**moses 0.1 – LL(1)**

*statement ->* ***compound-statement*** *|* ***if-statement*** *|* ***while-statement*** *|* ***break-statement*** *|* ***continue-statement*** *|* ***return-statement*** *|* ***expression-statement*** *|****declaration-statement***

*if-statement ->* ***if******expression******compound-statement*** *else* ***compound-statement***

*while-statement ->* ***while******expression******compound-statement***

*break-statement ->* ***break******;***

*compound-statement ->* ***{******statement-list******}***

*statement-list ->* ***EPSILON*** *|* ***statement******statement-list***

*continue-statement ->* ***continue ;***

*return-statement ->* ***return*** *expression* ***;***

*return-statement ->* ***return ;***

*expression-statement ->* ***expression-list******;***

*expression-list ->* ***expression*** *|* ***EPSILON***

*class-body ->* ***{******variable-declaration-list******}***

*variable-declaration-list ->* ***variable-declaration variable-declaration-list*** *|* ***EPSILON***

*expression ->* ***assignment-expression***

*assignment-expression ->* ***condition-or-expression-list******condition-or-expression***

*condition-or-expression-list ->* ***condition-or-expression******=******condition-or-expression-list*** *|* ***EPSILON***

*condition-or-expression ->* ***condition-and-expression condition-or-expression-tail***

*condition-or-expression-tail ->* ***EPSILON*** *|* ***||******condition-and-expression condition-or-expression-tail***

*condition-and-expression ->* ***equality-expression******condition-and-expression-tail***

*condition-and-expression-tail ->* ***&&******equality-expression equality-expression-tail*** *|* ***EPSILON***

*equality-expression ->* ***rel-expression******equality-expression-tail***

*equality-expression-tail ->* ***EPSILON*** *|* ***==******rel-expression equality-expression-tail*** *|* ***!=******rel-expression equality-expression-tail***

*rel-expression ->* ***additive-expression rel-expression-tail***

*rel-expression-tail ->* ***EPSILON*** *|* ***<******additive-expression rel-expression-tail*** *|* ***<=******additive-expression******rel-expression-tail*** *|* ***>******additive-expression rel-expression-tail*** *|* ***>=******additive-expression rel-expression-tail***

*additive-expression ->* ***m-d-expression additive-expression-tail***

*additive-expression-tail ->* ***EPSILON*** *|* ***+******m-d-expression additive-expression-tail*** *|* ***-******m-d-expression additive-expression-tail***

*m-d-expression ->* ***u-expression m-d-expression-tail***

*m-d-expression-tail ->* ***EPSILON*** *|* ***\*******u-expression m-d-expression-tail*** *|* ***/******u-expression m-d-expression-tail***

*u-expression ->* ***-******u-expression*** *|* ***!******u-expression*** *|* ***primary-expression***

*primary-expression ->* ***identifier*** *|* ***identifier arg-list*** *|* ***(******expression******)*** *|* ***INT-LITERAL*** *|* ***BOOL-LITERAL***

*para-list ->* ***( )*** *|* ***(******proper-para-list******)***

*proper-para-list ->* ***para-declaration proper-para-list-tail***

*proper-para-list-tail ->* ***,******para-declaration proper-para-list-tail*** *|* ***EPSILON***

*para-declaration ->* ***type******identifier***

*arg-list ->* ***( )*** *| (* ***proper-arg-list*** *)*

*proper-arg-list ->* ***arg proper-arg-list-tail***

*proper-arg-list-tail ->* ***,******arg proper-arg-list-tail*** *|* ***EPSILON***

*arg ->* ***expression***

*declaration-statement ->* ***function-declaration*** *|* ***constant-declaration*** *|* ***variable-declaration*** *|* ***class-declaration***

*function-declaration ->* ***identifier******para-list compound-statement***

*variable-declaration ->* ***var******identifier******init-expression******;*** *|* ***var identifier type-annotation ;***

*class-declaration ->* ***class******identifier******init-expression******;*** *|* ***class identifier******type-annotation ;***

*constant-declaration ->* ***const******identifier******init-expression******;*** *|* ***const******identifier******type-annotation ;***

*init-expression ->* ***= expression***

*type-annotation ->* ***:******type***

*type ->* ***int*** *|* ***bool***

*top-level ->* ***statement******top-level*** *|* ***EPSILON***