

Project 02 published

Lab 03 - due now Tue Sep 8th 11:59pm

Lab 03 - maketest

## Parsing

expression ::= operand operator operand EOT

operand ::= integer —  
1 + 2  
1 - 2

expression ::= operand (operator operand) \* EOT

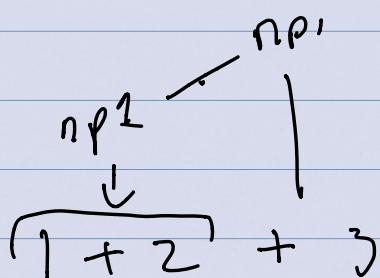
operand ::= integer

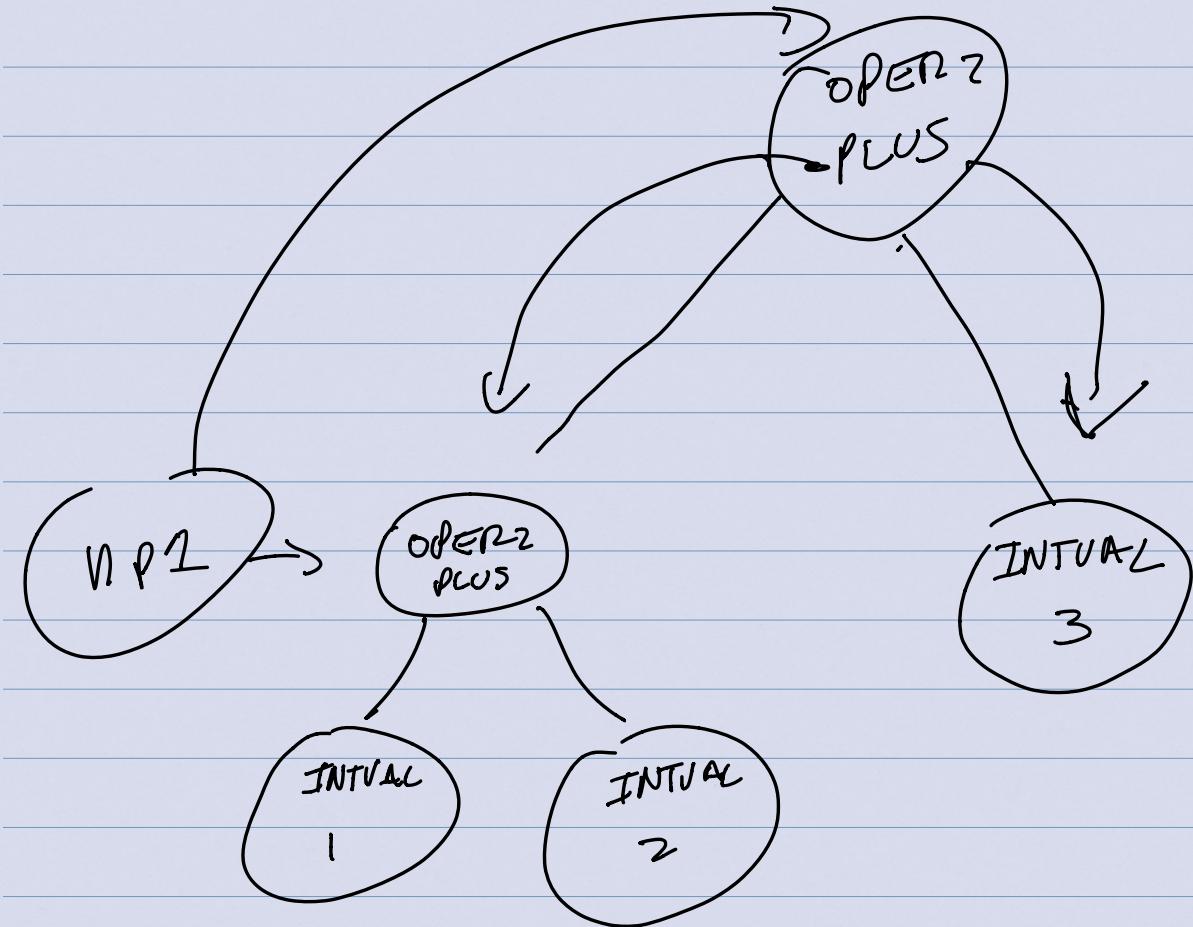
1 + 2 + 3 \* 4

count argc = 3

./lab03 -e "1+2"

argv[0] argv[1] argv[2]





TK\_INTCT TK\_PLUS TK\_INTLIT TK\_EOT

$1 + 2 \oplus 9$

all ops

expression ::= operand (operator operand)  $\star$  END

operand ::= integer  $\leftarrow$

~~\*~~ [ T '-' operand ]  
~~\*~~ [ T '(' expression ')' ]

