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| **Характеристический автомат** | | | | |
|  | | | | |
| № сост | Конфигурация | Символ перехода (свертки) | Состояние- преемник | Свертка {действие} |
| 1 | S = • "scheme" "id" A ";" Block "endsch" | scheme | 2 |  |
| 2 | S = "scheme" • "id" A ";" Block "endsch" | id | 3 |  |
| 3 | S = "scheme" "id" • A ";" Block "endsch" | A | 4 |  |
|  | A = {A1} • | ; |  | R24 {A1} |
| 4 | S = "scheme" "id" A • ";" Block "endsch" | ; | 5 |  |
| 5 | S = "scheme" "id" A ";" • Block "endsch" | Block | 6 |  |
|  | Block = • LstDecl "start" LstStmt ";" StopStmt {A2} | LstDecl | 7 |  |
|  | LstDecl = • Decl | Decl | 8 |  |
|  | LstDecl = • LstDecl Decl | LstDecl | 7 |  |
|  | Decl = • "id" B LstId ";" | id | 9 |  |
|  | Decl = • "const" "id" C LstId ";" | const | 10 |  |
|  | Decl = • "funcional" "id" D LstId ";" | funcional | 11 |  |
| 6 | S = "scheme" "id" A ";" Block • "endsch" | endsch | stop |  |
| 7 | Block = LstDecl • "start" LstStmt ";" StopStmt {A2} | start | 12 |  |
|  | LstDecl = LstDecl • Decl | Decl | 13 |  |
|  | Decl = • "id" B LstId ";" | id | 9 |  |
|  | Decl = • "const" "id" C LstId ";" | const | 10 |  |
|  | Decl = • "funcional" "id" D LstId ";" | funcional | 11 |  |
| 8 | LstDecl = Decl • | id, start, const, funcional |  | R3 |
| 9 | Decl = "id" • B LstId ";" | B | 14 |  |
|  | B = {A3} • | id |  | R25 {A3} |
| 10 | Decl = "const" • "id" C LstId ";" | id | 15 |  |
| 11 | Decl = "funcional" • "id" D LstId ";" | id | 16 |  |
| 12 | Block = LstDecl "start" • LstStmt ";" StopStmt {A2} | LstStmt | 17 |  |
|  | LstStmt = • Stmt | Stmt | 18 |  |
|  | LstStmt = • LstStmt ";" Stmt | LstStmt | 17 |  |
|  | Stmt = • StmtNoLbl | StmtNoLbl | 19 |  |
|  | Stmt = • "lbl" E ":" StmtNoLbl | lbl | 20 |  |
|  | StmtNoLbl = • AssStmt | AssStmt | 21 |  |
|  | StmtNoLbl = • TestStmt | TestStmt | 22 |  |
|  | AssStmt = • "id" F "ass" Term {A9} | id | 23 |  |
|  | AssStmt = • "id" F "ass" Term "goto" "lbl" {A10} | id | 23 |  |
|  | TestStmt = • "if" Term H "then" "lbl" I "else" "lbl" {A17} | if | 24 |  |
| 13 | LstDecl = LstDecl Decl • | id, start, const, funcional |  | R4 |
| 14 | Decl = "id" B • LstId ";" | LstId | 25 |  |
|  | LstId = • "id" {A6} | id | 26 |  |
|  | LstId = • LstId "," "id" {A6} | LstId | 25 |  |
| 15 | Decl = "const" "id" • C LstId ";" | C | 27 |  |
|  | C = {A4} • | id |  | R26 {A4} |
| 16 | Decl = "funcional" "id" • D LstId ";" | D | 28 |  |
|  | D = {A5} • | id |  | R27 {A5} |
| 17 | Block = LstDecl "start" LstStmt • ";" StopStmt {A2} | ; | 29 |  |
|  | LstStmt = LstStmt • ";" Stmt | ; | 29 |  |
| 18 | LstStmt = Stmt • | ; |  | R10 |
| 19 | Stmt = StmtNoLbl • | ; |  | R12 |
| 20 | Stmt = "lbl" • E ":" StmtNoLbl | E | 30 |  |
|  | E = {A7} • | : |  | R28 {A7} |
| 21 | StmtNoLbl = AssStmt • | ; |  | R14 |
| 22 | StmtNoLbl = TestStmt • | ; |  | R15 |
| 23 | AssStmt = "id" • F "ass" Term {A9} | F | 31 |  |
|  | AssStmt = "id" • F "ass" Term "goto" "lbl" {A10} | F | 31 |  |
|  | F = {A8} • | ass |  | R29 {A8} |
| 24 | TestStmt = "if" • Term H "then" "lbl" I "else" "lbl" {A17} | Term | 32 |  |
|  | Term = • "id" {A11} | id | 33 |  |
