CS 311: Computational Structures Exercise 5

James Hook

Prepared: November 4, 2014 Due: November 6, 2014

Sipser problem 2.35. Given a grammar in Chomsky Normal Form show that if there is a sufficiently long string then the language is infinite. Note: This problem is more like a regular "problem set" problem than a typical "exercise" problem. It will be graded as an exercise. It is selected because of its close relationship with the proof of the Pumping Lemma for Context Free Languages.