```
1. <prolog> → require "ifj21" <prog> EOF
 2. \langle prog \rangle \rightarrow global \ ID : function ( <math>\langle params\_type \rangle ) \langle ret\_type \rangle \langle prog \rangle
 3. <prog> → function ID ( <params> ) <ret_type> <statement> end <prog>
4. \langle prog \rangle \rightarrow ID (\langle arg \rangle)
5. <params_type> → <type> <params_type_n>
6. cans_type> \rightarrow \epsilon
7. <params_type_n> \rightarrow , <type> <params_type_n>
8. c ams_type_n \rightarrow \epsilon
9. <ret_type> \rightarrow : <type>
10. \langle \text{ret\_type} \rangle \rightarrow \epsilon
11. <params> \rightarrow ID : <type> <params_n>
12. <params> \rightarrow \epsilon
13. <params_n> \rightarrow , ID : <type> <params_n>
14. <params_n> \rightarrow \epsilon
15. <statement> → local ID : <type> <def_var> <statement>
16. <statement> → ID <id_list> = <def_value> <statement>
17. <statement> → if <expression> then <statement> else <statement> end
     <statement>
18. <statement> → while <expression> do <statement> end <statement>
19. <statement> → return <ret_exp> <statement>
20. <statement> → write ( <arg> ) <statement>
21. <statement> \rightarrow \epsilon
22. <ret_exp> → <expression> <expression_list>
23. \langle ret_exp \rangle \rightarrow \epsilon
24. \langle def_value \rangle \rightarrow ID ( \langle arg \rangle )
25. <def_value> → <builtin>
26. <def_value> → <expression> <expression_list>
27. \langle id\_list \rangle \rightarrow , ID \langle id\_list \rangle
28. \langle id_list \rangle \rightarrow \epsilon
29. <expression_list> \rightarrow , <expression> <expression_list>
30. \langle expression\_list \rangle \rightarrow \epsilon
31. \langle def_var \rangle \rightarrow = \langle builtin \rangle
32. \langle def_var \rangle \rightarrow = ID (\langle arg \rangle)
33. \langle def_var \rangle \rightarrow = \langle expression \rangle
34. \langle def_var \rangle \rightarrow \epsilon
35. <builtin> \rightarrow reads ( <arg> )
36. \langle \text{builtin} \rangle \rightarrow \text{readi} (\langle \text{arg} \rangle)
37. <builtin> \rightarrow readn ( <arg> )
38. <builtin> → tointeger ( <arg> )
39. <builtin> \rightarrow substr ( <arg> )
40. <builtin> \rightarrow ord ( <arg> )
41. \langle builtin \rangle \rightarrow chr ( \langle arg \rangle )
42. \langle arg \rangle \rightarrow \langle value \rangle \langle arg_n \rangle
43. <arg> \rightarrow \epsilon
44. \langle arg_n \rangle \rightarrow , \langle value \rangle \langle arg_n \rangle
45. \langle arg_n \rangle \rightarrow \epsilon
46. <value> → INTEGER
47. <value> → NUMBER
48. <value> → STRING
49. <value> → ID
50. <value> → nil
51. <type> → integer
52. <type> → number
53. <type> \rightarrow string
54. <type> → nil
```