CS 421 — LR Parsing Activity
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Example 1)

$$S \rightarrow x\,S\,y$$
$$\quad |\quad \epsilon$$

Action

	x	y	$
0			
1			
2			
3			

Go To

	x	y	$	S
0				
1				
2				
3				

Example 2)

$$S \rightarrow a\,E\,b$$
$$\quad |\quad x$$
$$E \rightarrow E\,x\,E$$
$$\quad |\quad b$$

Action

	a	b	x	$
0				
1				
2				
3				
4				
5				
6				

Go To

	a	b	x	$	S	E
0						
1						
2						
3						
4						
5						
6						

Problem 1)

Is this grammar ambiguous?

$S \rightarrow$ v
    $| \quad x\,S$
    $| \quad x\,S\,y\,S$

Action

	v	x	y	$
0				
1				
2				
3				
4				
5				

Go To

	v	x	y	$	S
0					
1					
2					
3					
4					
5					

Problem 2)

You will discover a new kind of conflict in this grammar.

$S \rightarrow$ $a\,b$
    $| \quad a\,E$
    $| \quad F\,b$
$E \rightarrow$ b
$F \rightarrow$ a

Action

	a	b	c	$
0				
1				
2				
3				
4				
5				

Go To

	a	b	c	$	S	E	F
0							
1							
2							
3							
4							
5							