|  | Term = • "id" G "(" Term ")" {A13} | id | 33 |  |
|  | Term = • "id" G "(" Term "," Term ")" {A14} | id | 33 |  |
| 25 | Decl = "id" B LstId • ";" | ; | 34 |  |
|  | LstId = LstId • "," "id" {A6} | , | 35 |  |
| 26 | LstId = "id" {A6} • | ;, , |  | R8 {A6} |
| 27 | Decl = "const" "id" C • LstId ";" | LstId | 36 |  |
|  | LstId = • "id" {A6} | id | 26 |  |
|  | LstId = • LstId "," "id" {A6} | LstId | 36 |  |
| 28 | Decl = "funcional" "id" D • LstId ";" | LstId | 37 |  |
|  | LstId = • "id" {A6} | id | 26 |  |
|  | LstId = • LstId "," "id" {A6} | LstId | 37 |  |
| 29 | Block = LstDecl "start" LstStmt ";" • StopStmt {A2} | StopStmt | 38 |  |
|  | LstStmt = LstStmt ";" • Stmt | Stmt | 39 |  |
|  | StopStmt = • "lbl" E ":" "stop" {A18} | lbl | 40 |  |
|  | StopStmt = • "stop" {A18} | stop | 41 |  |
|  | Stmt = • StmtNoLbl | StmtNoLbl | 19 |  |
|  | Stmt = • "lbl" E ":" StmtNoLbl | lbl | 40 |  |
|  | StmtNoLbl = • AssStmt | AssStmt | 21 |  |
|  | StmtNoLbl = • TestStmt | TestStmt | 22 |  |
|  | AssStmt = • "id" F "ass" Term {A9} | id | 23 |  |
|  | AssStmt = • "id" F "ass" Term "goto" "lbl" {A10} | id | 23 |  |
|  | TestStmt = • "if" Term H "then" "lbl" I "else" "lbl" {A17} | if | 24 |  |
| 30 | Stmt = "lbl" E • ":" StmtNoLbl | : | 42 |  |
| 31 | AssStmt = "id" F • "ass" Term {A9} | ass | 43 |  |
|  | AssStmt = "id" F • "ass" Term "goto" "lbl" {A10} | ass | 43 |  |
| 32 | TestStmt = "if" Term • H "then" "lbl" I "else" "lbl" {A17} | H | 44 |  |
|  | H = {A15} • | then |  | R31 {A15} |
| 33 | Term = "id" {A11} • | ;, ,, goto, ), then |  | R18 {A11} |
|  | Term = "id" • G "(" Term ")" {A13} | G | 45 |  |
|  | Term = "id" • G "(" Term "," Term ")" {A14} | G | 45 |  |
|  | G = {A12} • | ( |  | R30 {A12} |
| 34 | Decl = "id" B LstId ";" • | id, start, const, funcional |  | R5 |
| 35 | LstId = LstId "," • "id" {A6} | id | 46 |  |
| 36 | Decl = "const" "id" C LstId • ";" | ; | 47 |  |
|  | LstId = LstId • "," "id" {A6} | , | 35 |  |
| 37 | Decl = "funcional" "id" D LstId • ";" | ; | 48 |  |
|  | LstId = LstId • "," "id" {A6} | , | 35 |  |
| 38 | Block = LstDecl "start" LstStmt ";" StopStmt {A2} • | endsch |  | R2 {A2} |
| 39 | LstStmt = LstStmt ";" Stmt • | ; |  | R11 |
| 40 | StopStmt = "lbl" • E ":" "stop" {A18} | E | 49 |  |
|  | Stmt = "lbl" • E ":" StmtNoLbl | E | 49 |  |
|  | E = {A7} • | : |  | R28 {A7} |
| 41 | StopStmt = "stop" {A18} • | endsch |  | R23 {A18} |
| 42 | Stmt = "lbl" E ":" • StmtNoLbl | StmtNoLbl | 50 |  |
|  | StmtNoLbl = • AssStmt | AssStmt | 21 |  |
|  | StmtNoLbl = • TestStmt | TestStmt | 22 |  |
|  | AssStmt = • "id" F "ass" Term {A9} | id | 23 |  |
|  | AssStmt = • "id" F "ass" Term "goto" "lbl" {A10} | id | 23 |  |
|  | TestStmt = • "if" Term H "then" "lbl" I "else" "lbl" {A17} | if | 24 |  |
| 43 | AssStmt = "id" F "ass" • Term {A9} | Term | 51 |  |
|  | AssStmt = "id" F "ass" • Term "goto" "lbl" {A10} | Term | 51 |  |
|  | Term = • "id" {A11} | id | 33 |  |
|  | Term = • "id" G "(" Term ")" {A13} | id | 33 |  |
|  | Term = • "id" G "(" Term "," Term ")" {A14} | id | 33 |  |
| 44 | TestStmt = "if" Term H • "then" "lbl" I "else" "lbl" {A17} | then | 52 |  |
