

BNF for microIR.jj

NON-TERMINALS

Goal ::= "MAIN" StmtList "END" (Procedure)* <EOF>
StmtList ::= ((Label)? Stmt)*
Procedure ::= Label "[" IntegerLiteral "]" StmtExp
Stmt ::= NoOpStmt
| ErrorStmt
| CJumpStmt
| JumpStmt
| HStoreStmt
| HLoadStmt
| MoveStmt
| PrintStmt
NoOpStmt ::= "NOOP"
ErrorStmt ::= "ERROR"
CJumpStmt ::= "CJUMP" Temp Label
JumpStmt ::= "JUMP" Label
HStoreStmt ::= "HSTORE" Temp IntegerLiteral Temp
HLoadStmt ::= "HLOAD" Temp Temp IntegerLiteral
MoveStmt ::= "MOVE" Temp Exp
PrintStmt ::= "PRINT" SimpleExp
Exp ::= Call
| HAllocate
| BinOp
| SimpleExp
StmtExp ::= "BEGIN" StmtList "RETURN" SimpleExp "END"
Call ::= "CALL" SimpleExp "(" (Temp)* ")"
HAllocate ::= "HALLOCATE" SimpleExp
BinOp ::= Operator Temp SimpleExp
Operator ::= "LE"
| "NE"
| "PLUS"
| "MINUS"
| "TIMES"
| "DIV"
SimpleExp ::= Temp
| IntegerLiteral
| Label

Temp ::= "TEMP" IntegerLiteral
IntegerLiteral ::= <INTEGER_LITERAL>
Label ::= <IDENTIFIER>