

Recursive Descent Parser for Arithmetic Expressions

Grammar Productions	First Token Set
$\langle \text{expr} \rangle \rightarrow \langle \text{term} \rangle \text{ (+ -) } \langle \text{term} \rangle \text{ }$	$\{ (, \text{ID}, \text{INTLIT} \}$
$\langle \text{term} \rangle \rightarrow \langle \text{factor} \rangle \text{ (* /) } \langle \text{factor} \rangle \text{ }$	$\{ (, \text{ID}, \text{INTLIT} \}$
$\langle \text{factor} \rangle \rightarrow \text{ID} \mid \text{INTLIT} \mid (\langle \text{expr} \rangle)$	$\{ (, \text{ID}, \text{INTLIT} \}$

Note: Symbols shown in **red** are EBNF symbols, not actual symbols expected.

Error Conditions Detected

Syntax error: displays an appropriate error message and quits execution