

Lecture notes for Week 7: Trees and Priority Queues

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1. Topics

1. Trees
2. Binary trees
3. Priority Queues

1.1. Textbook portions covered

Introduction to Algorithms (Cormen et al.)

Appendix B.5

Chapter 6

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

Chapter 7

2. Lecture 19 (Friday, February 18, 2005)

2.1. Announcements

- **Study Week** next week.
- Midterm Friday March 4

2.2. Overview of heaps

1. Covered: binary trees, complete binary trees, array representation, heap, informal overview of add/delete and heapSort ($O(n \log n)$).

3. Lecture 20/21 (Tuesday, March 1, 2005)

3.1. Announcements

- **Midterm FRIDAY!**

4. Suggested Problems

Introduction to Algorithms (Cormen et al.)

- Exercise B.5-1
- Exercise B.5-3
- Exercise 6.5-1

- Exercise 6.5-2
- Exercise 6.5-6

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

- 7.1
- 7.2
- 7.5