

Lecture notes for Week 4: Pointers & Dynamic Allocation

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Table of contents

1 Topics.....	2
1.1 Textbook portions covered.....	2
2 Lecture 10 (Friday, January 28, 2005).....	2
2.1 Announcements.....	2
2.2 Solving Recurrences (continued).....	2
2.3 Data Structures.....	2
2.4 Pointers.....	2
3 Lecture 11/12 (Tuesday, February 1 2005).....	2
3.1 Announcements.....	2
4 Suggested Problems.....	3

1. Topics

1. Linked lists
2. Reference (pointer) implementations
3. Memory allocation and freeing

1.1. Textbook portions covered

Introduction to Algorithms (Cormen et al.)

Chapter 10 Sections 2 and 3

Engineering Algorithms...(Clowes "online book")

Appendix B (*Data Structures, Memory and Pointers*)

2. Lecture 10 (Friday, January 28, 2005)

2.1. Announcements

- Problem set available in course directory (ProbSet1-2003.pdf).
- firefox <http://www.mozilla.org/products/firefox>
(<http://www.mozilla.org/products/firefox>)
- Reduced counselling next Tuesday (unavail 11:00-11:30)
- Lab 4 now available.

2.2. Solving Recurrences (continued)

2.2.1. Substitution method

2.2.2. Recurrence Tree method

2.3. Data Structures

2.4. Pointers

3. Lecture 11/12 (Tuesday, February 1 2005)

3.1. Announcements

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4. Suggested Problems

Introduction to Algorithms (Cormen et al.)

- Exercise 10.3-1
- Exercise 10.3-3

Engineering Algorithms...(Clowes "online book")

- B.2
- B.3
- B.4