Princeton University
COS 217: Introduction to Programming Systems
Digital Circuit Simulator Parser Module Design

Grammar (expressed in Backus Naur Form):

```
element ::= TKN_NUMBER
element ::= TKN_IDENTIFIER
element ::= TKN_LEFT_PAREN expr TKN_RIGHT_PAREN

factor ::= TKN_NOT* element

term ::= factor [TKN_AND factor]*

expr ::= term [TKN_OR term]*

inputstmt ::= TKN_INPUT TKN_IDENTIFIER+ TKN_SEMICOLON

flipflopstmt ::= TKN_FLIPFLOP TKN_IDENTIFIER+ TKN_SEMICOLON

nextstmt ::= TKN_NEXT TKN_IDENTIFIER TKN_EQUALS expr TKN_SEMICOLON

stmt ::= inputstmt
stmt ::= flipflopstmt
stmt ::= nextstmt

program ::= stmt+
```