Small 语法图

# <program> = <stmt\_sequence>

program

Stmt\_sequence

# <stmt\_sequence> = <statement>{“;”<statement>}

stmt\_sequence

statement

;

# <statement>=<if\_stmt>|<repeat\_stmt>|<assign-stmt>|<read\_stat>|<write\_stat>

statement

If\_stmt

Repeat\_stmt

Assign\_stmt

read\_stmt

write\_stmt

# <if\_stmt>= “if” <exp> “then” <stmt\_sequence>[else <stmt\_sequence>]”end”

If\_stmt

exp

Stmt\_sequence

Stmt\_sequence

# <repeat\_stmt>=”repeat” <stmt\_sequence> “until” <exp>

Repeat\_stmt

Stmt\_sequence

exp

# <assign-stmt> = <identifier> “:=” <exp>

Assign\_stmt

exp

# <read\_stmt> = “read” <identifier>

Read\_stmt

# <write\_stmt>= “write” <exp>

write\_stmt

# <exp>=<simple-exp>[( “>”|”<”|”>=”|”<=”|”==”|”!=”)<simple-exp>]

exp

Simple\_exp

Simple\_exp

# <simple-exp> =<term>{(“+”| “-”)<term>}

Simple\_exp

term

term

# <term>=<factor>{(“\*”|“/”)<factor>}

term

factor

factor

# <factor>=”(“<exp>”)”|<number>|<identifier>

factor

exp

number

# <number>=<digit>{<digit>}

<digit>=”0”|”1”|”2”|”3”|”4”|”5”|”6”|”7”|”8”|”9”

number

# <identifier>=<letter>{(<letter>|<digits>)}

<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|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

identifer

综上所述，Small语言文法符合LL（1）。