

ParseTable

	A	B	C
1		Terminals	
2	Productions	program	var
3	1. program	program → program id (identifier_list);program1	
4	1.1 program1		program1 → declarations program1_1
5	1.1 program1_1		
6	2. identifier_list		
7	2.1 identifier_list1		
8	3. declarations		declarations → var id :type;declarations1
9	3.1 declarations1		declarations1 → var id :type;declarations1
10	4. type		
11	5. standard_type		
12	6. subprogram_declarations		
13	6.1 subprogram_declarations1		
14	7. subprogram_declaration		
15	7.1 subprogram_declaration1		subprogram_declaration1 → declarations subprogram_declaration1_1
16	7.1.1 subprogram_declaration1_1		
17	8. subprogram_head		
18	8.1 subprogram_head1		
19	9. parameter_list		
20	9.1 parameter_list1		
21	10. compound_statement		
22	10.1 compound_statement1		
23	11. statement_list		
24	11.1 statement_list1		
25	12. statement		
26	12.1 statement1		
27	13. variable		
28	13.1 variable1		
29	14. expression_list		
30	14.1 expression_list1		
31	15. expression		
32	15.1 expression1		
33	16. simple_expression		
34	16.1 simple_expression1		
35	17. term		
36	17. term1		
37	18. factor		
38	18.1 factor1		
39	19. sign		

ParseTable

	A	D	E
1			
2	Productions	function	begin
3	1. program		
4	1.1 program1	program1 → subprogram_declarations compound_statement.	program1 → compound_statement.
5	1.1 program1_1	program1_1 → subprogram_declarations compound_statement.	program1_1 → compound_statement.
6	2. identifier_list		
7	2.1 identifier_list1		
8	3. declarations		
9	3.1 declarations1	declarations1 → epsilon	declarations1 → epsilon
10	4. type		
11	5. standard_type		
12	6. subprogram_declarations	subprogram_declarations → subprogram_declaration ;subprogram_declarations1	
13	6.1 subprogram_declarations1	subprogram_declarations1 → subprogram_declaration;subprogram_declarations1	subprogram_declarations1 → epsilon
14	7. subprogram_declaration	subprogram_declaration → subprogram_head subprogram_declaration1	
15	7.1 subprogram_declaration1	subprogram_declaration1 → subprogram_declarations compound_statement	subprogram_declaration1 → compound_statement
16	7.1.1 subprogram_declaration1_1	subprogram_declaration1_1 → subprogram_declarations compound_statement	subprogram_declaration1_1 → compound_statement
17	8. subprogram_head	subprogram_head → function id subprogram_head1	
18	8.1 subprogram_head1		
19	9. parameter_list		
20	9.1 parameter_list1		
21	10. compound_statement		compound_statement → begin compound_statement1
22	10.1 compound_statement1		compound_statement1 → statement_list end
23	11. statement_list		statement_list → statement statement_list1
24	11.1 statement_list1		
25	12. statement		statement → compound_statement
26	12.1 statement1		
27	13. variable		
28	13.1 variable1		
29	14. expression_list		
30	14.1 expression_list1		
31	15. expression		
32	15.1 expression1		
33	16. simple_expression		
34	16.1 simple_expression1		
35	17. term		
36	17. term1		
37	18. factor		
38	18.1 factor1		
39	19. sign		

