1. program → declaration-list

2. declaration-list → declaration-list declaration | declaration

3. declaration → var-declaration | fun-declaration

4. var-declaration → type-specifierID ; | type-specifierID [NUM];

5. type-specifier→ int | void

6. fun-declaration → type-specifierID (params)compound-stmt

7. params→ param-list | void

8. param-list→ param-list , param| param

9. param→ type-specifierID | type-specifierID [ ]

10. compound-stmt → { local-declarations statement-list }

11. local-declarations → local-declarations var-declaration | empty

12. statement-list → statement-list statement | empty

13. statement → expression-stmt | compound-stmt| selection-stmt | iteration-stmt | return-stmt

14. expression-stmt → expression ;| ;

15. selection-stmt → if( expression ) statement | if ( expression ) statement else statement

16. iteration-stmt → while( expression ) statement

17. return-stmt → return ; | return expression ;

18. expression → var = expression | simple-expression

19. var → ID| ID[ expression ]

20. simple-expression → additive-expression relop additive- expression | additive-expression

21. relop → <= | < | > | >= | == | !=

22. additive-expression → additive-expression addop term | term

23. addop → + | -

24. term → term mulop factor | factor 25. mulop → \* | /

26. factor → ( expression ) | var | call | NUM

27. call → ID( args )

28. args → arg-list | empty

29. arg-list → arg-list , expression | expression