1.1.	program	\rightarrow	<pre>program id (identifier_list) ; declarations subprogram_declarations compound_statement</pre>
1.2.	program	\rightarrow	<pre>program id (identifier_list) ; declarations compound_statement</pre>
1.3.	program	\rightarrow	program id (identifier_list); subprogram_declarations compound_statement
1.4.	program	\rightarrow	<pre>program id (identifier_list) ; compound_statement</pre>
2.1.	$identifier_list$	\rightarrow	id identifier_list'
2.2.1.	$identifier_list'$	\rightarrow	, id identifier_list'
2.2.2.	$identifier_list'$	$\stackrel{'}{ ightarrow}$	ϵ
3.1.	declarations	$\stackrel{'}{ ightarrow}$	var id: type; declarations'
3.2.1.	declarations'	$\stackrel{'}{ ightarrow}$	var id: type; declarations'
3.2.2.	declarations'	$\stackrel{'}{ ightarrow}$	ϵ
4.1.	type	$\stackrel{'}{ ightarrow}$	$standard_type$
4.2.	type	$\stackrel{'}{ ightarrow}$	array [num num] of standard_type
5.1.	$standard_type$	$\stackrel{'}{ ightarrow}$	integer
5.2.	$standard_type$	$\stackrel{'}{ ightarrow}$	real
6.1.	$subprogram_declarations$	$\stackrel{'}{ ightarrow}$	subprogram_declaration; subprogram_declarations'
6.2.1.	$subprogram_declarations'$	$\stackrel{'}{ ightarrow}$	subprogram_declaration; subprogram_declarations'
6.2.2.	$subprogram_declarations'$	$\stackrel{'}{ ightarrow}$	ϵ
7.1.	$subprogram_declaration$	$\stackrel{'}{ ightarrow}$	$subprogram_head\ declarations$
1.1.	suoprogrami_acciaration	,	subprogram_declarations compound_statement
7.2.	$subprogram_declaration$	\rightarrow	$subprogram_head\ declarations$ $compound_statement$
7.3.	$subprogram_declaration$	\rightarrow	subprogram_head subprogram_declarations compound_statement
7.4.	$subprogram_declaration$	\rightarrow	subprogram_head compound_statement
8.1.	$subprogram_head$	\rightarrow	procedure id;
8.2.	$subprogram_head$	\rightarrow	procedure id arguments;
9.1.	arguments	\rightarrow	(parameter_list)
10.1.	$parameter_list$	\rightarrow	id: type parameter_list'
10.2.1.	$parameter_list'$	\rightarrow	; id : type parameter_list'
10.2.2.	$parameter_list'$	\rightarrow	ϵ
11.1.	$compound_statement$	\rightarrow	$egin{array}{c} \mathbf{begin} \\ optional_statements \\ \mathbf{end} \end{array}$
11.2.	$compound_statement$	\rightarrow	begin end
12.	$optional_statements$	\rightarrow	$statement_list$
13.1.	$statement_list$	\rightarrow	$statement\ statement_list'$
13.2.1.	$statement_list'$	\rightarrow	$; statement_list'$
13.2.2.	$statement_list'$	\rightarrow	ϵ
14.1.	statement	\rightarrow	variable assignop expression
14.2.	statement	\rightarrow	$procedure_statement$
14.3.	statement	\rightarrow	$compound_statement$
14.4.	statement	\rightarrow	if expression then statement

```
14.5.
                           statement
                                         \rightarrow
                                                 if expression then statement else statement
14.6.
                           statement
                                                 while expression do statement
15.1.
                             variable
                                         \rightarrow
15.2.
                             variable
                                                 id [ expression ]
16.1.
                procedure\_statement
                                                 call id
16.2.
                                                 call id ( expression_list )
                procedure\_statement
17.1.
                      expression\_list
                                                 expression\ expression\_list'
17.2.1.
                      expression\_list'
                                                 , expression expression_list'
17.2.2.
                      expression\_list'
18.1.
                           expression
                                                 simple\_expression
                                                 simple\_expression relop simple\_expression
18.2.
                           expression
19.1.
                                                 term\ simple\_expression'
                   simple\_expression
19.2.
                   simple\_expression
                                                 sign term simple_expression'
19.3.1.
                   simple\_expression'
                                                 \mathbf{addop}\ \mathit{term}\ \mathit{simple\_expression'}
                   simple\_expression'
19.3.2.
20.1.
                                 term
                                                 factor term'
20.2.1.
                                term'
                                                 mulop factor term'
20.2.2.
                                term'
21.1.
                               factor
                                                 id
21.2.
                               factor
                                                 id [ expression ]
21.3.
                               factor
                                                 num
21.4.
                                                 ( expression )
                               factor
21.5.
                               factor
                                                 not factor
22.1.
                                  sign
                                                 +
22.2.
                                  sign
```