

**600.271 Automata & Computation Theory**  
**Assignment 4**  
**Due March 1, 2012**

I. Design a dlba for the following language:

$\{x \mid x \in \{a, b\}^+, \#_b x \text{ is a multiple of the } \#_a x\}$ .

II. Problem Set 5, Problem 4 (page 96) - (c), (e), (g), (i), (q).

III. Problem Set 5, Problem 6 (page 96).