

LL(1)文法分析

i+i*i-i/i

确认

显示当前文法

返回

退出

E->TG
G->+TG|-TG
G->ε
T->FS
S->*FS|/FS
S->ε
F->(E)
F->i

	A	B	C	D	E
10	#GS	*i/i#			GETNEXT(i)
11	#GSF*	*i/i#	S->*FS		POP, PUSH(SF*)
12	#GSF	i/i#			GETNEXT(*)
13	#GSI	i/i#	F->i		POP, PUSH(i)
14	#GS	i/i#			GETNEXT(i)
15	#G	i/i#	S->ε		POP
16	#GT-	i/i#	G->-TG		POP, PUSH(GT-)
17	#GT	i/i#			GETNEXT(-)
18	#GSF	i/i#	T->FS		POP, PUSH(SF)
19	#GSI	i/i#	F->i		POP, PUSH(i)
20	#GS	i/i#			GETNEXT(i)
21	#GSF/	i/i#	S->/FS		POP, PUSH(SF/)
22	#GSF	i#			GETNEXT(/)
23	#GSI	i#	F->i		POP, PUSH(i)
24	#GS	#			GETNEXT(i)
25	#G	#	S->ε		POP
26	#	#	G->ε		POP

FIRST(S) = {ε, *, /}

FIRST(i) = {}

FIRST(G) = {ε, +, -, }

FIRST(/) = {}

FIRST() = {}

FIRST(+) = {+}

FIRST(ε) = {ε}

FIRST(F) = {(, i}

FIRST(E) = {(, i}

FIRST(i) = {}

FIRST(-) = {-}

FIRST(T) = {(, i}

FIRST(*) = {*}

FOLLOW集:

FOLLOW(S) = {+, -, #,)}

FOLLOW(G) = {#,)}

FOLLOW(F) = {*, /, +, -, #,)}

FOLLOW(E) = {#,)}

FOLLOW(T) = {+, -, #,)}

	+	-	#	*	/	()	i
E						E->TG		E->TG
T						T->FS		T->FS
G	G->+TG	G->-TG	G->ε				G->ε	
F						F->(E)		F->i
S	S->ε	S->ε	S->ε	S->*FS	S->/FS		S->ε	

Figure 16 执行文法分析（输入表达式为“i+i*i-i/i”）