

EAdd. Exp ::= Exp "+" Exp1 ;
 EMul. Exp1 ::= Exp1 "*" Integer ;
 EInt. Exp1 ::= Integer ;

coercions Exp 1 ;

Exp → Exp '+' Exp1 (3)
 Exp → Exp1 (4)
 Exp1 → Exp1 '*' Integer (5)
 Exp1 → Integer (6)
 Exp1 → '(' Exp ')' (7)

the interesting shift-reduce conflict
 distinguishing
 arises at
 the place marked (*)



Stack	Input	CFG Rules	BNFC Rules
empty	1 + 2 * 3		
1	+ 2 * 3		
Integer	+ 2 * 3		
Exp1	+ 2 * 3	6	EInt
Exp	+ 2 * 3	4	
Exp +	2 * 3		
Exp → 2	* 3		
Exp + Integer	* 3		
Exp + Exp1	* 3	6	EInt (*)
Exp + Exp1 *	3		
Exp + Exp1 * 3			
Exp + Exp1 * Integer	3		EInt
Exp + Exp1	3		EMul
Exp			EAdd

read input shift
 apply a rule reduce

	1	+ 2 * 3
shift	1 +	2 * 3
reduce	Integer	+ 2 * 3

reductions are only
 allowed on the top of
 the stack

From this table extract the

concrete syntax tree

abstract syntax tree

