

Gramatika:

1. *Stmts* -> *Stmts*;*Stmt*
2. *Stmts* -> *Stmt*
3. *Stmt* -> *Assign*
4. *Stmt* -> *WhileStmt*
5. *WhileStmt* -> **while**(*RelExp*):{*Stmts*}
6. *RelExp* -> *Term* **less** *Term*
7. *RelExp* -> *Term*
8. *Term* -> **ID**
9. *Term* -> **CONST**
10. *Assign* -> **ID**:=*Term*

I) Kreiranje kanoničkog skupa LR pravila:

- **I₀:**
 - *Stmts'* -> *Stmts*
 - *Stmts* -> *.Stmts*;*Stmt*
 - *Stmts* -> *.Stmt*
 - *Stmt* -> *.Assign*
 - *Stmt* -> *.WhileStmt*
 - *Assign* -> *.ID*:=*Term*
 - *WhileStmt* -> *.while*(*RelExp*):{*Stmts*}
- **goto(I₀, *Stmts*) = I₁:**
 - *Stmts'* -> *Stmts*.;*Stmt*
- **goto(I₀, *Stmt*) = I₂:**
 - *Stmts* -> *Stmt*. (R2)
- **goto(I₀, *Assign*) = I₃:**
 - *Stmt* -> *Assign*. (R3)
- **goto(I₀, *WhileStmt*) = I₄:**
 - *Stmt* -> *WhileStmt*. (R4)
- **goto(I₀, **ID**) = I₅:**
 - *Assign* -> **ID**.:=*Term*
- **goto(I₀, **while**) = I₆:**
 - *WhileStmt* -> **while**.(*RelExp*):{*Stmts*}
- **goto(I₁, ';') = I₇:**
 - *Stmts'* -> *Stmts*;*.Stmt*
 - *Stmt* -> *.Assign*
 - *Stmt* -> *.WhileStmt*
 - *Assign* -> *.ID*:=*Term*

- *WhileStmt* -> **.while(*RelExp*):{*Stmts*}**

- **goto(I₅, ':=') = I₈:**
 - *Assign* -> **ID:=*Term***
 - *Term* -> **.ID**
 - *Term* -> **.CONST**

- **goto(I₆, '(') = I₉:**
 - *WhileStmt* -> **while(.*RelExp*):{*Stmts*}**
 - *RelExp* -> **.Term less *Term***
 - *RelExp* -> **.Term**
 - *Term* -> **.ID**
 - *Term* -> **.CONST**

- **goto(I₇, *Stmt*) = I₁₀:**
 - *Stmts* -> ***Stmts*;*Stmt*.** (R1)

- **goto(I₇, *Assign*) = *I₃**
- **goto(I₇, *WhileStmt*) = *I₄**
- **goto(I₇, ID) = *I₅**
- **goto(I₇, while) = *I₆**

- **goto(I₈, *Term*) = I₁₁:**
 - *Assign* -> **ID:=*Term*.** (R10)

- **goto(I₈, ID) = I₁₂:**
 - *Term* -> **ID.** (R8)

- **goto(I₈, CONST) = I₁₃:**
 - *Term* -> **CONST.** (R9)

- **goto(I₉, *RelExp*) = I₁₄:**
 - *WhileStmt* -> **while(*RelExp*.):{*Stmts*}**

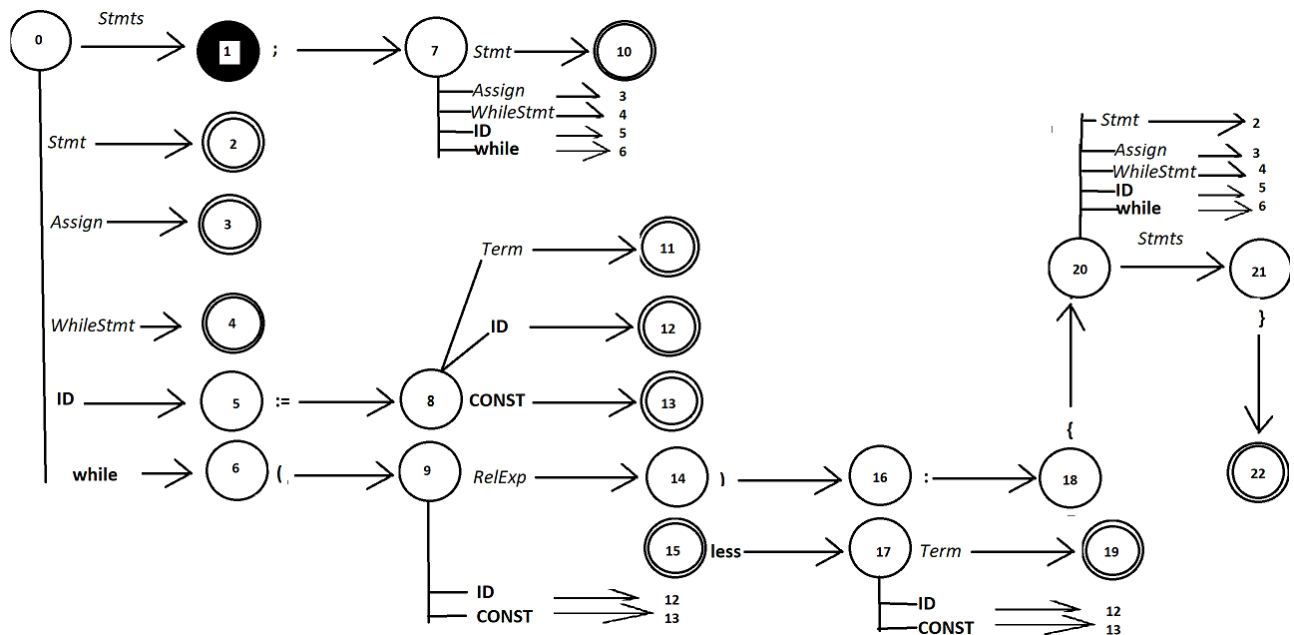
- **goto(I₉, *Term*) = I₁₅:**
 - *RelExp* -> ***Term*.less *Term***
 - *RelExp* -> ***Term*.** (R7)

