CS486: Spring 1999

Problem Set 3:

Due Thursday, February 18, 1999

Please submit each problem on a separate page.

Exercises from Smullyan:

1. P. 36

   "Assume for every valuation v_i there is an $X_i \in S$ with $val(X_i, v_i) = t$. Show by using the compactness theorem that for some n the disjunction $X_1 \vee ... X_n$ is a tautology."

2. Select three of the formulae in Smullyan's book, p. 24 (1) – (7) and show using matrix methods that they are tautologies.

3. Provide the correct answers to the questions you missed on Quiz 2.