```
    <prog> -> HEADER <prog_con>

<prog_con> -> func FID (<arg>) <types> <prog_con>
3. con> -> <variant> ID <option> con>
4. con> -> <id_type> con>
<prog_con> -> if <expression> {<statement>} <else_statement> <prog_con>

 7. prog_con> -> ε ΕΟΕ

8. <arg> -> PARAM_NAME ID : <type_spec> <args_more>
9. <arg> -> ε
10. <args more> -> , PARAM NAME ID : <type spec> <args more>
11. <args_more> -> ε
12. <types> -> -> <type_spec> {<statement_with_return>} // return so spravnym dat typom exp
13. <types> -> {<statement_with_return>} //return bez expression OR ziadny return
14. <type_spec> -> Double
15. <type_spec> -> Int
16. <type_spec> -> String
17. <type_spec> -> Double?
18. <type_spec> -> Int?
19. <type_spec> -> String?
20. <variant> -> let
21. <variant> -> var
22. <option> -> : <type spec> <assigns>
23. <option> -> <assign>
24. <assigns> -> <assign>
25. <assigns> -> &
26. <assign> -> = <expression>
27. <assign> -> = <builtin>
28. <assign> -> = ID reopt>
29. <id_type> -> <builtin_extra>
30. <id_type> -> ID <opt>
31. <builtin extra> -> write(<write params>)
32. <builtin extra> -> <builtin>
33. <write_params> -> <term> <write_params_more>
34. <write params> -> &
35. <write_params_more> -> , <term> <write_params_more>
36. <write_params_more> -> &
37. <builtin> -> readString ()
38. <builtin> -> readInt ()
39. <builtin> -> readDouble ()
40. <builtin> -> Int2Double (<chr_t>)
41. <builtin> -> Double2Int (<double_t>)
42. <builtin> -> length (<length_t>)
43. <builtin> -> substring (of <length_t>, startingAt <chr_t>, endingBefore <chr_t>)
44. <builtin> -> ord (<length_t>)
45. <builtin> -> chr (<chr_t>)
48. <opt> -> (<params>)
49. <opt> -> = ID EOL
50. <opt> -> = ID (<params>)
51. <opt> -> = <builtin> EOL
52. <opt> -> = <expression> EOL
53. <params> -> PARAM_NAME <params_more>
54. <params> -> PARAM_NAME : <term> <params_more>
55. <params> -> ε
56. <params more> -> ,PARAM NAME <params more>
57. <params_more> -> ,PARAM_NAME : <term> <params_more>
58. <params_more> -> &
59. <length_t

-> "STRINGLIT"
60. <length_t> -> ID //type STRING
61. <chr_t> -> INTLIT
62. <chr_t> -> ID //type INT
63. <double_t> -> DOUBLELIT
64. <double_t> -> ID //type DOUBLE
65. <statement_with_return> -> <variant> ID <option> <statement_with_return >
66. <statement_with_return> -> <id_type> <statement_with_return >
67. <statement_with_return> -> if <expression> {<statement_with_return>} else {<statement_with_return>}
<statement with return>
68. <statement_with_return> -> while <expression> {<statement_with_return>} <statement_with_return>
69. <statement_with_return> -> return <return_value> <statement_with_return>
70. <statement_with_return> -> &
71. <statement> -> <variant> ID <option> <statement>
72. <statement> -> <id_type> <statement>
73. <statement> -> if <expression> {<statement>} else {<statement>} <statement>
74. <statement> -> while <expression> {<statement>} <statement>
75. <statement> -> &
76. <return_value> -> <expression>
```

- 77. <term> -> "STRINGLIT"
  78. <term> -> INTLIT
  79. <term> -> DOUBLELIT
  80. <term> -> ID
  81. <expression> -> <term> <sign> <term> <expression\_more>
  82. <expression\_more> -> <sign> <term> <expression\_more>
  83. <expression\_more> -> &

- 83. <expresion\_r 84. <sign> -> + 85. <sign> -> -86. <sign> -> \* 87. <sign> -> / 88. <sign> -> == 89. <sign> -> != 90. <sign> -> < 91. <sign> -> < 92. <sign> -> = 93. <sign> -> = 94. <sign> -> ??