```
cprogram> -> begin <stmt_list> end
<stmt_list> -> <stmt>
             I <stmt> <stmt_list>
<stmt> -> <assign stmt>
        I <comment_stmt>
        I <def_stmt>
<def_stmt> -> <data_types> <identifiers>
<data_types> -> FLOAT
                    I BOOLEAN
                    INTEGER
                    I WIDTH
                    I HEIGHT
                    I STROKE_WIDTH
                    I DEF_WIDTH
                    I DEF_HEIGHT
                    I RECTANGLE
                    I LINE
                    I OVAL
                    I COMPOSITE_SHAPE
                    I SHAPE
                    I PARAMETER
                    I LOCATION
                    I COLOR
                    ISET
                    I DIRECTION
                    I IDENTIFIER
                    I CSHAPE
<identifiers> -> <identifier>
             I <identifier> <assign_stmt>
             I <identifier> <function_callers>
<assign_stmt> -> '=' <cshape>
<cshape> -> IDENTIFIER '+' IDENTIFIER
             I IDENTIFIER '+' IDENTIFIER '+' IDENTIFIER
             I IDENTIFIER '+' IDENTIFIER '+' IDENTIFIER'+'IDENTIFIER
<function_callers> -> IDENTIFIER "DRAW"
                          I IDENTIFIER "FILLSTATE"
                          I IDENTIFIER "FILLCOLOR"
<logic_stmt> -> < expr >
          I <expr> <logical op>
          I <expr> <logical_op> <expr>
<comment_stmt> -> '/' '/' <stmt_list>
```

```
<expr> -> IDENTIFIER
             I <function_callers>
            I WIDTH
            I HEIGHT
             I STROKE_WIDTH
             I DEF_WIDTH
             I DEF_HEIGHT
            I RECTANGLE
            I LINE
            I OVAL
             I COMPOSITE_SHAPE
             I SHAPE
             I PARAMETER
             I LOCATION
            I COLOR
            I SET
            I DIRECTION
```

<logical_ op> -> '==' | '!=' | '<' | '>' | '<=' | '>=' | 'and' | 'or' | '->' | '*' | '!' | '!'