- 1. s -> DT MAIN OB CB BEGIN stmt END
- 2. stmt -> decl stmt
- 3. stmt -> loop stmt
- 4. stmt -> expr **SC** stmt
- 5. stmt -> ?
- 6. decl -> DT vars SC
- 7. vars -> ID vars'
- 8. vars -> CM vars
- 9. vars -> ?
- 10. vars' -> vars
- 11. vars' -> **ASSI** simpleExp vars
- 12. loop -> FOR OB init SC comp SC expr CB BEGIN stmt END
- 13. init -> ID ASSI simpleExp
- 14. comp -> term relop term
- 15. relop -> **LT**
- 16. relop -> **GT**
- 17. relop -> **GE**
- 18. relop -> **LE**
- 19. relop -> **EQ**
- 20. relop -> **NE**
- 21. expr -> **ID** expr'
- 22. expr -> unop **ID**
- 23. expr' -> ASSI simpleExp
- 24. expr' -> unop
- 25. simpleExp -> term simpleExp'
- 26. simpleEmp' -> arithop term simpleExp'
- 27. simpleEmp' -> ?
- 28. arithop -> PLUS
- 29. arithop -> MINUS
- 30. arithop -> DIV
- 31. arithop -> **PROD**
- 32. arithop -> MOD
- 33. unop -> **INCR**
- 34. unop -> **DECR**
- 35. term -> **ID**
- 36. term -> **NUM**

```
DT (int | float)

MAIN (main)

OB (()

CB())

BEGIN (begin )

END (end )

SC (;)

CM (,)

ID ([a-zA-Z][a-zA-Z0-9_]*)

ASSI (=)

FOR (for )

NUM ([0-9]+)

RELOP (<|>|<=|>=|!=|==)

INCR (++)

DECR (--)
```