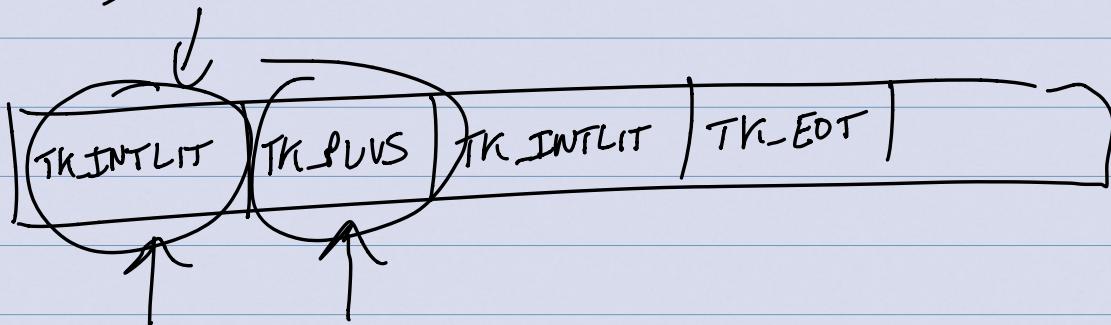
3 else if ( scan\_table\_acct (st, TK\_MINUS) ) {

[ OPER1 ]

3 else if ( scan\_table\_acct (st, TK\_LPAREN) ) {

[ PP1  $\rightarrow$  parse\_expression( ) ]

3

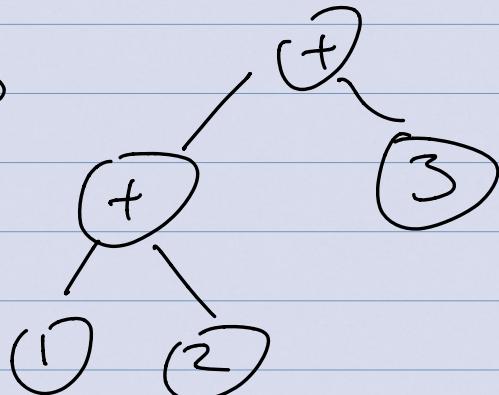


next = 0 = 1

↑  
Accept

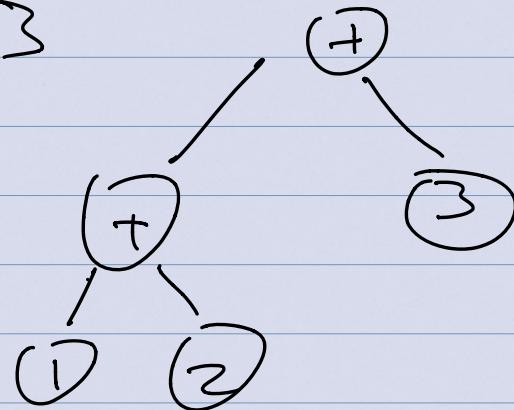
TP scan-table(c-gt(st), 0)

$\overbrace{1 + 2} + 3$

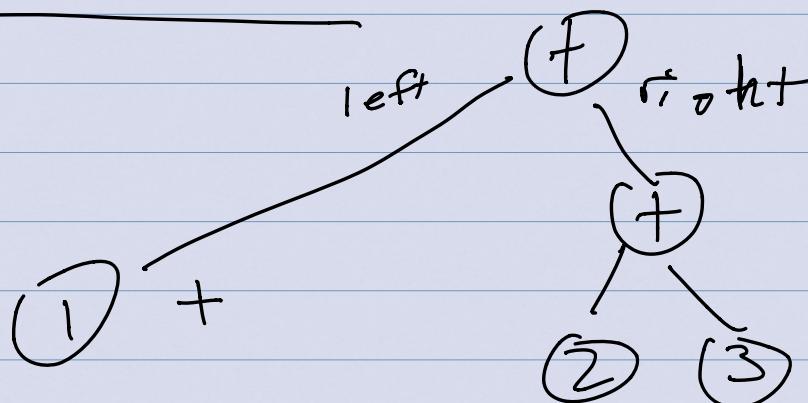


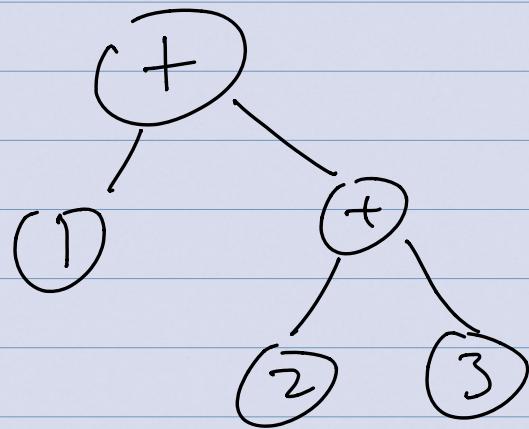
rP1

$\rightarrow (\underline{1 + 2}) + 3$



$1 + (\underline{2 + 3})$





$$(1 + 2) * 3 = 9$$

$$1 + (2 * 3) = 7$$

$1 + (2 * 3)$   
 $\downarrow$

$$1 + (2 * 3)$$

