|  |  |
| --- | --- |
| Program | (FuncDeclaration | GlobalDeclaration)+ |
| GlobalDeclaration | ‘var’ Label ‘=’ Expression ‘;’ |
| FuncDeclaration | ‘function’ Label ‘(‘ [‘var’ Label [‘, var’ Label]\* ] ‘)’ CodeBlock |
| CodeBlock | ‘{‘ [Code]\* ‘}’ |
| Code | Statement | Control |
| Control | IF | LOOP |
| LOOP | ‘while’ ‘(‘ Condition ‘)’ CodeBlock |
| IF | ‘if’ ‘(‘ Condition ‘)’ ‘{‘ Code\* ‘}’ [ELSEIF]\* [ELSE] |
| ELSEIF | ‘else if’ ‘(‘ Condition ‘)’ CodeBlock |
| ELSE | ‘else’ CodeBlock |
| Condition | Expression ConditionOp Expression |
| ConditionOp | == | != | < | > | <= | >= |
| Statement | (VarDeclaration | Assignment | FuncInvoke) ‘;’ |
| FuncInvoke | Label ‘(‘ [Expression [, Expression]\* ‘)’ |
| VarDeclaration | ‘var’ Label ‘=’ Expression |
| Assignment | Label ‘=’ Expression |
| Expression | [‘-‘] Term [ (‘+’|’-‘) Term ]\* |
| Term | Factor [‘\*’ Term] |
| Factor | ‘(‘ Expression ‘)’ | Constant | Variable | FuncInvoke |
| Variable | Label |
| Label | [A-Za-z][A-Za-z0-9]\* |
| Constant | ‘0x’ [A-F0-9]+ | [0-9]+ |

Re-write minus sign to be handled at the factor level