

Shift-Reduce Parsing Table

Monday, February 11, 2013

Grammar

- (1) $stmt \rightarrow ID "=" expr$
- (2) $expr \rightarrow expr "+" ID$
- (3) $expr \rightarrow expr "-" ID$
- (4) $expr \rightarrow ID$

Start symbol: $stmt$ **Parsing Table**Initial stack: $-/0$ (no symbol, state 0) $\$$ represents end of input

Blank cells indicate error (failure)

STATE	ACTION TABLE					GOTO TABLE	
	ID	=	+	-	\$	$stmt$	$expr$
0	s1					g2	
1		s3					
2					s4		
3	s5						g6
4	accept	accept	accept	accept	accept		
5	r4	r4	r4	r4	r4		
6	r1	r1	s7	s8	r1		
7	s9						
8	s10						
9	r2	r2	r2	r2	r2		
10	r3	r3	r3	r3	r3		

Based on "Introduction to Shift-Reduce Parsing" by Zerksis D. Umrigar, 1997.

<http://www.cs.binghamton.edu/~zdu/parsdemo/srintro.html>