```
PROG -> package main eol EOL DEF_FUNC eof
DEF FUNC -> func id (PARAMS) FUNC RETLIST BODY eol EOL DEF FUNC
DEF_FUNC -> ε
PARAMS -> id TYPE PARAMS_N
PARAMS -> \varepsilon / )
PARAMS_N -> , id TYPE PARAMS_N
PARAMS N \rightarrow \epsilon / )
FUNC_RETLIST_BODY -> (FUNC_BODY
FUNC_RETLIST_BODY -> { eol EOL STAT OPTIONAL_RET }
FUNC_BODY -> ) { eol EOL STAT OPTIONAL_RET }
FUNC_BODY -> RETURN_TYPE { eol EOL STAT REQUIRED_RET eol EOL}
REQUIRED RET -> return exp EXP N
OPTIONAL RET -> return eol EOL
OPTIONAL RET -> eol EOL
EXP N -> , exp EXP N
EXP N -> ε
STAT -> id ID_N/CALL_FUNC
STAT -> if exp { eol EOL STAT } else { eol EOL STAT eol EOL } eol EOL STAT
STAT -> for FOR_DEF exp; id = exp { eol EOL STAT eol EOL } eol EOL STAT
STAT -> ε
FOR_DEF -> id INIT_DEF exp;
FOR DEF -> \epsilon/;
INIT_DEF -> :=
INIT DEF -> =
ID_N->, id ID_N
ID N -> ε
//CALL_FUNC-> id ( exp EXP_N ) - NAHRADENE DO CALL_FUNC/ASSIGN
TYPE -> int
TYPE -> float64
TYPE -> string
TYPE -> id
EOL -> eol EOL
EOL \rightarrow \epsilon
```

```
RETURN_TYPE -> TYPE RETURN_TYPE_N

RETURN_TYPE -> \epsilon / )

RETURN_TYPE_N -> , TYPE RETURN_TYPE_N

RETURN_TYPE_N -> \epsilon / )

CALL_FUNC/ASSIGN -> exp EXP_N eol EOL STAT

CALL_FUNC/ASSIGN -> (FUNC_PARAMS) EOL STAT

OPT_ID -> id

OPT_ID -> \epsilon

FUNC_PARAMS -> exp FUNC_PARAMS_N

FUNC_PARAMS -> \epsilon

FUNC_PARAMS -> \epsilon

FUNC_PARAMS_N -> , exp FUNC_PARAMS_N

FUNC_PARAMS_N -> \epsilon

FOR_ASSIGN -> id = exp;

FOR_ASSIGN -> \epsilon
```

ID\_N/CALL\_FUNC -> ID\_N INIT\_DEF OPT\_ID CALL\_FUNC/ASSIGN
ID\_N/CALL\_FUNC -> (FUNC\_PARAMS) EOL STAT