Assignment 2

21.03.2006 **Due date: 30.03.2006**

Formal Languages and Grammars

1. Consider the following CFG that describes regular expressions over an alphabet containing the symbols *{a, b}:*
   a. Show that the grammar is ambiguous for *a|b*a*
   b. Transform the grammar into an unambiguous CFG, considering that all operations are associative to the left and that the priority order between the operations is: Kleen closure "*" (the highest priority), concatenation, and alternation "|".
   c. If the grammar defined at point (b) is left recursive, eliminate the recursivity.
2. Show that the following grammar is ambiguous and transform it into an equivalent unambiguous grammar:
3. Describe the language generated by the grammar:
4. Describe the language generated by the grammar:

Every team has to deliver the assignments on paper, at the beginning of the proseminar on 30.03. You do not have to write many explanations or notes in English, just provide the solution.
