TOC Assignment 2

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Grammar

<program> -> <declaration>";"<statement_list> | <statement_list> | <declaration>";"

<statement_list> -> <statement>";"<statement_list> | <statement>";"

<statement> -> <read> | <write> | <assignment> | <for_loop>

<declaration> -> "int" <variable_list>

<read> -> "read" <variable>

<write> -> "write" <variable> | "write" <integer_constant>

<assignment> -> <variable>"="<expression>

<for_loop> ->"for""("<assignment>";"<expression>";"<assignment>")""{"<statement_list>"}"

<expression> -> <expression> <operator_exp_low> <expression_low> | <expression_low>

<expression_low> -> <expression_low> <operator_exp_mid> <expression_mid> | <expression_mid>

<expression_mid> -> <expression_mid> <operator_exp_top> <expression_top> | <expression_top>

<expression_top> -> "("<expression>")" | <integer_constant> | <variable>

<operator_exp_low> -> ">"|"=="

<operator_exp_mid> -> "+"|"-"

<operator_exp_top> -> "*"|"/"

<variable> -> "{a - z}+ - {for,int,read,write}"

<integer_constant> -> "{0 - 9}+"

<variable_list> -> <variable> | <variable>","<variable_list>