ParseTable

	A	F	G	H
1				
2	Productions	id	,	(
3	1. program			
4	1.1 program1			
5	1.1 program1_1			
6	2. identifier_list	identifier_list → id identifier_list1		
7	2.1 identifier_list1		identifier_list1 → , id identifier_list1	
8	3. declarations			
9	3.1 declarations1			
10	4. type			
11	5. standard_type			
12	6. subprogram_declarations			
13	6.1 subprogram_declarations1			
14	7. subprogram_declaration			
15	7.1 subprogram_declaration1			
16	7.1.1 subprogram_declaration1_1			
17	8. subprogram_head			
18	8.1 subprogram_head1			subprogram_head1 → (parameter_list):standard_type;
19	9. parameter_list	parameter_list → id : type parameter_list1		
20	9.1 parameter_list1			
21	10. compound_statement			
22	10.1 compound_statement1	compound_statement1 → statement_list end		
23	11. statement_list	statement_list → statement statement_list1		
24	11.1 statement_list1			
25	12. statement	statement → variable assign expression		
26	12.1 statement1			
27	13. variable	variable → id variable1		
28	13.1 variable1		variable1 → epsilon	
29	14. expression_list	expression_list → expression expression_list1		expression_list → expression expression_list1
30	14.1 expression_list1		expression_list1 → ,expression	
31	15. expression	expression → simple_expression expression1		expression → simple_expression expression1
32	15.1 expression1		expression1 → epsilon	
33	16. simple_expression	simple_expression → term simple_expression1		simple_expression → term simple_expression1
34	16.1 simple_expression1		simple_expression1 → epsilon	
35	17. term	term → factor term1		term → factor term1
36	17. term1			
37	18. factor	factor → id factor1		factor → (expression)
38	18.1 factor1		factor1 → variable1	factor1 → (expression_list)
39	19. sign			

ParseTable

	A	I	J	K
1				
2	Productions)	:	;
3	1. program			
4	1.1 program1			
5	1.1 program1_1			
6	2. identifier_list			
7	2.1 identifier_list1	identifier_list1 → epsilon		
8	3. declarations			
9	3.1 declarations1			
10	4. type			
11	5. standard_type			
12	6. subprogram_declarations			
13	6.1 subprogram_declarations1			
14	7. subprogram_declaration			
15	7.1 subprogram_declaration1			
16	7.1.1 subprogram_declaration1_1			
17	8. subprogram_head			
18	8.1 subprogram_head1		subprogram_head1 → :standard_type;	
19	9. parameter_list			
20	9.1 parameter_list1	parameter_list1 → epsilon		parameter_list1 → ; id:type parameter_list1
21	10. compound_statement			
22	10.1 compound_statement1			
23	11. statement_list			
24	11.1 statement_list1			statement_list1 =;statement statement_list1
25	12. statement			
26	12.1 statement1			statement1 → epsilon
27	13. variable			
28	13.1 variable1	variable1 → epsilon		variable1 → epsilon
29	14. expression_list			
30	14.1 expression_list1	expression_list1 → epsilon		
31	15. expression			
32	15.1 expression1	expression1 → epsilon		expression1 → epsilon
33	16. simple_expression			
34	16.1 simple_expression1	simple_expression1 → epsilon		simple_expression1 → epsilon
35	17. term			
36	17. term1			term1 → epsilon
37	18. factor			
38	18.1 factor1	factor1 → variable1		factor1 → variable1
39	19. sign			

ParseTable

	A	L	M	N
1				
2	Productions	if	while	end
3	1. program			
4	1.1 program1			
5	1.1 program1_1			
6	2. identifier_list			
7	2.1 identifier_list1			
8	3. declarations			
9	3.1 declarations1			
10	4. type			
11	5. standard_type			
12	6. subprogram_declarations			
13	6.1 subprogram_declarations1			
14	7. subprogram_declaration			
15	7.1 subprogram_declaration1			
16	7.1.1 subprogram_declaration1_1			
17	8. subprogram_head			
18	8.1 subprogram_head1			
19	9. parameter_list			
20	9.1 parameter_list1			
21	10. compound_statement			
22	10.1 compound_statement1	compound_statement1 → statement_list end	compound_statement1 → statement_list end	compound_statement1 → end
23	11. statement_list	statement_list → statement statement_list1	statement_list → statement statement_list1	
24	11.1 statement_list1			statement_list1 = epsilon
25	12. statement	statement → if expression then statement statement1	statement → while expression do statement	
26	12.1 statement1			statement1 → epsilon
27	13. variable			
28	13.1 variable1			variable1 → epsilon
29	14. expression_list			
30	14.1 expression_list1			
31	15. expression			
32	15.1 expression1			expression1 → epsilon
33	16. simple_expression			
34	16.1 simple_expression1			simple_expression1 → epsilon
35	17. term			
36	17. term1			term1 → epsilon
37	18. factor			
38	18.1 factor1			factor1 → variable1
39	19. sign			

