1. program → declaration-list

2. declaration-list → decl {decl}

3. decaration → (int ID(var-decl’fun-decl’)|void ID fun-decl’

var-decl’ → ; | [NUM]

fun-decl’ → (params) compound-stmt

4. var-decl → int ID var-decl’

7. params → param-list | void

8. param-list → param {,param}

9. param → int ID [[]]

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

11. local-declarations → {var-declaration}

12. statement-list → {statement}

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

14. expression-stmt → [expression];

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

16. iteration-stmt → while (expression) statement

17. return-stmt → return [expression];

18. expression → NUM simple-expression’ | (expression) simple-expression’ | ID expression’

expression’ → =expression | [expression] expression’’| (args) simple-expression’ | simple-expression’

expression’’→ expression | simple-expression’

19. var-call → [ expression] | (args)

20. simple-expression’ → additive-expression’ [relop additive-expression]

21. relop → <= | < | > | => | == | !=

22. additive-expression → {addop term}

additive-expression’ → term’ {addop term}

23. addop → +|-

24. term → factor {mulop factor}

term’ → {mulop factor}

25. mulop → \*|/

26. factor → (expression) | ID varCall | NUM

27. args → argl-list

28. arg-list → expression {,expression}