

Assignment # 3

Due: March 3 by 11:59PM

Present the **CKY** recognition matrix for each of the following strings (one per page on 4 pages) assuming the Chomsky Normal Form grammar, $G = (\{S,A,B,C,D,E\}, \{a,b\}, S, P)$, specified by the rules **P**. Note: not all strings are in the language.

- $S \rightarrow AB \mid BA$
- $A \rightarrow CD \mid a$
- $B \rightarrow CE \mid b$
- $C \rightarrow a \mid b$
- $D \rightarrow AC$
- $E \rightarrow BC$

	a	b	b	a	b
1					
2					
3					
4					
5					

	b	a	b	a
1				
2				
3				
4				

	b	b	a	a	b	b
1						
2						
3						
4						
5						
6						

	a	b	b	a
1				
2				
3				
4				