ParseTable

	A	O	P	Q	R	S
1						
2	Productions	else	[assignop	multop
3	1. program					
4	1.1 program1					
5	1.1 program1_1					
6	2. identifier_list					
7	2.1 identifier_list1					
8	3. declarations					
9	3.1 declarations1					
10	4. type					
11	5. standard_type					
12	6. subprogram_declarations					
13	6.1 subprogram_declarations1					
14	7. subprogram_declaration					
15	7.1 subprogram_declaration1					
16	7.1.1 subprogram_declaration1_1					
17	8. subprogram_head					
18	8.1 subprogram_head1					
19	9. parameter_list					
20	9.1 parameter_list1					
21	10. compound_statement					
22	10.1 compound_statement1					
23	11. statement_list					
24	11.1 statement_list1					
25	12. statement					
26	12.1 statement1	statement1 → elstatement				
27	13. variable					
28	13.1 variable1	variable1 → epsilon	variable1 → [expression]	variable1 → epsilon	variable1 → epsilon	variable1 → epsilon
29	14. expression_list					
30	14.1 expression_list1					
31	15. expression					
32	15.1 expression1	expression1 → epsilon		expression1 → epsilon		
33	16. simple_expression					
34	16.1 simple_expression1	simple_expression1 → epsilon		simple_expression1 → epsilon		
35	17. term					
36	17. term1	term1 → epsilon		term1 → epsilon		term1 → multopfactor term1
37	18. factor					
38	18.1 factor1	factor1 → variable1	factor1 → variable1	factor1 → variable1		factor1 → variable1
39	19. sign					

ParseTable

	A	T	U	V
1				
2	Productions	addop	relop	then
3	1. program			
4	1.1 program1			
5	1.1 program1_1			
6	2. identifier_list			
7	2.1 identifier_list1			
8	3. declarations			
9	3.1 declarations1			
10	4. type			
11	5. standard_type			
12	6. subprogram_declarations			
13	6.1 subprogram_declarations1			
14	7. subprogram_declaration			
15	7.1 subprogram_declaration1			
16	7.1.1 subprogram_declaration1_1			
17	8. subprogram_head			
18	8.1 subprogram_head1			
19	9. parameter_list			
20	9.1 parameter_list1			
21	10. compound_statement			
22	10.1 compound_statement1			
23	11. statement_list			
24	11.1 statement_list1			
25	12. statement			
26	12.1 statement1			
27	13. variable			
28	13.1 variable1	variable1 → epsilon	variable1 → epsilon	variable1 → epsilon
29	14. expression_list			
30	14.1 expression_list1			
31	15. expression			
32	15.1 expression1		expression1 → relop simple_expression	expression1 → epsilon
33	16. simple_expression			
34	16.1 simple_expression1	simple_expression1 → addop term simple_expression1	simple_expression1 → epsilon	simple_expression1 → epsilon
35	17. term			
36	17. term1	term1 → epsilon	term1 → epsilon	term1 → epsilon
37	18. factor			
38	18.1 factor1	factor1 → variable1	factor1 → variable1	factor1 → variable1
39	19. sign			

