

Assignment 1

Try to construct LL(1) parsing table and parse the associated string following LL(1) parsing mechanism:

1. ababc

$S \rightarrow abABC/DE$

$A \rightarrow a/\epsilon$

$B \rightarrow bA/\epsilon$

$C \rightarrow c$

$D \rightarrow d/(E)$

$E \rightarrow e/\epsilon$

2. ab

$S \rightarrow abCDE/ abAAB$

$A \rightarrow A/b$

$B \rightarrow B/b$

$C \rightarrow CDE/\epsilon$

$D \rightarrow E$

$E \rightarrow \epsilon$

3. idbid

$P \rightarrow SR/S$

$R \rightarrow bSR/bS$

$S \rightarrow WbS/W$

$W \rightarrow L^*W/L$

$L \rightarrow id$

4. dada

$S \rightarrow SAa/\epsilon$

$A \rightarrow B$

$B \rightarrow C$

$C \rightarrow D$

$D \rightarrow d$

5. abbcdd

$S \rightarrow aABC/BC$

$A \rightarrow bA/\epsilon$

$B \rightarrow cC/\epsilon$

$C \rightarrow d$

6. abbddddd

$S \rightarrow abABC/ABC$

$A \rightarrow bABC/BC$

$B \rightarrow C$

$C \rightarrow d$