

BU CAS CS 525 (SPRING SEMESTER, 2005)
COMPILER DESIGN

Assignment 2

Out: Wednesday, 02 February 2005

Due: Monday, 14 February 2005

Total: 250 points

Exercise 1 (20 pts) Please do items (a) through (e) in Exercise 2.1 on page 34 in the textbook.

Exercise 2 (20 pts) Please do Exercise 2.3 on page 35 in the textbook.

Exercise 3 (20 pts) Please do Exercise 2.5 on page 35 in the textbook.

Exercise 4 (20 pts) Please do Exercise 2.6 on page 36 in the textbook.

Exercise 5 (20 pts) Please do Exercise 2.7 on page 36 in the textbook.

Exercise 6 (100 pts) Please implement a translation from regular expressions to DFAs. You are given the freedom to choose the data structures for representing regular expressions and DFAs. However, you should provide clear instructions needed to test your implementation.

Exercise 7 (50 pts) Please write the lexical analysis part of a JavaCC or SableCC specification for Tiger. The description of the syntax of Tiger is available on-line.