]**

***Evaluate*[[**IntegerLiteral**]]** =

LOADL literal

***Evaluate*[[**BoolLiteral**]]** =

LOADL literal

***Evaluate*[[**DoubleLiteral**]]** =

LOADL literal

***Evaluate*[[**Identifier**]]** =

LOADL varoffset[varreg]