| 45 | Term = "id" G • "(" Term ")" {A13} | ( | 53 |  |
|  | Term = "id" G • "(" Term "," Term ")" {A14} | ( | 53 |  |
| 46 | LstId = LstId "," "id" {A6} • | ;, , |  | R9 {A6} |
| 47 | Decl = "const" "id" C LstId ";" • | id, start, const, funcional |  | R6 |
| 48 | Decl = "funcional" "id" D LstId ";" • | id, start, const, funcional |  | R7 |
| 49 | StopStmt = "lbl" E • ":" "stop" {A18} | : | 54 |  |
|  | Stmt = "lbl" E • ":" StmtNoLbl | : | 54 |  |
| 50 | Stmt = "lbl" E ":" StmtNoLbl • | ; |  | R13 |
| 51 | AssStmt = "id" F "ass" Term {A9} • | ; |  | R16 {A9} |
|  | AssStmt = "id" F "ass" Term • "goto" "lbl" {A10} | goto | 55 |  |
| 52 | TestStmt = "if" Term H "then" • "lbl" I "else" "lbl" {A17} | lbl | 56 |  |
| 53 | Term = "id" G "(" • Term ")" {A13} | Term | 57 |  |
|  | Term = "id" G "(" • Term "," Term ")" {A14} | Term | 57 |  |
|  | Term = • "id" {A11} | id | 33 |  |
|  | Term = • "id" G "(" Term ")" {A13} | id | 33 |  |
|  | Term = • "id" G "(" Term "," Term ")" {A14} | id | 33 |  |
| 54 | StopStmt = "lbl" E ":" • "stop" {A18} | stop | 58 |  |
|  | Stmt = "lbl" E ":" • StmtNoLbl | StmtNoLbl | 50 |  |
|  | StmtNoLbl = • AssStmt | AssStmt | 21 |  |
|  | StmtNoLbl = • TestStmt | TestStmt | 22 |  |
|  | AssStmt = • "id" F "ass" Term {A9} | id | 23 |  |
|  | AssStmt = • "id" F "ass" Term "goto" "lbl" {A10} | id | 23 |  |
|  | TestStmt = • "if" Term H "then" "lbl" I "else" "lbl" {A17} | if | 24 |  |
| 55 | AssStmt = "id" F "ass" Term "goto" • "lbl" {A10} | lbl | 59 |  |
| 56 | TestStmt = "if" Term H "then" "lbl" • I "else" "lbl" {A17} | I | 60 |  |
|  | I = {A16} • | else |  | R32 {A16} |
| 57 | Term = "id" G "(" Term • ")" {A13} | ) | 61 |  |
|  | Term = "id" G "(" Term • "," Term ")" {A14} | , | 62 |  |
| 58 | StopStmt = "lbl" E ":" "stop" {A18} • | endsch |  | R22 {A18} |
| 59 | AssStmt = "id" F "ass" Term "goto" "lbl" {A10} • | ; |  | R17 {A10} |
| 60 | TestStmt = "if" Term H "then" "lbl" I • "else" "lbl" {A17} | else | 63 |  |
| 61 | Term = "id" G "(" Term ")" {A13} • | ;, ,, goto, ), then |  | R19 {A13} |
| 62 | Term = "id" G "(" Term "," • Term ")" {A14} | Term | 64 |  |
|  | Term = • "id" {A11} | id | 33 |  |
|  | Term = • "id" G "(" Term ")" {A13} | id | 33 |  |
|  | Term = • "id" G "(" Term "," Term ")" {A14} | id | 33 |  |
| 63 | TestStmt = "if" Term H "then" "lbl" I "else" • "lbl" {A17} | lbl | 65 |  |
| 64 | Term = "id" G "(" Term "," Term • ")" {A14} | ) | 66 |  |
| 65 | TestStmt = "if" Term H "then" "lbl" I "else" "lbl" {A17} • | ; |  | R21 {A17} |
| 66 | Term = "id" G "(" Term "," Term ")" {A14} • | ;, ,, goto, ), then |  | R20 {A14} |
| SLR(1)-грамматика | | | | |
|  | | | | |
| **Множества Follow нетерминалов** | | | | |
| Follow(S)={}; Follow(A)={;}; Follow(Block)={endsch}; Follow(LstDecl)={id,start,const,funcional}; Follow(LstStmt)={;}; Follow(StopStmt)={endsch}; Follow(Decl)={id,start,const,funcional}; Follow(B)={id}; Follow(LstId)={;,,}; Follow(C)={id}; Follow(D)={id}; Follow(Stmt)={;}; Follow(StmtNoLbl)={;}; Follow(E)={:}; Follow(AssStmt)={;}; Follow(TestStmt)={;}; Follow(F)={ass}; Follow(Term)={;,,,goto,),then}; Follow(G)={(}; Follow(H)={then}; Follow(I)={else}; | | | | |