ParseTable

	A	W	X	Y
1				
2	Productions	do	"+" (plus)	"-" (minus)
3	1. program			
4	1.1 program1			
5	1.1 program1_1			
6	2. identifier_list			
7	2.1 identifier_list1			
8	3. declarations			
9	3.1 declarations1			
10	4. type			
11	5. standard_type			
12	6. subprogram_declarations			
13	6.1 subprogram_declarations1			
14	7. subprogram_declaration			
15	7.1 subprogram_declaration1			
16	7.1.1 subprogram_declaration1_1			
17	8. subprogram_head			
18	8.1 subprogram_head1			
19	9. parameter_list			
20	9.1 parameter_list1			
21	10. compound_statement			
22	10.1 compound_statement1			
23	11. statement_list			
24	11.1 statement_list1			
25	12. statement			
26	12.1 statement1			
27	13. variable			
28	13.1 variable1	variable1 → epsilon		
29	14. expression_list		expression_list → expression expression_list1	expression_list → expression expression_list1
30	14.1 expression_list1			
31	15. expression		expression → simple_expression expression1	expression → simple_expression expression1
32	15.1 expression1	expression1 → epsilon		
33	16. simple_expression		simple_expression → sign term simple_expression1	simple_expression → sign term simple_expression1
34	16.1 simple_expression1	simple_expression1 → epsilon		
35	17. term			
36	17. term1	term1 → epsilon		
37	18. factor			
38	18.1 factor1	factor1 → variable1		
39	19. sign		sign → +	Sign → -

ParseTable

	A	Z	AA	AB
1				
2	Productions	num	not	integer
3	1. program			
4	1.1 program1			
5	1.1 program1_1			
6	2. identifier_list			
7	2.1 identifier_list1			
8	3. declarations			
9	3.1 declarations1			
10	4. type			type → standard_type
11	5. standard_type			standard_type → integer
12	6. subprogram_declarations			
13	6.1 subprogram_declarations1			
14	7. subprogram_declaration			
15	7.1 subprogram_declaration1			
16	7.1.1 subprogram_declaration1_1			
17	8. subprogram_head			
18	8.1 subprogram_head1			
19	9. parameter_list			
20	9.1 parameter_list1			
21	10. compound_statement			
22	10.1 compound_statement1			
23	11. statement_list			
24	11.1 statement_list1			
25	12. statement			
26	12.1 statement1			
27	13. variable			
28	13.1 variable1			
29	14. expression_list	expression_list → expression expression_list1	expression_list → expression expression_list1	
30	14.1 expression_list1			
31	15. expression	expression → simple_expression expression1	expression → simple_expression expression1	
32	15.1 expression1			
33	16. simple_expression	simple_expression → term simple_expression1	simple_expression → term simple_expression1	
34	16.1 simple_expression1			
35	17. term	term → factor term1	term → factor term1	
36	17. term1			
37	18. factor	Factor → num	Factor → not factor	
38	18.1 factor1			
39	19. sign			

ParseTable

	A	AC	AD
1			
2	Productions	real	array
3	1. program		
4	1.1 program1		
5	1.1 program1_1		
6	2. identifier_list		
7	2.1 identifier_list1		
8	3. declarations		
9	3.1 declarations1		
10	4. type	type → standard_type	type → [num .. num] of standard_type
11	5. standard_type	standard_type → real	
12	6. subprogram_declarations		
13	6.1 subprogram_declarations1		
14	7. subprogram_declaration		
15	7.1 subprogram_declaration1		
16	7.1.1 subprogram_declaration1_1		
17	8. subprogram_head		
18	8.1 subprogram_head1		
19	9. parameter_list		
20	9.1 parameter_list1		
21	10. compound_statement		
22	10.1 compound_statement1		
23	11. statement_list		
24	11.1 statement_list1		
25	12. statement		
26	12.1 statement1		
27	13. variable		
28	13.1 variable1		
29	14. expression_list		
30	14.1 expression_list1		
31	15. expression		
32	15.1 expression1		
33	16. simple_expression		
34	16.1 simple_expression1		
35	17. term		
36	17. term1		
37	18. factor		
38	18.1 factor1		
39	19. sign		