

Name:

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Compiler Construction, Spring 2017
Quiz 2

Given the context-free grammar, please determine if the given grammar is an LL(1) grammar. To do so, you should first compute the First, Follow, and Predict sets. If it is an LL(1) grammar, please build the parse table for it. (Note: Please put your answers into the tables below.)

Context-free grammar:

```
1 | S -> A B $
2 | A -> a C d
3 | B -> b
4 |   | λ
5 | C -> c
6 |   | λ
```

Compute the First, Follow, and Predict sets.

0	Grammar	First()	Follow()	Predict set
1	S -> A B \$	a	\$	a
2	A -> a C d	a	\$, b	a
3	B -> b	b, λ	\$	b
4	λ			\$
5	C -> c	c, λ	d	c
6	λ			d

Is the CFG an LL(1) grammar? Why?

Yes, answer at PPT ch5 p.20.

Build the parse table.

Non-terminals/Terminals	a	b	c	d	\$
S	1				
A	2				
B		3			4
C			5	6	