topRule = "startprogram", "startblock", varsBlock, ";", statement, "endblock";
varsBlok = "Low16", identifier, { commaAndIdentifier };
identifier = low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter, low_letter;
commaAndIdentifier = ",", identifier;
statement = write | read | assignment | ifStatement| goto_statement |goto_declaration | forToOrDownToDoRule | while | repeatUntil ;
read = "read", identifier;
write = "write", equation;
assignment = identifier, "<==", equation;
ifStatement = "if", (equation), statement, [elseStatement];
elseStatement = "else", statement;
goto_statement = "goto", identifier;
goto_declaration = identifier,":";
forToOrDownToDoRule = "for", assignment, ("to" | "downto"), equation, "do", statement;
while = "while", (equation), "do", while_statement, "wend";
while_statement = write | read | assignment | whileifStatement| goto_statement |goto_declaration | whileforToOrDownToDoRule | while | repeatUntil | continuewhile | exitwhile;
exitwhile = "exitwhile" ;
continuewhile = "continuewhile" ;
whileifstatement = "if", (equation), while_statement, [elseStatement];
whileforToOrDownToDoRule = "for", assignment, ("to" | "downto"), equation, "do", while_statement;
repeatUntil = "repeat",(statement), "until", equation;
equation = signedNumber | identifier | notRule, { operationAndIdentOrNumber | equation };
notRule = notOperation, signedNumber | identifier | equation;
operationAndIdentOrNumber = mult | arithmetic | logic | compare | signedNumber | identifier | equation;
arithmetic = "add" | "sub";
mult = "*" | "/" | "%";
logic = "&" | "|";
notOperation = "!";
compare = "==" | "<>" | "<<" | ">>";
comment = CommentStatement, { low_letter | up_letter | digit };
CommentStatement = "##";
signedNumber = [sign], digit, { digit };
sign = "+" | "-";
low_letter = "a" | "b" | "c" | "d" | "e" | "f" | "g" | "h" | "i" | "j" | "k" | "l" | "m" | "n" | "o" | "p" | "q" | "r" | "s" | "t" | "u" | "v" | "w" | "x" | "y" | "z";
digit = "0" | "1" | "2" | "3" | "4" | "5" | "6" | "7" | "8" | "9";