

CS 112 – Spring 2012, Homework 1

Problems due at the beginning of class on Thursday, January 26

Question 1 (10 pts). *Chapter 1, Exercise 1.1.15 on p. 56. Please submit two versions: one iterative implementation (using loops) and one recursive implementation. They should have the same API, so that the same test client can be used for both. As with recursive binary search (see code on p. 25), it may be helpful to write two methods.*

Question 2 (10 pts). *Chapter 1, Exercise 1.1.29 on p. 59.*

Question 3 (10 pts). *Chapter 1, Exercise 1.1.34 on p. 60. Give a one-sentence explanation (sketch of an algorithm) of how you will implement a filter for those cases for which you say it is possible.*

Question 4 (10 pts). *Chapter 1, Exercise 1.2.16 on p. 117.*