

CS445 4/18/2019

expression language

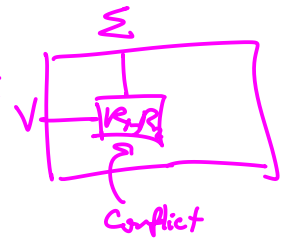
Test 2: Tue 4/23 in class, open book

Ch4: LL(1), SLR(1), LR(1)

Ch9: gencode §9.10

Format: Grammar  $G$ , (T/F)  $G$  is

$G$  is  $\begin{cases} LL(1)? \\ SLR(1)? \\ LR(1)? \end{cases}$  No if



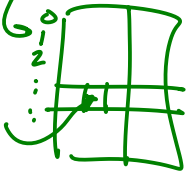
expression  $\xrightarrow{\text{syntax tree}} \text{assembly code}$   
 $\uparrow$   
 precedence + associativity rules

$E \rightarrow E - E \mid E * E \mid -E \mid (E) \mid \text{NUM}$   
 $E \rightarrow E - T \mid T$   
 $T \rightarrow T * F \mid F$   
 $F \rightarrow (E) \mid -F \mid \text{NUM}$

Conflict

$(R_i, S_i, R_k)$

reduce/reduce shift/reduce



## Code Generation



foo\_boo

boo\_boo