

1. Perform the pairwise disjointness test for the following grammar rules.
 - a. $A \rightarrow aB \mid b \mid cBB$
 - b. $B \rightarrow aB \mid bA \mid aBb$
 - c. $C \rightarrow aaA \mid b \mid caB$
2. Show a trace of the recursive descent parser given in Section 4.4.1 for the string $a + b * c$
3. Given the following grammar and the right sentential form, draw a parse tree and show the phrases and simple phrases, as well as the handle for $bBab$.
 $S \rightarrow aAb \mid bBA$
 $A \rightarrow ab \mid aAB$
 $B \rightarrow aB \mid b$
4. Construct LR parsing table for the following grammar:
 $S \rightarrow Aa \mid dAb \mid dca \mid cb$
 $A \rightarrow c$
5. Show a complete parse, including the parse stack contents, input string, and action for the string $id * (id + id)$, using the grammar and parse table in Section 4.5.3