

```

<program> ::= <primary> | <program>
<primary> ::= <def> | <statement>
<def> ::= "def" <whitespace> <proc iden> <EOL> <pblock> <EOL> "ENDPROC" <EOL>
<pblock> ::= <statement> | <local> | <statement> <EOL> <pblock> | <local> <EOL> <pblock>
<local> ::= "LOCAL" <whitespace> <typed identifier>
<statement> ::= <let> | <if> | <while> | <for> | <case> | <goto> | <dim> | <print> |
    <input> | <statement> ":" <statement>
<let> ::= "LET" <whitespace> <typed identifier> <whitespace> "=" <whitespace>
    <expression>
<if> ::= "IF" <whitespace> <expression> <whitespace> "THEN" <whitespace> <statement> |
    "IF" <whitespace> <expression> <whitespace> "THEN" <whitespace> <statement> "ELSE"
    <whitespace> <statement> | "IF" <whitespace> <expression> <whitespace> "THEN" <EOL>
    <block> <EOL> "ELSE" <EOL> <block> <EOL> "ENDIF"
<while> ::= "WHILE" <whitespace> <expression> <EOL> <block> <EOL> "ENDWHILE"
<for> ::= <for header> <EOL> <block> <EOL> "NEXT" <whitespace> <typed identifier>
<for header> ::= "FOR" <whitespace> <typed identifier> <whitespace> "=" <whitespace>
    <expression> <whitespace> <for to> <whitespace> <for step>
<type> ::= "%" | "$" | ""
<typed identifier> ::= <identifier> <type>
<proc iden> ::= "PROC" <identifier>
<identifier> ::= <letter> <identifier cont.>
<identifier cont.> ::= "" | <letter> | <digit> | "_" | <letter> <identifier cont.> |
    <digit> <identifier cont.> | "_" <identifier cont.>
<whitespace> ::= <SP> | <TAB> | <SP> <whitespace> | <TAB> <whitespace>

```