- **goto(I₉, ID) = *I₁₂:**
- **goto(I₉, CONST) = *I₁₃:**

- **goto(I₁₄, ')') = I₁₆:**
 - *WhileStmt* -> **while(*RelExp*).:{*Stmts*}**

- **goto(I₁₅, less) = I₁₇:**
 - *RelExp* -> *Term less.Term*
 - *Term* -> **.ID**
 - *Term* -> **.CONST**
- **goto(I₁₆, ':') = I₁₈:**
 - *WhileStmt* -> **while(RelExp):.{Stmts}**
- **goto(I₁₇, Term) = I₁₉:**
 - *Relxp* -> *Term less Term.* (R6)
- **goto(I₁₇, ID) = *I₁₂**
- **goto(I₁₇, CONST) = *I₁₃**
- **goto(I₁₈ , '{') = I₂₀:**
 - *WhileStmt* -> **while(RelExp):{.Stmts}**
 - *Stmts* -> **.Stmts;Stmt**
 - *Stmts* -> **.Stmt**
 - *Stmt* -> **.Assign**
 - *Stmt* -> **.WhileStmt**
 - *Assign* -> **.ID:=Term**
 - *WhileStmt* -> **.while(RelExp):{Stmts}**
- **goto(I₂₀, Stmts) = I₂₁:**
 - *WhileStmt* -> **while(RelExp):{Stmts.}**
- **goto(I₂₀, Stmt) = *I₂**
- **goto(I₂₀, Assign) = *I₃**
- **goto(I₂₀, WhileStmt) = *I₄**
- **goto(I₂₀, ID) = *I₅**
- **goto(I₂₀, while) = *I₆**
- **goto(I₂₁, '}') = I₂₂:**
 - *WhileStmt* -> **while(RelExp):{Stmts}. (R5)**

II) Crtanje grafa automata:



III) Follow f-je

- FOLLOW(*Stmts*) = {'}', #, ';'}
- FOLLOW(*Stmt*) = {'}', #, ';' - FOLLOW(*Stmts*)
- FOLLOW(*RelExp*) = {'}', #, ';', ')'} - FOLLOW(*WhileStmt*)
- FOLLOW(*Assign*) = {'}', #, ';' - FOLLOW(*Stmt*)
- FOLLOW(*WhileStmt*) = {'}', #, ';' - FOLLOW(*Stmt*)
- FOLLOW(*Term*) = {'}', #, ';', ')', **less**} - FOLLOW(*RelExp*)

IV) Sintaksna tabela

Stanza	Jaccia												GOTO						
	while	ID	CONST	less	=	:	:	{	}	()	EOF(#)	Strms	Strnt	WhileStrnt	RelExp	Term	Assign	
0	s6	s5												1	2	4			3
1							s7					acc							
2							r2		r2			r2							
3									r3			r3							
4							r4		r4			r4							
5						s8													
6						s9													
7	s6	s5													10	4			3
8		s12	s13															11	
9		s12	s13														14		
10							r1		r1			r1							
11							r10		r10			r10							
12				r8			r8		r8	r8		r8							
13				r9			r9		r9		r9	r9							
14											s16								
15																			
16				s17			r7		r7		r7	r7							
17		s12	s13			s18													
18								s20										19	
19							r6		r6	r6	r6								
20	s6	s5													2	4			3
21											s22								
22							r5		r5		r5								