

1. Program -> declaration-list
2. declaration-list -> declaration-list declaration | declaration
3. declaration -> var- declaration | fun- declaration
4. var- declaration -> type-specifier **ID** ; | type-specifier **ID** [**NUM**] ;
5. type-specifier -> **int** | **void** | **float**
6. fun- declaration -> type-specifier **ID** (params) compound-stmt
7. params -> param-list | **void**
8. param-list -> param-list , param | param
9. param -> type-specifier **ID** | type-specifier **ID** []
10. compound-stmt -> { local-declarations statement-list }
11. local-declarations -> local-declarations var-declarations | 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