University of Arizona, Department of Computer Science

CSc 620 — Security Through Obscurity — Assignment 2

Christian Collberg
January 16, 2002

1 Introduction

The purpose of this assignment is for you to learn more about Java bytecode.

Write a Jasmin class `Tree.j` which represents a binary tree where each node has an integer data value. The class should have a constructor which creates a new node in the tree and a method `sum()` which recursively walks the tree in preorder and computes the sum of all the data values in the nodes. `sum()` can be static or virtual, whichever you prefer.

Use the Jasmin assembler to convert the assembly code to a classfile.

Write a Java class `Main.java` which builds up a small tree, passes it to `Tree.sum()`, and prints out its result.

2 Adminstrivia

This assignment is due Thursday, January 24. It is worth 4% of your final grade. To submit, email me (`collberg@cs.arizona.edu`) the Java assembly code you wrote.

This is an individual assignment!