

Shift-Reduce Parsing Table

Monday, February 15, 2021

GrammarStart symbol: *all*.

\$ represents a lexeme marking the end of the input.

1. *all* → *expr* \$
2. *expr* → *term*
3. *expr* → *expr* ("+" | "-") *term*
4. *term* → *factor*
5. *term* → *term* ("*" | "/") *factor*
6. *factor* → ID
7. *factor* → NUMLIT
8. *factor* → "(" *expr* ")"

Parsing Table

A blank cell indicates ERROR. "NL" is short for "NUMLIT".

STATE	ACTION TABLE									GOTO TABLE			
	ID	NL	+	-	*	/	()	\$	<i>all</i>	<i>expr</i>	<i>term</i>	<i>factor</i>
Start 1	S2	S3					S4			G18	G13	G10	G9
ID 2	R6												
NL 3	R7												
(4	S2	S3					S4				G7	G6	G5
(f 5	R4												
(t 6	R2			S11			R2						
(e 7			S14	S14				S8					
(e) 8	R8												
f 9	R4												
t 10			R2	R2	S11	S11			R2				
t* 11	S2	S3					S4						G12
t*f 12	R5												
e 13			S14	S14					S17				
e+ 14	S2	S3					S4					G16	G15
e+f 15	R4												
e+t 16	R3			S11			R3						
e\$ 17	R1												
a 18	ACCEPT												