

ASSIGNMENT #6:

Suppose, you are given the following grammar and the input string ***abcd***:

$S \rightarrow aXD$

$X \rightarrow YZ$

$Y \rightarrow b$

$Y \rightarrow \epsilon$

$Z \rightarrow cX$

$Z \rightarrow \epsilon$

❑ You are required to perform the following tasks manually:

1. Find the FIRST and FOLLOW sets of each of the non-terminals.
2. Construct the predictive parsing table for LL(1) method.
3. Demonstrate the moves of the LL(1) parser on the given input.
4. Construct the LR(0) automaton for the grammar.
5. Construct the parsing table for LR(1) parsing with the grammar.
6. Demonstrate the moves of the LR(1) parser on the given input.