

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

Assignment 7

Out: Friday, 25 March 2005
Due: Monday, 04 April 2005

Total: 200 points

Exercise 1 (individual assignment) (30 points) *Please do Exercise 7.1 on page 170 in the textbook.*

Exercise 2 (individual assignment) (30 points) *Please do Exercise 7.2 on page 170 in the textbook.*

Exercise 3 (group assignment) (100 points) *Please implement a package for translating Tiger programs into the tree representation mentioned in the textbook.*

Exercise 4 (group assignment) (40 points) *Please implement a package for translating a Tree into canonical form. You need to implement all the functions in the following signature CANON:*

```
signature CANON =  
  sig  
    val linearize: Tree.stm -> Tree.stm list  
    val basicBlocks: Tree.stm list -> (Tree.stm list list * Temp.label)  
    val traceSchedule: Tree.stm list list * Temp.label -> Tree.stm list  
  end
```