

LL(1) Parser

Input grammar :

Example of grammar

nonterminals - operators - terminals

$E = E + T \mid T$
 $T = T * F \mid F$
 $F = id \mid (E)$

step 1... input grammar
step 2... click submit
step 3... input string

clear submit

Input source string :

Grammar after removing left recursion :

E	=	TX
X	=	+TX e
T	=	FY
Y	=	*FY e
F	=	(E) id

Predictive Parser Table :

	id	+	*	()	\$
E	TX				TX	
X		+TX				e e
T	FY				FY	
Y		e	*FY			e e
F	id			(E)		

First and Follow of the grammar :

	first	follow
E	(, id), \$
X	+, e), \$
T	(, id	+,), \$
Y	*, e	+,), \$
F	(, id	*, +,), \$

Parsing :

current sentential form	symbol	prediction
ES	id	TX
TXS	id	FY
FYXS	id	id
idYXS	+	e
idXS	+	+TX
id+TXS	id	FY
id+FYXS	id	id
id+idYXS	*	*FY
id+id*FYXS	id	id
id+id*idYXS	\$	e
id+id*idXS	\$	e
id+id*idS	\$	e
id+id*id\$	\$	-

