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Proyecto 2

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Gramática C-

1. program : declaration_list
2. declaration_list : declaration {declaration}
3. declaration : type_specifier **ID** ;
 | type_specifier **ID [INTEGER]** ;
 | type_specifier **ID (params)** compound_stmt
4. type_specifier : **int** | **void**
5. compound_stmt : { local_declarations_list statement_list }
6. local_declarations_list : var_declarations { local_declarations_list }
7. statement_list : statement { statement_list }
8. params : param_list
 | **void**
9. param_list : param { , param_list }
10. param : type_specifier **ID**
 | type_specifier **ID []**
11. statement : expression_stmt
 | compound_stmt
 | selection_stmt
 | iteration_stmt
 | return_stmt

12. iteration_stmt : **while** (expression) statement

13. selection_stmt : **if** (expression) statement

| **if** (expression) statement **else** statement

14. return_stmt : **return** ;

| **return** expression ;

15. expression_stmt : expression ;

| ;

16. expression : **ID** = expression

| **ID** [expression] = expression

| **ID** [expression] {operations}

| **ID** [expression] {operations} conditional {operations}

| factor {operations}

| factor {operations} conditional {operations}

17. conditional : relop factor

18. operations : multis

| multis sumres

| sumres

19. sumres : { addop factor multis }

20. multis : { mulop factor }

21. factor : (expression)

| **NUM**

| **ID**

| **ID** [expression]

| **ID** (args)

22.mulop : * | /

23.addop : + | -

24.relop : < | <= | > | >= | == | !=