## THE ORIGINAL GRAMMAR (With Substitutions)

LEGEND		
State	New Name	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	Р	
<identifier></identifier>	I	
Α	Α	
<dec-list></dec-list>	D	
<dec></dec>	U	
J	J	
<type></type>	Т	
<stat-list></stat-list>	S	
С	С	
<stat></stat>	V	
<write></write>	W	
Н	Н	
<assign></assign>	X	
<expr></expr>	Е	
<expr>'</expr>	E'	
<term></term>	Y	
<term>'</term>	Y'	
<factor></factor>	F	
<number></number>	N	
В	В	
<sign></sign>	Z	
<digit></digit>	Q	
<letter></letter>	R	

Р	->	program I ; var D begin S end.
I	->	R A
Α	->	R A
Α		Q A
Α	->	λ
D		U:T;
U	->	IJ
J	->	, U
J		λ
Т	->	integer
S	->	V C
С	->	S
С	->	λ
V	->	W
V	->	x
W	->	display ( H ) ;
Н	->	"value=" , I
Н	->	I
X	->	I = E;
E	->	Y E'
E'	->	+ Y E'
E'	->	- Y E'
E'	->	λ
Υ	->	FY'
Y'	->	* F Y'
Y'	->	/ F Y'
Y'	->	λ
F	->	(E)
F	->	I

F -> N N -> Z Q B B -> Q B B -> λ Z -> + Z -> - Z -> λ Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p R -> q			
B -> Q B B -> λ Z -> + Z -> - Z -> λ Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	F	->	N
B -> λ Z -> + Z -> - Z -> λ Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	N	->	Z Q B
Z -> + Z -> - Z -> λ Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	В	->	Q B
Z -> - Z -> λ Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	В	->	λ
Z -> λ Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Z	->	+
Q -> 0 Q -> 1 Q -> 2 Q -> 3 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Z	->	-
Q -> 1 Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Z	->	λ
Q -> 2 Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Q	->	0
Q -> 3 Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Q	->	1
Q -> 4 Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Q	->	2
Q -> 5 Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Q	->	3
Q -> 6 Q -> 7 Q -> 8 Q -> 9 R -> p	Q	->	4
Q -> 7 Q -> 8 Q -> 9 R -> p	Q	->	5
Q -> 8 Q -> 9 R -> p	Q	->	6
Q -> 9 R -> p	Q	->	7
R -> p	Q	->	8
	Q	->	9
R -> q	R	->	p
	R	->	q
R -> r	R	->	r
R -> s	R	->	S