

1. Build the CFSSM for this grammar. Is it an LR(0) grammar? Why or why not?

1. $S \rightarrow AB\$$
2. $A \rightarrow xy$
3. $A \rightarrow xB$
4. $B \rightarrow yz$

2. Build the LR(1) machine for the grammar in the previous problem. Is this an LR(1) grammar? Why or why not?
3. In the project, we saw an example of a grammar that was not LR(1) because the grammar was ambiguous (there are multiple parse trees for a given string). Ambiguity, however, is not necessary for a grammar to not be LR(1). Give an example of a grammar that is *unambiguous*, but not LR(1).