

CSC 254

Assignment 2

September 25th, 2003

**Due in class on Thursday, October 2nd, 2003**

1. (25 pts) Consider the grammar

$S ::= Aa \mid bAc \mid Bc \mid bBa$

$A ::= d$

$B ::= d$

- (a) Show that the grammar is not LALR(1) (Hint: Construct the LALR states and show any potential reduce-reduce conflict. Recall that LALR(1) (look-ahead LR) states can be obtained by merging LR(1) states with the same core (i.e.,  $\alpha$ ). **SHOW YOUR WORK.**