```
→ <'program' '<identifier>' E E E E E '<identifier>'>
P
Ε
      \rightarrow <'consts' E+>
      → 'consts'
       → <'const' '<identifier>' E>
      → '<integer>'
       → '<char>'
       \rightarrow <'types' E+>
      → 'types'
       → <'type' '<identifier>' E>
       → <'lit' E+>
       → <'subprogs' E*>
       → <'fcn' '<identifier>' E '<identifier>' E E E E
'<identifier>'>
       \rightarrow <'params' E+>
       \rightarrow <'dclns' E+>
       → 'dclns'
       → <'var' '<identifier>'+ '<identifier>'>
       → <'block' E+>
       → <'output' E+>
       \rightarrow <'if' E E E?>
       → <'while' E E>
       \rightarrow <'repeat' E+ E>
       \rightarrow <'for' E E E E>
       → <'loop' E+>
       \rightarrow <'case' E E E>
      → <'read' '<identifier>'+>
       → 'exit'
       → <'return' E>
       → '<null>'
      → <'integer' E>
       → <'string' E>
       → '<string>'
       → <'case clause' E+ E>
       \rightarrow <' ..' E E>
       → <'otherwise' E>
       → <'assign' '<identifier>' E>
       → <'swap' '<identifier>' '<identifier>'>
       → 'true'
       \rightarrow <'<=' \to \to
       \rightarrow <'<' \to \to
       \rightarrow <'>=' E E>
       \rightarrow <'>' \to \to \to
       \rightarrow <'=' \mathbb{E} \mathbb{E}>
      \rightarrow <'<>' \to \to \to
       _{
ightarrow} < ^{\prime} + ^{\prime} \to \to
       \rightarrow <'-' \to \to \to
```

- → <'or' E E>
- \rightarrow <' *' E E>
- \rightarrow <'/' E E>
- \rightarrow <'and' E E>
- → <'mod' E E>
- \rightarrow <'-' E>
- → <'not' E>
- → 'eof'
- \rightarrow <'call' E E+>
- → <'succ' E>
- → <'pred' E>
- → <'chr' E>
- → <'ord' E>
- → '<identifier>'